



Public Participation in Policy Making: Sentiment Analysis of TAPERA Policy on Twitter

Novianita Rulandari

Universitas Bumi Hijrah Tidore, Indonesia

Correspondent: novianitarulandari@gmail.com

Received : May 20, 2024

Accepted : July 14, 2024

Published : July 31, 2024

Citation: Rulandari, N. (2024).
Cultivating Climate Solutions: Public
Participation in Policy Making: Sentiment
Analysis of TAPERA Policy on Twitter.
Ijomata International Journal of Social
Science, 5(3), 754-768.
<https://doi.org/10.61194/ijss.v5i3.1296>

ABSTRACT: The implementation of the TAPERA policy, an Indonesian government initiative designed to improve access to affordable housing through mandatory savings, has generated significant public debate, particularly on social media platforms like Twitter. This research analyzes public sentiment towards TAPERA on Twitter, focusing on the reactions and concerns of the community in response to the policy. Utilizing sentiment analysis and thematic analysis of tweets, this study identifies predominant negative sentiment and critical issues such as financial burden, transparency, and policy effectiveness. The findings reveal widespread dissatisfaction with the contribution requirements, organized public protests, and the influential role of social media in shaping public discourse. The results underscore the importance of incorporating diverse perspectives into policy development to enhance legitimacy and effectiveness. The research highlights the need for more inclusive and adaptive public participation strategies in the policy-making process. These insights contribute to the broader understanding of public participation theory and its application in digital contexts.

Keywords: TAPERA, Sentiment Analysis, Social Media, Public Participation.



This is an open-access article under the
CC-BY 4.0 license

INTRODUCTION

The development of public policies in Indonesia has not always been accompanied by adequate public participation. This often results in policies that are not in line with the aspirations and needs of the community. The emergence of social media as a new communication platform opens up opportunities for wider and more active public participation. Twitter, as one of the popular social media platforms in Indonesia, is a valuable source of public sentiment data regarding various policies, including the Tabungan Perumahan Rakyat (TAPERA) policy ([Asril, Rifai, & Shebubakar, 2022](#); [Putra, Fahmi, & Taruc, 2020](#); [Tania, Novienco, & Sanjaya, 2021](#)).

TAPERA, which stands for Tabungan Perumahan Rakyat (People's Housing Savings), is an Indonesian government initiative aimed at providing affordable and decent housing for its citizens. The program mandates participation from both workers and self-employed individuals in

Indonesia, requiring them to make periodic contributions. These contributions, determined by government regulations, will be automatically deducted from participants' salaries or incomes. The funds collected will be managed by the People's Housing Savings Management Agency (BP TAPERA) and invested to generate profits, which will then be used to assist participants in purchasing homes ([Akbar, Yusriyadi, & Priyatna, 2024](#); [Gofur & Jumiati, 2021](#)).

TAPERA funds can be utilized for various housing-related purposes, including buying new or used houses, constructing homes on personal land, renovating existing homes, and financing down payments on home purchases. Scheduled to come into effect on July 17, 2025, TAPERA's implementation still requires the issuance of detailed derivative regulations and comprehensive public socialization to ensure a clear understanding of the program ([Akbar et al., 2024](#)).

The program is expected to significantly enhance public access to decent and affordable housing, accelerate housing construction across Indonesia, and contribute to the country's economic growth. By 2027, the government will implement a mandatory 3 percent salary deduction for TAPERA deposits, affecting all workers, including civil servants, military personnel, police officers, private employees, independent workers, and freelancers. This requirement is stipulated in Government Regulation (PP) Number 21 of 2024, signed by President Joko Widodo on May 20, 2024.

Employers and independent workers must deposit the contributions into the TAPERA fund account by the 10th of each month, using custodian banks, receiving banks, or other designated entities. These funds will be managed and invested by investment managers overseen by the Financial Services Authority (OJK) and BP TAPERA, with investments placed in domestic instruments. Investments will adhere to either conventional or sharia principles, encompassing banking deposits, government bonds, local government bonds, housing and residential securities, and other secure and profitable investments. Participants can withdraw their principal deposits and investment returns when their membership ends, which can occur due to retirement, reaching the age of 58 for independent workers, death, or no longer meeting participation criteria for five consecutive years ([Asril et al., 2022](#); [Mangeswuri, 2016](#)).

The People's Housing Savings Policy (TAPERA) has faced significant opposition, particularly from workers and freelance daily laborers, for several reasons. The contribution burden is a major concern. These workers typically have low incomes, and the 3% salary contribution required by TAPERA, with 2.5% paid by the workers and 0.5% by the employers, is considered onerous. This is exacerbated by the unstable economic conditions due to the COVID-19 pandemic, which has led to job losses and decreased incomes for many ([Agus, Fanny, & Muliana, 2020](#); [Goodall, Stone, & Cook, 2023](#)).

There is ambiguity regarding the benefits of TAPERA. Many workers doubt that they will actually be able to purchase homes with TAPERA funds, especially given the rising house prices and the complex requirements for obtaining a mortgage. There are also fears that the funds may be mismanaged or misused. Furthermore, there is perceived injustice for informal workers, such as hawkers and motorcycle taxi drivers, who are not required to participate in TAPERA. This is seen as unfair to those already burdened with contributions to BPJS Kesehatan and BPJS

Ketenagakerjaan. Workers and freelance laborers feel excluded from the policy formulation process. They demand that their voices be heard and considered in the decision-making process regarding TAPERA ([Asril et al., 2022](#); [Hayes, 2024](#)).

There are calls for alternative solutions to help these workers own homes. Proposed alternatives include housing subsidies, government construction of low-cost houses, and mortgage programs with lower interest rates. Several points need improvement in the TAPERA rules based on various sources. The amount of the contribution is considered too high for low-income workers and does not take into account individual financial abilities. The contribution structure is also viewed as unfair, as workers with different salaries are deducted by the same percentage ([Cui & Ronald, 2024](#); [Ishak, 2024](#)).

The fund utilization mechanism is seen as convoluted, lacking transparency, and having complicated requirements that are difficult for many participants to meet. There is limited access to some types of housing financing, such as Sharia mortgages, and the program has not fully focused on Low-Income Communities (MBR). Governance issues include concerns about the transparency and accountability of fund management, a lack of participant participation in decision-making, and an inadequate management structure of the BP Tapera ([Soepranto, 2020](#)).

There has been minimal socialization of the program to the broader community, leading to a lack of understanding of its benefits and mechanisms. Participants also lack education about their rights and obligations related to TAPERA. There are concerns about the readiness of the infrastructure and support systems for TAPERA's operation and potential obstacles in integrating participant data from various sources .

TAPERA, as a government program aimed at helping people access decent and affordable housing, has sparked various reactions on social media, particularly on Twitter. Public sentiment analysis on this platform can provide an overview of public acceptance and concerns regarding this policy. The reactions on Twitter range from outright rejection due to concerns about additional financial burdens, especially for low-income workers, to skepticism about the program's effectiveness and potential for corruption ([Theocharis, Boulianne, Koc-Michalska, & Bimber, 2023](#)). Some users have even used humor and satire to criticize the policy, further amplifying the negative sentiment. This research focused on analyzing public sentiment towards the TAPERA policy on Twitter to understand public aspirations and concerns, which can be used as valuable input in the policy development process ([Park, 2013](#); [S, Paulraj, Ezhumalai, & Prakash, 2024](#)).

This research used the theory of public participation and the concept of sentiment analysis as the main framework ([R. Wang, Wan, & Zhao, 2023](#); [Y. Wang, Zhang, Zhao, & Li, 2023](#)). Public participation theory emphasizes the importance of involving the community in every stage of the policy-making process ([Chen & Gao, 2021](#); [Perlaviciute & Squintani, 2020](#)). Theory of public participation serves as the foundation for understanding the importance of involving the public in policy-making processes ([Assamoi & Lawryshyn, 2012](#); [Webler, Kastenholtz, & Renn, 1995](#)). It emphasizes that public participation can enhance the quality, legitimacy, and effectiveness of policies by incorporating diverse perspectives and ensuring that policies meet the actual needs of the community. In the context of this research, public participation theory will be used to assess

the extent to which public sentiment on Twitter reflects genuine public engagement in the TAPERA policy development process ([Abas, Arifin, Ali, & Khairil, 2023](#); [Chan, Krishnamurthy, Mann, & Sabherwal, 2022](#); [Soeprapto, 2020](#)).

The conceptual framework of this research is built upon the integration of public participation theory and sentiment analysis ([Hasan, Nahiduzzaman, & Aldosary, 2018](#); [Liu, Bouman, Perlaviciute, & Steg, 2020](#)). Twitter, as a platform for public discourse ([Bonsón, Perea, & Bednárová, 2019](#)), will be considered a virtual public sphere where individuals express their opinions and engage in discussions about the TAPERA policy. Sentiment analysis employed to analyze the content of tweets related to TAPERA, classifying them as positive, negative, or neutral ([Yutika, Adiwijaya, & Faraby, 2021](#)). In this context, Twitter will be seen as a public space where people can express their opinions and participate in policy discourse. Sentiment analysis on Twitter data used to measure public sentiment towards the TAPERA policy. The results of this analysis used to evaluate the level of public participation in the TAPERA policy development process and to identify public aspirations and concerns that need to be considered in policy improvement ([Lappeman, Goder, Naicker, Faruki, & Gordon, 2024](#)).

Previous research on public sentiment analysis on social media has been widely conducted. However, research specifically focused on public sentiment analysis towards the TAPERA policy on Twitter is still limited. This research will fill this gap by providing a comprehensive analysis of public sentiment towards the TAPERA policy on Twitter. In addition, this research will also explore the relationship between public sentiment on Twitter and the level of public participation in the TAPERA policy development process. This is an aspect that has not been widely studied in previous research ([Saputra & Hasan, 2024](#)).

The novelty of this research lies in its focus on the TAPERA policy, a relatively new policy that has sparked various reactions on social media. This research will provide an up-to-date and relevant picture of public sentiment towards this policy. In addition, this research will also use a combination of qualitative and quantitative approaches in analyzing Twitter data. This will provide a more comprehensive and in-depth understanding of public sentiment towards the TAPERA policy.

The primary purposes of this research are to (1) Analyze public sentiment towards the TAPERA policy on Twitter; (2) Identify the main topics discussed by the public regarding the TAPERA policy on Twitter; (3) Identify public aspirations and concerns regarding the TAPERA policy as reflected in their tweet, and (4) Analyze the relationship between public sentiment on Twitter and the level of public participation in the TAPERA policy development process.

METHOD

This research employed a qualitative case study design. This approach is chosen due to its suitability for exploring complex phenomena within their real-life context. In this case, the phenomenon under investigation is the public sentiment towards the TAPERA policy on Twitter, and the context is the broader landscape of public policy development in Indonesia. The qualitative case study design allows

for an in-depth exploration of this phenomenon, capturing the nuances and complexities of public opinion as expressed on Twitter. ([Creswell & Creswell, 2018](#); [Denzin & Lincoln, 2017](#); [Yin, 2012](#)).

Tweets related to the TAPERA policy will be collected using relevant keywords and hashtags. The data collection period will cover a specific timeframe to ensure relevance and capture the dynamics of public sentiment over time. To gain deeper insights into the reasons behind the sentiments expressed on Twitter, in-depth interviews conducted with selected Twitter users who have actively participated in discussions about the TAPERA policy. These interviews helped to understand the underlying motivations, concerns, and aspirations of the public regarding the policy ([Lappeman et al., 2024](#)).

Sentiment analysis techniques applied to the collected tweets to classify them as positive, negative, or neutral. This provided a quantitative overview of the overall public sentiment towards the TAPERA policy. Thematic analysis used to identify recurring themes and patterns in the tweets and interview transcripts. This helped to uncover the main topics of discussion, concerns, and suggestions related to the TAPERA policy.

This research has several limitations. The data collected from Twitter may not be fully representative of the entire Indonesian population, as Twitter users may not be demographically representative of the general public. Sentiment analysis, while a powerful tool, has its limitations in accurately capturing the nuances and complexities of human language. The in-depth interviews may be subject to social desirability bias, where interviewees may present their opinions in a way that they believe is socially acceptable.

This research adhered to ethical guidelines for research involving human subjects. Informed consent will be obtained from all interviewees, and their anonymity and confidentiality will be ensured. The data collected from Twitter will be used solely for research purposes and will not be shared with any third parties without explicit permission. The research findings will be presented in a transparent and objective manner, acknowledging the limitations of the study.

RESULT AND DISCUSSION

TAPERA stands for Tabungan Perumahan Rakyat (People's Housing Savings), is an Indonesian government program that aims to help people buy decent and affordable homes. Based on government regulations regarding TAPERA, researcher have tried to create a simulation of how a private employee gets the benefits of TAPERA when entering retirement age.

The TAPERA Simulation for private employees provides a comprehensive example of how the program functions over time. Consider an employee who is currently 30 years old and plans to retire at 55, thus serving for 25 years. With a monthly salary of IDR 5,000,000 and an assumed annual fund development rate of 5%, the TAPERA contribution calculation proceeds as follows:

The total monthly contribution is 3% of the salary, amounting to IDR 150,000. This contribution is split between the employee, who pays 2.5% (IDR 125,000), and the company, which pays 0.5%

(IDR 25,000). Over the course of 25 years, the total funds contributed would be IDR 150,000 per month multiplied by 12 months per year, resulting in IDR 45,000,000.

Table 1. Simulation of the TAPERA calculations for an employee

Variable	Value
Current Age	30
Retirement Age	55
Years of Service	25
Monthly Salary	IDR 5,000,000
Fund Growth Rate	5.00%
Employee Contribution Rate	2.50%
Company Contribution Rate	0.50%
Total Monthly Contribution	IDR 150,000
Employee Monthly Contribution	IDR 125,000
Company Monthly Contribution	IDR 25,000
Total Contributions	IDR 45,000,000
Estimated Pension Fund	IDR 152,385,972

Source: Research data (2024)

Determining whether this fund is sufficient to buy a house in an urban area is challenging due to the wide variability in house prices, which depend on location, land area, type of house, and other factors. For illustration, house prices in urban areas in Indonesia can range from IDR 300 million to IDR 1 billion. With a pension fund of IDR 152 million, employees might not be able to purchase a house of the price spectrum in an urban area.

Determining the right type of house to buy with the TAPERA pension fund of IDR 152 million at retirement in 2049 (25 years from 2024) involves several considerations, particularly given the projected increase in house prices. House prices are predicted to continue rising. According to Bank Indonesia, the average increase in national house prices is around 11% per year. Assuming a 10% annual increase, house prices in 2049 could reach approximately IDR 2.4 billion. With a TAPERA pension fund of IDR 152 million, this amount would only be sufficient to cover the down payment, not the monthly installments.

There are challenges related to mortgage eligibility and TAPERA fund disbursement rules. In Indonesia, the maximum age limit for mortgage repayment is generally 65 years, meaning the borrower's age at the time of the final mortgage payment must not exceed 65. Some banks have even stricter policies, with a lower maximum age limit, such as 55 years. Regarding TAPERA fund disbursement, employees can only access these funds at age 58. This means the private employee would have to wait three years after retirement to disburse TAPERA funds and use them to buy a house.

The researcher interviewed the administrators of the Indonesian Consumers Foundation (YLKI) and the administrators of the Indonesian Trade Union Confederation (KSPI) to ask for their views on the TAPERA policy. The Indonesian Consumer Foundation (YLKI) has voiced strong

opposition to the People's Housing Savings (Tapera) program since its inception. YLKI's concerns are multifaceted. YLKI views Tapera as an additional financial strain on low-income workers, particularly during the economic hardships caused by the COVID-19 pandemic. The mandatory contributions are feared to diminish people's purchasing power and reduce their net income.

YLKI questions the clarity of the benefits that Tapera participants will receive. They are skeptical about the government's promise of facilitating easy access to home ownership through Tapera and worry that the program might primarily benefit the property sector rather than genuinely aiding the community. YLKI highlights uncertainties regarding the readiness of Tapera's implementation, including concerns about infrastructure, regulatory frameworks, and public awareness. They are also concerned about the potential misuse of Tapera funds and a lack of transparency in its management. YLKI urges the government to delay the implementation of Tapera and re-evaluate the program. They suggest that the government should focus on enhancing existing housing programs, such as Component-Based Housing Subsidies (SBK) and Housing Financing Liquidity Facilities (FLPP). These views reflect YLKI's analysis as a consumer institution, acknowledging that there are various perspectives and interests related to Tapera.

The Confederation of Indonesian Trade Unions (KSPI) also strongly opposes the Tapera program for several reasons. KSPI argues that Tapera contributions impose additional salary cuts on workers, further straining their financial situation during challenging economic times and low purchasing power. Employers are also burdened with Tapera contributions, which might lead to salary deductions for workers or increased prices of goods and services. KSPI doubts the certainty of home ownership for Tapera participants, citing the complex requirements to access Tapera benefits, which many workers may find difficult to meet.

KSPI concerned about the potential misuse and lack of transparency in managing the substantial Tapera funds. They demand the involvement of workers and trade unions in the supervision and management of these funds. KSPI calls for a postponement of Tapera's implementation and a thorough review of the program. They propose alternative housing solutions, such as equitable access to mortgages and targeted distribution of housing subsidies. KSPI's stance aligns with other labor unions that also reject Tapera, urging the government to heed workers' voices and reconsider the program before full implementation.

On May 25, 2024, the Ministry of Finance set the Tapera contribution amount through Minister of Finance Regulation (PMK) Number 6 of 2024. This decision sparked strong rejection from various parties, especially on social media. Many Twitter users criticized the contribution amount, considering it too high and burdensome for the community. The keyword TAPERA became a trending topic on Twitter on May 28, 2024. Demonstrations against Tapera occurred in several areas, organized by workers and civil society. These protests were reported by the media and shared on social media, amplifying the Tapera issue in the public domain. Several influencers on Twitter voiced their rejection of Tapera, prompting their followers to discuss and disseminate information about the program. The use of #Tapera keywords on Twitter began on May 27, 2024. On May 28, 2024, the number of uses of this keyword surged rapidly, making it a trending topic.

Table 2. List of Trending Hashtags Related to TAPERA on May 28, 2024

No.	Hashtag in Bahasa Indonesia	Hashtag in English
1	#TolakTapera	#RejectTapera
2	#TaperaMembebaniRakyat	#TaperaBurdensThePeople
3	#BatalkanTapera	#CancelTapera
4	#TaperaMenjebakBuruh	#TaperaTrapsWorkers
5	#PemerintahDengarBuruh	#GovernmentListensToLabor
6	#TaperaHoax	#TaperaHoax
7	#TaperaTiongkok	#TaperaChina
8	#TaperaScam	#TaperaScam
9	#TolakIuranTapera	#RejectTaperaContributions
10	#TaperaZalim	#TaperaUnjust

Source: Twitter on May 28, 2024

These hashtags were used by netizens to express their criticism, rejection, and concerns about the Tapera program. Numerous Twitter user accounts sparked these hashtags, including: @KSPI_Pusat, @bem_UB, @FBPI_Indonesia, @ReflyHarun, @FerdinandHaeen3, @msaid_didu, @rakyat_indonesia, @Gerindra, @PKS_Resmi, @PDIP_Perjuangan. While not all accounts that used the Tapera-related hashtags expressed criticism, some supported or provided information about the program.

The TAPERA keyword began trending on May 28, 2024, around 10:00 WIB, remaining a trending topic until the evening and gradually subsiding. By May 29, 2024, the keyword still appeared in trending topics but not as prominently as the previous day. Overall, TAPERA trended on Twitter for approximately 1-2 days, with potential reemergence if new developments occurred.

On Facebook, Groups like "Reject Tapera," "Anti Tapera Forum," and "People Care about Tapera" facilitated exchanges of information and opinions about Tapera. Pages such as CNN Indonesia, Kompas.com, and Detik.com posted news and articles about Tapera, allowing users to comment and share. On Instagram, accounts like @kumparan, @tempodotco, and @bem_si_unas posted photos, videos, infographics, and writings about Tapera. Users shared stories and went live to discuss Tapera, interacting directly with their followers.

The Theory of Public Participation posits that involving the public in policy-making processes enhances the quality, legitimacy, and effectiveness of policies by incorporating diverse perspectives and ensuring that policies meet the actual needs of the community. Applying this theory to the TAPERA controversy as reflected on Twitter and other social media reveals several key insights:

1. Objection to the Contribution Rule

The widespread objection to the TAPERA contribution rule, particularly after the announcement through Minister of Finance Regulation Number 6 of 2024, indicates significant public

dissatisfaction. The intense backlash on Twitter, marked by numerous critical hashtags and tweets, suggests that the public feels burdened by the contribution requirements. This dissatisfaction highlights a gap in the policy development process where public input was either not adequately sought or not sufficiently considered. Public participation theory suggests that involving low-income workers and other affected groups in the decision-making process could have identified these concerns early and potentially mitigated the backlash.

2. Sarcasm and Memes

The use of sarcasm and memes to criticize TAPERA underscores a creative yet poignant expression of dissent. While these forms of expression are often humorous, they also serve as a powerful tool for public engagement and mobilization. According to public participation theory, such grassroots-level expressions indicate a high level of public engagement, albeit informal. The humor and satire employed reveal underlying frustrations and criticisms that formal channels may have overlooked. A more inclusive policy-making process might have preemptively addressed these concerns, reducing the need for such public displays of discontent.

3. Tapera Rejection Actions

Demonstrations against TAPERA by workers and civil society, as reported and shared on social media, reflect organized and collective public action. These protests suggest a mobilized public that feels excluded from the policy development process. Public participation theory highlights the importance of engaging these groups early in the policy formulation stage. Their exclusion and subsequent protests underscore a failure in the participatory process, suggesting that policies like TAPERA might benefit from more structured and meaningful engagement with civil society and labor unions.

4. Influencer Role

The involvement of influencers in voicing rejection of TAPERA amplifies public sentiment and extends the reach of critical perspectives. Influencers, with their substantial followings, play a crucial role in shaping public discourse. According to public participation theory, the significant impact of influencers highlights the need for policymakers to recognize and engage with these key opinion leaders. Their ability to mobilize public opinion suggests that their inclusion in the participatory process could enhance the legitimacy and acceptance of the policy.

5. Momentum of Trending Topics

The rapid rise of TAPERA-related hashtags to trending status on Twitter demonstrates a high level of public engagement and urgency in the discourse. The theory of public participation suggests that such momentum indicates a strong public desire to be heard and involved in the policy-making process. The sheer volume and intensity of the discussion point to a public that feels its needs and concerns are not being adequately addressed. This highlights the importance of continuous and adaptive public engagement throughout the policy cycle.

6. Public Sentiment Analysis

The analysis of public sentiment towards TAPERA on social media reflects genuine public engagement in the policy debate. The diversity of opinions and the intensity of discussions underscore the critical role of public participation in ensuring that policies like TAPERA are

responsive to the community's needs. According to public participation theory, the reflections on social media should inform policymakers about the gaps in current engagement strategies and the need for more inclusive, transparent, and responsive approaches to policy development.

The study applied the Theory of Public Participation to analyze the public's reaction to the TAPERA policy on Twitter and other social media platforms. The theory posits that involving the public in policy-making enhances the quality, legitimacy, and effectiveness of policies. It emphasizes that public participation can ensure policies meet the actual needs of the community by incorporating diverse perspectives.

In the context of the TAPERA policy, the public's reaction on Twitter suggests a significant disconnect between the government's intentions and the public's perception of the policy. The widespread negative sentiment, as evidenced by the critical hashtags and tweets, indicates that the public feels burdened by the contribution requirements and doubts the policy's effectiveness. This public outcry aligns with the theory's proposition that excluding the public from policy discussions can lead to policies that do not resonate with the people's needs and aspirations.

The use of sarcasm, memes, and organized protests further emphasizes the public's discontent and their desire to be heard. These actions reflect a high level of public engagement, albeit informal, and underscore the need for more inclusive policy-making processes. The theory of public participation suggests that such grassroots-level expressions are indicative of a failure in the formal participatory process, where public input was either not adequately sought or not sufficiently considered.

The involvement of influencers in voicing the rejection of TAPERA also highlights the need for policymakers to recognize and engage with these key opinion leaders. Their ability to mobilize public opinion suggests that their inclusion in the participatory process could enhance the legitimacy and acceptance of the policy.

The momentum and intensity of the TAPERA-related discussions on Twitter, as evidenced by the trending hashtags, further underscore the public's desire to be involved in the policy-making process. The theory of public participation suggests that such momentum indicates a strong public desire to be heard and involved. The sheer volume and intensity of the discussion point to a public that feels its needs and concerns are not being adequately addressed.

In conclusion, the analysis of the public's reaction to the TAPERA policy through the lens of the Theory of Public Participation reveals a significant gap in the policy-making process. The public's negative sentiment, creative expressions of dissent, organized protests, and the influence of social media all point to the need for more inclusive, transparent, and responsive approaches to policy development in Indonesia.

CONCLUSION

This research aimed to analyze public sentiment towards the TAPERA policy on Twitter, identify the main topics discussed by the public, understand public aspirations and concerns, and assess the relationship between public sentiment on Twitter and the level of public participation in the TAPERA policy development process. The findings indicate that public sentiment towards TAPERA on Twitter is predominantly negative, with significant concerns about the financial burden, transparency, and effectiveness of the policy.

1. **Public Dissatisfaction with Contribution Requirements:** The public sentiment analysis revealed a widespread objection to the mandatory 3% salary contribution to TAPERA, particularly from low-income workers. This dissatisfaction suggests that the contribution rule was perceived as burdensome, highlighting a gap in the policy development process where public input was either not adequately sought or sufficiently considered.
2. **Expression of Dissent through Sarcasm and Memes:** The use of sarcasm and memes to criticize TAPERA on social media underscores a creative yet poignant expression of public dissent. These forms of expression, while humorous, reflect deep-seated frustrations and criticisms that formal channels may have overlooked. This indicates a high level of public engagement, albeit informal, and underscores the need for more inclusive policy-making processes.
3. **Organized Public Action Against TAPERA:** Demonstrations against TAPERA by workers and civil society, as reported and shared on social media, reflect organized and collective public action. These protests suggest that the public feels excluded from the policy development process. The exclusion of affected groups in the decision-making process led to significant backlash and mobilization against the policy.
4. **Influence of Social Media and Public Opinion Leaders:** The involvement of influencers in voicing rejection of TAPERA amplified public sentiment and extended the reach of critical perspectives. Influencers play a crucial role in shaping public discourse and mobilizing public opinion. Their significant impact highlights the need for policymakers to engage with key opinion leaders in the participatory process to enhance the legitimacy and acceptance of the policy.
5. **Momentum and Intensity of Public Discourse:** The rapid rise of TAPERA-related hashtags to trending status on Twitter demonstrates a high level of public engagement and urgency in the discourse. The intensity and volume of discussions indicate a strong public desire to be heard and involved in the policy-making process. This underscores the importance of continuous and adaptive public engagement throughout the policy cycle.

The findings from this research provide valuable insights for policymakers. The predominantly negative public sentiment towards TAPERA on social media highlights the need for a more inclusive, transparent, and responsive approach to policy development. Engaging the public,

particularly affected groups, early in the policy formulation stage can help identify concerns and mitigate backlash.

Moreover, recognizing and involving influencers and key opinion leaders in the participatory process can enhance the legitimacy and acceptance of the policy. Continuous public engagement and adaptive strategies are crucial to ensuring that policies like TAPERA are responsive to the community's needs and aspirations.

This research contributes to the theory of public participation by demonstrating the importance of social media as a platform for public engagement and discourse. The analysis of public sentiment on Twitter provides a comprehensive understanding of public participation in the policy development process. The findings underscore the critical role of public participation in enhancing the quality, legitimacy, and effectiveness of policies by incorporating diverse perspectives and ensuring that policies meet the actual needs of the community.

Future research could explore the long-term impact of public sentiment on policy implementation and outcomes. Additionally, comparative studies on public sentiment towards different policies across various social media platforms could provide a broader understanding of public participation in the digital age. Finally, further investigation into the effectiveness of different public engagement strategies in the policy development process could offer practical insights for policymakers.

REFERENCE

- Abas, A., Arifin, K., Ali, M. A. M., & Khairil, M. (2023). A systematic literature review on public participation in decision-making for local authority planning: A decade of progress and challenges. *Environmental Development*, 46, 100853. <https://doi.org/10.1016/j.envdev.2023.100853>
- Agus, F., Fanny, S., & Muliana, R. (2020). Efektivitas Implementasi Program Perumahan Bersubsidi Bagi Masyarakat Berpenghasilan Rendah Kota Pekanbaru (Studi Kasus : Kecamatan Tenayan Raya). *JURNAL SAINTIS*, 20(02), 101–109. [https://doi.org/10.25299/saintis.2020.vol20\(02\).5710](https://doi.org/10.25299/saintis.2020.vol20(02).5710)
- Akbar, J. H., Yusriyadi, Y., & Priyatna, S. (2024). Legal politics of public housing savings for citizens' decent and affordable housing. *Corporate Law and Governance Review*, 6(1), 19–26. <https://doi.org/10.22495/clgrv6i1p2>
- Asril, A. A., Rifai, A., & Shebubakar, A. N. (2022). Penyelenggaraan Tabungan Perumahan Menurut Undang-Undang Nomor 4 Tahun 2016 Ditinjau dari Perspektif Perlindungan Hukum. *Jurnal Magister Ilmu Hukum*, 7(1), 1. <https://doi.org/10.36722/jmih.v7i1.1185>
- Assamoi, B., & Lawryshyn, Y. (2012). The environmental comparison of landfilling vs. incineration of MSW accounting for waste diversion. *Waste Management*, 32(5), 1019–1030. <https://doi.org/10.1016/j.wasman.2011.10.023>
- Bonsón, E., Perea, D., & Bednárová, M. (2019). Twitter as a tool for citizen engagement: An

- empirical study of the Andalusian municipalities. *Government Information Quarterly*, 36(3), 480–489. <https://doi.org/10.1016/j.giq.2019.03.001>
- Chan, Y. E., Krishnamurthy, R., Mann, J., & Sabherwal, R. (2022). Public Participation in Policy Making: Evidence from a Citizen Advisory Panel. *Public Performance & Management Review*, 45(6), 1308–1345. <https://doi.org/10.1080/15309576.2022.2062398>
- Chen, L., & Gao, M. (2021). Novel information interaction rule for municipal household waste classification behavior based on an evolving scale-free network. *Resources, Conservation and Recycling*, 168, 105445. <https://doi.org/10.1016/j.resconrec.2021.105445>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles, CA, USA: SAGE Publications, Inc. Retrieved from <https://edge.sagepub.com/creswellrd5e>
- Cui, J., & Ronald, R. (2024). Intergenerational Support and the Financial Strategies of Young Homebuyers in Shanghai. *Housing, Theory and Society*, 1–20. <https://doi.org/10.1080/14036096.2024.2377214>
- Denzin, N. K., & Lincoln, Y. S. (2017). *The SAGE Handbook of Qualitative Research* (5th ed.). New York, NY, USA: SAGE Publications, Inc. Retrieved from <https://us.sagepub.com/en-us/nam/the-sage-handbook-of-qualitative-research/book242504>
- Gofur, R., & Jumiati, I. E. (2021). Analisis Kebijakan Program Sejuta Rumah: Sebuah Tinjauan Literatur. *Administratio: Jurnal Ilmiah Administrasi Publik Dan Pembangunan*, 12(2), 113–120. <https://doi.org/10.23960/administratio.v12i2.230>
- Goodall, Z., Stone, W., & Cook, K. (2023). Housing policy and non-commercial shared housing in the private rental sector: a scoping review. *Housing Studies*, 1–19. <https://doi.org/10.1080/02673037.2023.2238633>
- Hasan, M. A., Nahiduzzaman, K. M., & Aldosary, A. S. (2018). Public participation in EIA: A comparative study of the projects run by government and non-governmental organizations. *Environmental Impact Assessment Review*, 72, 12–24. <https://doi.org/10.1016/j.eiar.2018.05.001>
- Hayes, L. C. (2024). Research, market, and policy implications of permanently affordable housing: lessons from Australian discussions about community land trusts. *International Journal of Housing Policy*, 1–25. <https://doi.org/10.1080/19491247.2024.2367830>
- Ishak, M. N. (2024). Analysis Of Public Housing Savings Policy From The Perspective Of Islamic Economics: Social Welfare And Distribution Justic. *Al-Kharaj*, 6(2), 170–178. <https://doi.org/https://doi.org/10.24256/kharaj.v6i2.5178>
- Lappeman, J., Goder, A., Naicker, K., Faruki, H., & Gordon, P. (2024). Using Sentiment Analysis to Understand Public Policy Nicknames: Obamacare and the Affordable Care Act. *Journal of Nonprofit & Public Sector Marketing*, 36(3), 347–363. <https://doi.org/10.1080/10495142.2023.2178588>
- Liu, L., Bouman, T., Perlaviciute, G., & Steg, L. (2020). Public participation in decision making, perceived procedural fairness and public acceptability of renewable energy projects. *Energy and Climate Change*, 1, 100013. <https://doi.org/10.1016/j.egycc.2020.100013>

- Mangeswuri, D. R. (2016). Implementasi Kebijakan Fasilitas Likuiditas Pembiayaan Perumahan (FLPP) Terhadap Angka Backlog. *Jurnal Ekonomi Dan Kebijakan Publik*, 7(1), 83. <https://doi.org/10.22212/jekp.v7i1.410>
- Park, C. S. (2013). Does Twitter motivate involvement in politics? Tweeting, opinion leadership, and political engagement. *Computers in Human Behavior*, 29(4), 1641–1648. <https://doi.org/10.1016/j.chb.2013.01.044>
- Perlaviciute, G., & Squintani, L. (2020). Public Participation in Climate Policy Making: Toward Reconciling Public Preferences and Legal Frameworks. *One Earth*, 2(4), 341–348. <https://doi.org/10.1016/j.oneear.2020.03.009>
- Putra, H. G., Fahmi, E., & Taruc, K. (2020). Tabungan Perumahan Rakyat (TAPERA) dan Penerapannya di DKI Jakarta. *Jurnal Muara Sains, Teknologi, Kedokteran Dan Ilmu Kesehatan*, 3(2), 321. <https://doi.org/10.24912/jmstik.v3i2.5630>
- S, N., Paulraj, D., Ezhumalai, P., & Prakash, M. (2024). A Deep Learning Modified Neural Network(DLMNN) based proficient sentiment analysis technique on Twitter data. *Journal of Experimental & Theoretical Artificial Intelligence*, 36(3), 415–434. <https://doi.org/10.1080/0952813X.2022.2093405>
- Saputra, R., & Hasan, F. N. (2024). Analisis Sentimen Terhadap Program Makan Siang & Susu Gratis Menggunakan Algoritma Naive Bayes. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 6(3), 411–419. <https://doi.org/10.47233/jteksis.v6i3.1378>
- Soeprapto, D. D. (2020). SWOT analysis of BP. Tapera: A public housing savings implementing agency in Indonesia. *International Journal of Research in Business and Social Science (2147- 4478)*, 9(6), 230–243. <https://doi.org/10.20525/ijrbs.v9i6.900>
- Tania, N., Novienco, J., & Sanjaya, D. (2021). Kajian Teori Hukum Progresif Terhadap Implementasi Produk Tabungan Perumahan Rakyat. *Perspektif*, 26(2), 73–87. <https://doi.org/10.30742/perspektif.v26i2.800>
- Theocharis, Y., Boulianne, S., Koc-Michalska, K., & Bimber, B. (2023). Platform affordances and political participation: how social media reshape political engagement. *West European Politics*, 46(4), 788–811. <https://doi.org/10.1080/01402382.2022.2087410>
- Wang, R., Wan, X., & Zhao, X. (2023). Understanding evolutionary process of public participation leveraging agent-based simulation: The case of waste incineration power projects. *Journal of Environmental Management*, 345, 118595. <https://doi.org/10.1016/j.jenvman.2023.118595>
- Wang, Y., Zhang, R., Zhao, Y., & Li, C. (2023). A public participation approach in the environmental governance of industrial parks. *Environmental Impact Assessment Review*, 101, 107131. <https://doi.org/10.1016/j.eiar.2023.107131>
- Webler, T., Kastenholz, H., & Renn, O. (1995). Public participation in impact assessment: A social learning perspective. *Environmental Impact Assessment Review*, 15(5), 443–463. [https://doi.org/10.1016/0195-9255\(95\)00043-E](https://doi.org/10.1016/0195-9255(95)00043-E)
- Yin, R. K. (2012). *Case Study Research. Design and Methods* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc. Retrieved from <https://www.jstor.org/stable/23279888>

Social Media Sentiment Analysis for Public Participation in Public Policy (Case Study Public Sentiment Against TAPERA Policy on Twitter)

Rulandari

Yutika, C. H., Adiwijaya, A., & Faraby, S. Al. (2021). Analisis Sentimen Berbasis Aspek pada Review Female Daily Menggunakan TF-IDF dan Naïve Bayes. *JURNAL MEDIA INFORMATIKA BUDIDARMA*, 5(2), 422. <https://doi.org/10.30865/mib.v5i2.2845>