

Analysis of Local Media Content on the Implementation of Air Pollution Control Policies

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Submitted: 12th December 2024

Revised : 28th February 2025

Accepted: 31th March 2025

ABSTRACT

Air pollution in Riau Province is an environmental problem that has been going on for years, with significant impacts on public health, the environment, and the economy. One of the main causes of air pollution is forest and land fires, which are generally caused by land clearing practices for agriculture and oil palm plantations. Although various efforts have been made to overcome air pollution, its implementation in Riau Province still faces a number of challenges, such as lack of socialization, suboptimal supervision, and weak law enforcement against perpetrators of arson. This study aims to examine how air pollution control policies are implemented in Riau Province through analysis of local media coverage from 2021 to 2024. The method used is qualitative research with a descriptive approach, which focuses on analyzing news content related to air pollution control policies. The results of the study show that although various policies have been implemented, challenges in supervision and public awareness still hinder the effectiveness of air pollution control efforts. This study provides recommendations for policy makers to strengthen coordination between agencies, increase public education, and improve supervision for more effective air pollution reduction in the future.

Keywords: air pollution, forest, land fires, communication policy, local media

INTRODUCTION

Air pollution in Riau Province is an environmental problem that has been going on for years and has a wide impact on public health, the environment, and the economy (Maula et.al, 2024; Utami, & Primawardani 2021). One of the main causes of air pollution is forest and land fires (karhutla) which mostly occur in peat areas. Karhutla are generally caused by land clearing practices by burning, both for agriculture and oil palm plantations (Maharani et.al, 2022). In recent years, this issue has become a national and international concern because the impacts are not only felt by the people of Riau, but also neighboring countries such as Malaysia and Singapore through the phenomenon of transboundary haze pollution (Faradiba, 2024).

Data shows that the area of land affected by forest and land fires in Riau tends to fluctuate. In 2019, Riau recorded more than 75,871 hectares of land burned (detikNews, 2019), while in 2023, around 2,632 hectares were reported burned (detik.com, 2024), indicating a significant decrease even though this problem has not been completely resolved. The National Disaster Management Agency (BNPB) together with the Riau Provincial Government determine the emergency alert status for fires every year as an anticipatory measure (Dewi, 2023; Ardhana & Ismandianto, 2022). In addition, they use various technologies, such as helicopters for water bombing and weather modification technology (TMC), to extinguish fires and prevent their spread.

Air quality in Riau often ranges from "unhealthy" to "hazardous" during the dry season. IQAir's report (2024) states that PM2.5 particle levels in several areas, such as Pekanbaru and Dumai, exceed the safe threshold recommended by the World Health Organization (WHO). This air pollution has a direct impact on public health, with thousands of cases of Acute Respiratory Infections (ARI) reported annually during the haze period (Candrasari et.al, 2023).

To address this issue, the Indonesian Government has issued various regulations as mitigation efforts, such as Government Regulation (PP) No. 22 of 2021 concerning the Implementation of Environmental Protection and Management, which provides guidelines for air quality management, and Presidential Regulation (Perpres) No. 44 of 2018 concerning Forest and Land Fire Control, which emphasizes the importance of integrated supervision and law

enforcement in preventing land fires. In addition, PP No. 41 of 1999 concerning Air Pollution Control is also the basis for efforts to control emissions and improve air quality.

The implementation of these policies in Riau Province includes strategic programs such as integrated patrols to prevent land burning, environmental education campaigns to increase public awareness, strengthening supporting infrastructure for emission control, and stricter law enforcement against perpetrators of burning and other violations. This combination of policy approaches is key to reducing chronic air pollution levels in the region.

However, the implementation of this policy faces various challenges, ranging from limited resources to lack of coordination between agencies (Satriana, 2023; Fithori, 2024). In addition, weak law enforcement against companies and individuals involved in land burning is often a major obstacle (Tempo, 2023; Kompas, 2023). For example, there are still many perpetrators of burning who are not subject to strict sanctions, so that preventive measures do not provide a significant deterrent effect. On the other hand, public awareness of the importance of maintaining air quality is also a key factor that needs to be considered in the implementation of this policy.

Research related to the implementation of communication policies is very important to be carried out, especially to provide a reference for the government in reflecting and evaluating programs and activities implemented to deal with air pollution more effectively, especially in Riau Province (Solihah & Rohman, 2024; Abdussamad et.al, 2022). For example, the implementation of air pollution control policies in Lampung faces obstacles such as weak coordination between institutions, lack of strict law enforcement, and low public awareness and participation (Maulana, 2024).

In addition, the implementation of PP No. 22 of 2021 carried out by the East Jakarta Environmental Service through the Motor Vehicle Emission Testing Program has not gone well, especially in terms of socialization to the community, because many drivers still choose not to participate in this program, because the main challenge in efforts to control air contamination is caused by motor vehicles (Riyanto, et.al 2024). Research by Surayda et.al (2024) on low carbon cooperation between Indonesia and the UK in Semarang which focuses on clean mobility and zero emission vehicles shows progress in reducing the impact of climate change which is also a form

of Indonesia's commitment to the Paris Agreement. Although the developments are positive, challenges in coordination and socialization still need to be overcome to achieve a more effective transition and optimal air pollution control.

Based on the implementation narrative in various regions in Indonesia related to Government Regulation No. 22 of 2021 concerning Environmental Management and Protection, it can be concluded that its implementation shows shortcomings in the aspects of supervision and control. In addition, it was also found that minimal socialization and education and lack of public awareness were inhibiting factors that made citizen participation only reactive after the impact of pollution was felt. Researchers emphasize that the implementation of communication policies carried out by opinion leaders has not been effective, because the role of opinion leaders is one of the keys to the success of implementing environmental policies, especially in inviting the public to care about the environment (Maulina & Rusli, 2021; Hamluddin, 2021).

Based on this, this study aims to examine the implementation of government policies in controlling air pollution in Riau Province. This study will focus on the analysis of local media coverage, namely Riau Pos, Tribun Pekanbaru, and Haluan Riau, to identify the extent to which air pollution control policies have been implemented in the field. By using the news content analysis method, this study is expected to provide a broader picture of the challenges and successes faced in implementing air pollution control policies in Riau Province, without being limited to one particular regulation or approach.

This research is important to provide input for policy makers in improving air pollution control strategies in the future. In addition, the results of this study are expected to be a reference for local governments and related agencies in increasing the effectiveness of environmental policy implementation, especially in areas prone to air pollution such as Riau Province.

RESEARCH METHODS

This study uses a qualitative method with a descriptive approach to explore the implementation of air pollution control policies in Riau Province (Astuti et.al, 2023). Data were

collected through content analysis of news (Mony & Wahyuni, 2023; Brouwer et.al, 2024) published by three popular local online media in Riau, namely Riau Pos, GoRiau, datariau.com and suarariau.id, related to the implementation of air pollution control policies.

The data sources in this study consisted of news published from early 2021 to 2024, by conducting a special keyword search, namely "Pollution", "Air", and "Riau", covering the period from January 1, 2021 to November 11, 2024. Based on this search, 8 relevant news items were found for analysis (Erdianto, 2023; Khaira et al., 2023). The analysis process aims to determine the implementation of air pollution control policies in Riau Province through news content analysis. This study aims to provide an overview of how communication policies related to air pollution control are implemented by the government at the Riau Province level in overcoming these environmental problems.

RESULT AND DISCUSSION

Result

Based on content analysis of news articles published by Riau Pos, Tribun Pekanbaru, Suara Riau, and Go Riau, the results of this study identified various findings related to the implementation of Government Regulation No. 22 of 2021 in Riau Province. The following are the main findings found in the research data:

Tabel 1 News Data

News	Date of issue	Media
Jaga Lingkungan lewat Sepeda Listrik	6 November 2022	RiauPos.co
PT RAPP Siap Operasikan Bus Listrik Buatan Anak Bangsa	1 September 2021	
HUT Ke-240 Pekanbaru, Pemko Gratiskan Layanan Bus TMP selama 3 Hari	21 Juni 2024	
Pj Bupati Inhil dan Perusahaan Sepakati Pembangunan Jalan Alternatif Khusus Angkutan Batubara	25 Desember 2023	GoRiau.com

News	Date of issue	Media
Pemprov Riau Beli 8 Mobil Listrik Rp10,4 Miliar, Warga: Sesuka Hatinyalah	06 April 2023	
Peringatan Hari Bumi 2022: Pemanasan Global dan Dampak Perubahan Iklim	27 Juni 2022	
Penguatan Fungsi MPB dalam Upaya Mitigasi Karhutla di Desa Tanjung Belit	14 November 2024	datariau.com
Karhutla Mulai Melanda, 3 Alat Ukur Polusi Udara Pekanbaru Tak Berfungsi	04 Maret 2021	suarariau.id

Source: Primary Data (2022)

Based on the analysis of the articles available in the attached sources, the implementation of Government Regulation (PP) Number 22 of 2021 concerning Environmental Management and Protection in Riau Province shows a number of important efforts in controlling air pollution and supporting environmental conservation. Several main aspects that can be identified related to the implementation of this policy are as follows:

Main Themes in the News

In the news titled "Jaga Lingkungan lewat Sepeda Listrik" (Riau Pos, November 6, 2022), it was stated that the government has begun to encourage the use of electric bikes as a strategic step to reduce emissions. The theme of environmentally friendly vehicles appeared in five of the eight news items analyzed. For example, news from GoRiau.com dated April 6, 2023 reported the purchase of eight electric cars by the Riau Provincial Government. These news items show the government's efforts to demonstrate its commitment to low-emission policies. However, only a few discuss its impact on public awareness.

Meanwhile, the theme of karhutla (forest and land fires) was found in three news items, one of which was titled "Karhutla Mulai Melanda, 3 Alat Ukur Polusi Udara Pekanbaru Tak Berfungsi" (SuaraRiau.id, March 4, 2021). This news describes the limitations of technical supervision that contribute to air pollution in the area.

The theme of community empowerment and socialization only appeared in two news items. For example, in the news "Peringatan Hari Bumi 2022" (Datariau.com, June 27, 2022), it was

mentioned that there was a need for public education regarding the impacts of climate change and air pollution, but without further explanation regarding the concrete steps taken.

Dominant Aspects of Communication

Most news focuses more on technical steps and government policies. For example, news about purchasing electric vehicles does not provide in-depth information about how this policy is communicated to the public. This shows that policy communication efforts have not touched on the aspect of public participation significantly.

Media Focus

The media tends to report on government actions without providing critical analysis of the obstacles in policy implementation. In the news "Penguatan Fungsi MPB dalam Upaya Mitigasi Karhutla" (Datariau.com, November 14, 2024), it was stated that strengthening the function of disaster-aware communities (MPB) is important for forest and land fire mitigation, but community involvement was not discussed in detail.

Limitations of Supervision

Of the eight news items analyzed, only one highlighted air quality measuring devices that were not functioning optimally. In the news "Karhutla Mulai Meland" (SuaraRiau.id, March 4, 2021), it was stated that three air pollution measuring devices in Pekanbaru were not functioning, which shows weaknesses in technical supervision.

Discussion

Based on the analysis of the content of the news articles studied, it shows that even though policies have been in place, there are not always sufficient actions to ensure that all parties comply with existing regulations. Articles 196 to 213 in PP No. 22 of 2021 require the government to carry out systematic air pollution control, starting from planning, implementation, inspection, to

corrective action. However, supervision that is less intensive and not evenly distributed throughout Riau hampers the effectiveness of the implementation of this policy.

Based on the data that has been explained from various available news, the implementation of Government Regulation No. 22 of 2021 concerning Environmental Management and Protection in Riau Province, especially in terms of air pollution control, shows several major challenges that hinder the effectiveness of the policy. The following is a more in-depth explanation of the findings related to the implementation of the policy recorded in the media:

Lack of Socialization and Public Education

One of the main problems faced in the implementation of PP No. 22 of 2021 in Riau is the lack of socialization to the public regarding air pollution control policies. In various news reports obtained, very few discuss the importance of the role of the community in reducing air pollution, especially related to behavioral changes in choosing environmentally friendly transportation. Although the Riau Provincial Government has taken steps to introduce electric vehicles and clean public transportation, news about this has not yet reached the wider community. The implementation of existing policies is more often dominated by initiatives that come from certain sectors, such as private companies that produce electric buses and electric cars, while the general public is still poorly educated about the benefits of these policies. This causes many residents to not feel involved or motivated to support the program, considering that they do not get enough information about how air pollution reduction can be done collectively.

In addition, although the purchase of electric cars by the provincial government was carried out as an effort to reduce vehicle emissions, the implementation of this policy was not accompanied by massive socialization steps. The public does not have sufficient understanding of why electric vehicles need to be encouraged or how the policy can reduce air pollution. Therefore, public awareness of this policy is still very low, resulting in a lack of active public participation in emission reduction programs promoted by the government.

Suboptimal Supervision

The implementation of air pollution control policies in Riau is also hampered by the lack of technical supervision of pollution sources, especially in terms of karhutla (forest and land fires) which are one of the largest contributors to air pollution in the province. Several news reports have found that the air pollution measuring devices used by the government do not always function properly. For example, the air quality monitoring device in Pekanbaru was reported to be unable to measure accurately in several periods, which hampers efforts to monitor air pollution in real time and develop appropriate remedial measures. In addition, although there are regulations requiring emission reductions and monitoring of air pollution sources, suboptimal monitoring devices are a major obstacle in assessing the effectiveness of policy implementation.

One concrete example of this lack of supervision is in handling forest fires. Although the government has implemented various efforts to prevent forest fires, such as the formation of firefighting teams and law enforcement against perpetrators of arson, forest fires still continue to occur every year. This indicates that supervision of the implementation of policies related to forest fires is not intensive enough, which in turn causes severe air pollution. Without adequate supervision, air pollution control efforts will remain limited, even though existing policies are quite clear.

Forest Fire Control is Not Yet Optimal

Forest and land fires are one of the main problems that hinder air pollution control in Riau. Forest and land burning often occurs, both by communities to clear agricultural land and by companies. Despite various efforts made by the government, such as imposing sanctions on parties proven to have carried out illegal burning and increasing patrols to detect fires early, forest and land fires are still an ongoing threat. One of the main problems is the lack of coordination between the central and regional governments, as well as between the public and private sectors in preventing forest and land fires. The forest and land fire control program is also hampered by the lack of alternatives for communities who rely on burning to clear land. This makes forest and land

fires a difficult problem to overcome in the short term, even though there are quite strict regulations in Presidential Regulation (Perpres) No. 44 of 2018.

Forest and land fires not only cause severe air pollution, but also have negative impacts on public health and the ecosystem. As a result, although there are various policies to reduce forest and land fires, the implementation of these policies has not been effective enough to overcome the problem comprehensively. In this case, the government needs to strengthen cooperation with private companies and local communities to develop more effective environmentally friendly alternatives.

Implementation of Environmentally Friendly Vehicle Policy

The Riau Provincial Government has also attempted to use environmentally friendly vehicles, such as purchasing electric cars and operating electric buses by private companies, such as PT RAPP. However, despite positive efforts, the implementation of this policy has not reached all levels of society. One of the obstacles faced is the limited infrastructure that supports electric vehicles, such as charging stations which are still limited. In addition, the relatively high cost of electric vehicles is an obstacle for people who want to switch to environmentally friendly vehicles.

In this case, although the Riau Provincial Government has started to purchase electric cars and encourage the development of electric buses, this policy still needs to be supported by broader infrastructure and subsidies for the community, so that more people can switch to more environmentally friendly vehicles. Without the support of more inclusive infrastructure and policies, the implementation of electric vehicles in Riau will not achieve a significant impact on reducing air pollution.

Air Pollution Still High in 2024

Air pollution in Riau, especially in Pekanbaru, still shows high numbers in 2024. On September 5, 2024, Riau was recorded as the province with the highest air pollution in Indonesia (databoks, 2024) which is the result of a combination of forest and land fires, motor vehicle emissions, and lack of supervision of existing policies. Although there are several initiatives that

support air pollution control, such as the procurement of electric vehicles and the operation of electric buses, the impact of these policies has not been felt significantly. The high air pollution shows that the implementation of existing policies, both from the provincial and central governments, still needs to be improved.

Most of this air pollution is still influenced by external factors such as forest fires that often occur every year and the lack of preventive measures implemented by related parties. In addition, suboptimal supervision of policy implementation also contributes to the high level of air pollution in Riau in 2024.

Therefore, it is necessary to strengthen the aspects of supervision and law enforcement, as well as the use of technology to monitor and measure air pollution in real time. The Riau Provincial Government needs to ensure that the devices used to maintain air quality function properly and can provide accurate data to support appropriate policy-making.

CONCLUSION

The conclusion highlights several key points regarding the implementation of air pollution control policies in Riau Province. Despite existing regulations, the policies face numerous challenges in enforcement and effectiveness. A major issue is the lack of public awareness about air pollution reduction efforts, leading to low public participation in eco-friendly initiatives, such as the use of electric vehicles. Furthermore, technical monitoring tools for tracking pollution sources are not functioning optimally, making it difficult to accurately measure air quality in real-time.

While policies for reducing emissions and controlling forest and land fires are in place, their execution has been hindered by insufficient supervision and weak coordination between the government, private sector, and the public. The challenge of recurrent forest and land fires highlights the need for better inter-governmental collaboration. In terms of encouraging environmentally friendly transportation, the government's efforts to promote electric vehicles and buses are promising, but the lack of supporting infrastructure and the high cost of these vehicles

remain obstacles. To effectively reduce air pollution, there needs to be greater public education, stronger monitoring systems, improved coordination, and enhanced infrastructure to support eco-friendly practices.

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