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ENVIRONMENTAL COMMUNICATION IN INDONESIAN TELEVISION NEWS COVERAGE

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ABSTRACT

This article aims to present baseline data on environmental issues broadcasted on Indonesian televisions. Data was collected from one year broadcasts of 63 TV from July 2017 to June 2018 using indexing theory on Indonesian environmental indicators concept which are the state of land, air, and water. Then content analysis conducted guided by research questions. The study found that eleven out of sixty three television stations broadcasted 425 programs related to environmental issues. It reveals that only small number of Indonesian TV stations broadcasted environmental news. The study identified that in the most cases shows government officials and the minister or representatives of the Ministry of Environment and Forestry in central and regional governments were quoted as sources. In general, news sources were not representing stakeholders of environmental problems. The contents broadcasted the most were related to forest fires including: forest fires, hotspot, smog, peat and land use

change. The environmental issues covered were mostly related to those emerging in dry season in Indonesia, thus ignoring the problems emerged during rainy season. This study has found that Indonesian TVs have not been playing significant role in mainstreaming environmental issues and contributing to educating and sensitizing the Indonesian public about environmental issues.

INTRODUCTION

Previous studies have shown that media have a significant role in building people's understanding pertaining to environmental news (Cox, 2010; Hamidah et.al, 2012). Media in various forms are believed to influence the formation of understanding and awareness of environmental news in the minds of individuals and society. Although the present societies have the power to choose the information and select the media they consume, media still have the power to influence their minds once they are chosen. It is still acknowledged that the premise of media forms the individual's understanding pertaining to many events around him/her, in this case specifically pertaining to environmental news. The opposite fact in which society seeks for media to know information related to environmental news has also been widely described in previous studies so that media are considered as the reference of society related to environmental news. Media are the places where society seeks information pertaining to environmental news and improves its understanding of environmental news (Cox, 2013; Hansen, 2009). Hansen (2009, 2011, 2018) and Cox (2013) even stated that media has become an intermediary in disseminating information and is becoming a platform for obtaining information pertaining to environmental news in other regions and becomes the center of information related to environmental news whenever environmental problems occur.

Media has played a successful role in mainstreaming environmental news at global level. An agreement focusing on paying attention to environmental conditions and commitments made by many countries in the first Earth Summit held in the year 1972 in Rio de Janeiro is one of the evidences of the successful role played by media. Several studies have confirmed

that the role of media is important in mainstreaming environmental news (Anderson, 2015; Hansen & Machin, 2013; Holbert, Kwak, & Shah, 2003). To ensure this, several countries held various meetings with the aim of monitoring and evaluating plans for reducing environmental damage accommodated by UN including UN Conference on Environment and Development (UNCED). Since then, the media has always been involved in covering various forms of government commitment to reduce the occurrence of environmental damage in various countries through developing various policies. The practical manifestation of media's policies in this regard is the regular attendance of such annual meetings by the media professionals. In Indonesia, the successful example of mainstreaming environmental news where the media contributed among others, is the existence of Reducing Emissions from Deforestation and Forest Degradation (REDD) program that connects developed and developing countries. REDD activities covered by the print media are always evaluated by the study of coverage of print media on REDD activities carried out in Indonesia (Lindenfeld, Hall, McGreavy, Silka, & Hart, 2012). However, environmental news coverage in television media in Indonesia has not been the concern of the previous studies and demands attention of the researchers. Therefore, this article examines the role of Indonesian Television media in covering environmental news at national level.

The importance of television role in the Indonesian context has encouraged the researchers to trace the environmental coverage in television media in Indonesia. Moreover, the viewers of television serving in Indonesia are still dominant and large in number (Briandana, 2019). Generally, more than 90 percent Indonesians have a habit of watching television (Kitley, 2000). However, after the diversification of television shows into digital streaming which can be accessed through computers and smartphones, the television viewership has declined, having said that, it is still the dominant one. In 2017, Nielsen reported that 53 percent of the total media users in Indonesia are television viewers and are still the highest in proportion as compared to both radio lovers and print media readers (databoks.katadata.co.id/datapublish/2017/07/27 Television penetration is still the highest accessed on 9th January 2019). Thus, it is still relevant to review the contents broadcast by

television channels about environment. In fact, the author found that the study of television communicating environmental news is still limited.

Indonesian broadcast system concludes radio and television. It is regulated under Indonesian law (Undang-undang/ UU) number 32 year 2002. All broadcasting stations managed by institutions who hold license to broadcast and stated the kind of cluster they are in. The holders of broadcasting institutions categorized in four clusters, as stated in the article number 13 UU No. 32/2002, which are public broadcasting institutions, private broadcasting institutions, community broadcasting institutions, and subscriptions broadcasters. This article focuses on television station in communicating environmental news.

Indonesian only have one public broadcasting institution that is managed by the state owned government institution, namely Televisi Republik Indonesia or TVRI. TVRI head quarter office located in Jakarta/Central Government and its stations exist in regions, in the level of provinces or district, or cities. Private and subscriptions broadcasting institutions are commercials broadcasters. But the subscriptions criteria described in article 26 UU No. 32 is using satellite, cabel, or terrestrial provider. Their broadcast area determined by government in partner with Indonesian Broadcasting Commisioner (Komisi Penyiaran Indonesia/KPI). Private and subscriptions broadcasters mainly managed by businessman. Community broadcasting institutions are non commercial broadcasters. University television stations is an example of community broadcasters. Within the governance of televisions stations mentioned in UU No. 32 year 2002, there are also issues widely studies by communications scholars on media ownership.

Studies on Indonesian media, including television, always mentioned the issues of media ownership as its context (Hill & Sen, 2011; Rianto, 2018) Discussion mentioned the previous studies consists of the owner of media were not in neutral mode. They are in allignment of certain party, managing the media in favor of their preferences as businessmen, not for the greater good, and there is no variety in the content, among others. These issues were raising significantly after the year of 1998, when government no longer monitored the media,

businessmen owns most of the media in Indonesia, and corporations took over media management. Strong political economy governance applies in Indonesian media landscape.

CONCEPTUAL FRAMEWORK

Society and media have a close reciprocal relationship in the context of providing and obtaining information about environmental news. Previous studies have described that society obtains information pertaining to environmental news or problems from the various forms of media inclusive of print, electronic and online. The media and environmental relation started with the media becoming a sphere where people complained after the environmental problems occurred in America and in Mexico when oil polluted water (Bolsen & Shapiro, 2018; Hansen & Machin, 2013). At that time, media became the hope for the society in struggling for getting their rights to have an unpolluted environment through the media's attention and coverage. At that time, environmental issues were taken into consideration in policy making and media became a place for them to express their objections. The frequency of media coverage with respect to environmental pollution is expected to attract the attention of many parties and influence policy makers to take actions related to the pollution issues caused by the industry. This has become a context of many studies of communication and the environment in which the development of study was then categorized by Cox (2006) into themes including news content and news communication in environmental communication; by Anderson (2015) regarding the importance of informant and media owners in environmental communication news.

In several environmental events, society has great expectations from media to provide a more complete, up-to-date and accurate information (Liem, Marta, & Panggabean, 2019). On events like smog; floods; sea pollution or earthquakes, society looks forward to media in obtaining information related to the scene; what is happening; how people are responding and the response from the policy makers; even on what the victims must do in the situation they faced during the disaster; or what they must do in order to prevent a disaster from occurring.

Media has turned out to be a place where people seek information pertaining to environmental problems that occur around them or exist in other places. Media presents discourses and describes environmental news that occur not only in the form of events but also policies made by the parties concerned or authorized in accordance with the perspective of the media and media policy, respectively (Allen, 2001; Bolsen & Shapiro, 2018; Giannoulis, Botetzagias, & Skanavis, 2010; Zhang & Skoric, 2018).

The function of media when environmental event occurs is to identify and interpret the event and to play a role as a mediator among related parties such as scientists, policy makers, and society (Aalberg, Van Aelst, & Curran, 2010; Bonfadelli, 2010; Chao-Chen, 2013; Holbert et al., 2003; Jönsson, 2011). Media then interprets these environmental events. Then they form messages pertaining to such environmental events for the public, certainly pursuant to the prevailing media and media organization policies (Brookes, Lewis, & Wahl-Jorgensen, 2004).

The content of the environmental news, the news sources, as well as the represented institutions are also important factors for media when deciding what might and might not be conveyed to Public (Anderson, 2015; Bonfadelli, 2010; Brookes et al., 2004; Giannoulis et al., 2010). On the other hand, media also becomes a contributor to the formation of an understanding of environmental events with the news displayed, and formed which then influence the direction of the policy that must be on the agenda (Campbell, 2014). Although the policy makers or actors related to environmental news also utilize the media to obtain support from the news or ideas they offer or have (Eveland & Scheufele, 2000). Here, it is seen that environmental news in the media has a close reciprocal relationship among the media themselves, the society, the news sources, the policy makers, and the environmental events (Bonfadelli, 2010). All parties contribute to determine which news is important for the parties related to the event, parties who become the informants as well as what are the environmental news offered by the media? This reference then becomes the focus when analyzing environmental news show in Indonesian television. The Identification of what television stations are showing about the environmental news? How much environmental news are broadcasted during a period of 365 days/one year? Which news sources are often

quoted by the media? becomes the focus of data identification that will be presented in this article.

The state of Indonesian environment reported by Biro Pusat Statistik (BPS/Bureau of Indonesian Statistic) and the Ministry of Environment of Indonesia already experienced acid rain in 2009 and in 2014 the impact of it already affected the ecological cycle such as the biodiversity lost, the farming cycle, air, water, and land pollution. The report also put in concern on the population and the people behavior as the cause of the problems. This article argue that the people should be engaged to become part of the solution as mentioned by Lakoff (2010); Lopez (2010). Therefore media should cover and broadcast more on environmental issues to engage the people in doing it.

METHODOLOGY

This article is designed to provide baseline data in answering certain questions: How many environmental news shows are broadcasted on television in Indonesia? Who frequently becomes the informant in the show, and what environmental issues are reported? To answer these questions, data collection on environmental news broadcasted in television stations from July 2017 to June 2018 was conducted. Using indexing theory (Althaus, Edy, Entman, & Phalen, 1996); (Andersen & Christensen, 2001) the process of data collection is using the Indonesian environmental indicators, which are water condition, land condition, and air condition. Professional data collection agency IMM was asked to do the crawling data to the 63 TVs stations using keywords air, water, and land. Second step of data screening conducted by reviewing the data collected into the context of the condition of air, water, and land. The condition of air, ater and land would be included as data when it is presenting about the pollution, climate change, flora and fauna, data on the state of Indonesian environmental condition, the problems, and solution. After the data collected, screened, then content analysis conducted within the focus to look for the answer of research questions posted.

Content analysis conducted to identify list of the television stations that broadcasted environmental news, to identify frequency of environmental news broadcasted, the distribution of news broadcasted within the context of dry and rainy seasons, to identify news

sources quoted, and the topic of content broadcasted (Rubiyanto, 2018). Population of the research is 63 television stations (Nugroho, Siregar, & Laksmi, 2012), and sampling criteria in doing content analysis, limited to the stations who broadcasted environmental news, which are 11 TV stations.

FINDINGS & DISCUSSION

The results of data collection revealed that there are only 11 television stations broadcasting the news pertaining to environment. Television stations in Indonesia broadcasting environmental news and the number of shows per each television station were listed in the following Table 1:

Table 1: Indonesian Television stations broadcasting Environmental Issues and frequency

No	TV Stations	Frequency
1	Metro TV	132
2	Kompas TV	117
3	I News	85
4	TVRI	29
5	RCTI	22
6	TVONE	13
7	SCTV	10
8	TRANS 7	9
9	ANTV	6
10	MNC TV	1
11	Trans TV	1

The data in Table 1 shows that in the period of 1 year, television stations holding licenses in national level broadcast environmental news. The data also provided information of television sequence that showed the most environmental news with the least amount. Out of

the 11 television stations, in 1 year Metro TV broadcasted the most environmental news (132), followed by Kompas TV (117) and INews (85), whereas MNCTV and Trans TV each only one environmental news. Among all television stations in Indonesia, it can be seen that TVRI, RCTI, TVOne, SCTV, Trans7 and ANTV also broadcast environmental news with a number varying from 29 times, 22 times, 13 times, 10 times, 9 times and 6 times of the total broadcast.

The data above showed that three commercial TV channels (MetroTV, Kompas TV and INEWS) occupied the top three. Putting it into the context of media system, these three television stations had been positioning themselves as news television stations. Therefore they put more news broadcasted. The Tsunami Aceh was one of the data that is frequently referred and compared while talking about the problems on forest fires, especially in MetroTV. The three television stations had more portions on the news program than non news program where environmental issues presented to public. Nevertheless, positioning as news television was not always associated with an increase in the number of environmental issue shows, news agency and newsroom policy might also become one of the factors that need to study further as Wahyudin (2017) mentioned there are five level of influence in making decision on what to be published to the public. It can be seen from the number of environmental issue news in TVOne, who also positioned as news TV in Indonesia, which only showed 13 environmental issue based news. This figure was even lower than the number of shows on RCTI which is not a television station with news television positioning. To find out more about whether there was a relationship between news TV positioning and environmental news shows, there is a need to be further studies that can complement this study's baseline data.

TVRI is one and only Public television station with the widest range in Indonesia compared to private television stations. TVRI is also the first TV station in Indonesia. It has been governed by the government of Indonesia and its role is supporting government sustainable development program, among others. Since, TVRI is a television station which categorized as state television, who has local and national license to its content, ideally closer to

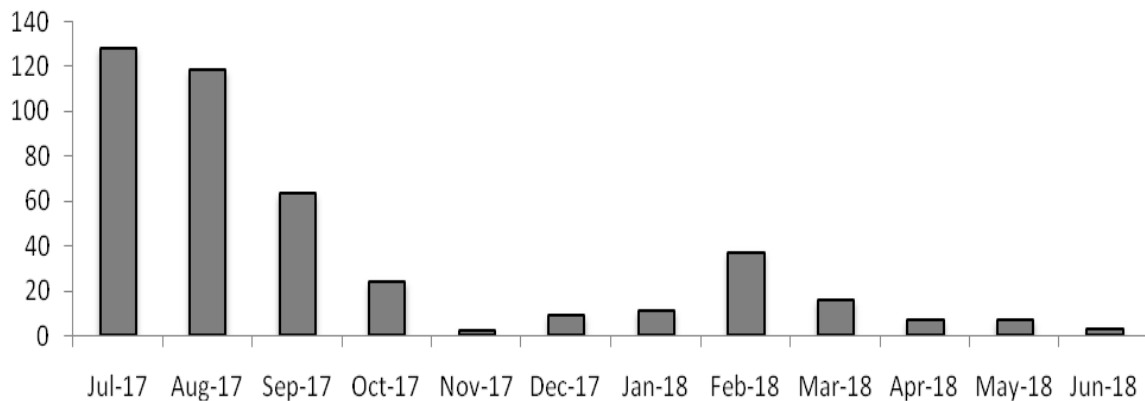
environmental news that occurred in Indonesia which consists of thousands of islands. Environmental issues exist in local context, TVRI local is closer to the events. Thus, this closeness allowed TVRI to raise voice more often about environmental issues. Not to mention in connection with the function of public television station pursuant to the mandate of broadcasting law number 32 of 2002 that public broadcast media must broadcast not only market desires but also market needs. One of the market's need that is not often complied by private television stations is news programs that are not impartial and are not influenced by ratings. This should be complied by TVRI. Data in table 1.1 showed that TVRI only broadcasted 29 news pertaining to environmental issues, far below the amount of environmental issues raised by three commercial TVs (Metro TV, Kompas TV and I News).

Deeper analysis of the number of environmental news showed on televisions can be seen in table 2 which was supported by figure 1, which presented the distribution of 1-year broadcast (July 2017 to June 2018). In Table 2 and Figure 2, it can be seen that from July 2017 to June 2018, there were differences in the number of news shows on environmental issues raised by all television stations in Indonesia.

Table 1.2 showed the number of environmental issues that were often raised in television news in July 2017 (128 news) and August 2017 (118 news), whereas the amount of news pertaining to environment were least raised in November 2017, which were only 2 news. The data can be explained by the dry season and rainy season with the annual cycle in Indonesia. In dry season occurring in July and August 2017 which had always occurred in recent years, had experienced repeated and widespread forest fire. This became the driving force for the coverage of environmental news not only on electronic media but also in all forms of media so that news pertaining to environmental issues was very high in those months. The news pertaining to forest fire and smoke from forest fire in several regions in Indonesia increased in the mid of dry season. Along with the beginning of rainy season and reduced smoke spots, the amount of environmental issue based news also decreased. Although issue pertaining to flood also appeared in the months of February and March, flood issue was not broadcasted by TV stations as often as forest fire or smoke issues.

Table 2. Environmental News Shows per Month on 11 Indonesian TV stations												
Month	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18
News	128	118	63	24	2	9	11	37	16	7	7	3

Figure 1: News Diagram Monthly from July 2017 to June 2018



Data related to environmental news showed issues that were broadcasted on TV. In Table 3, environmental news headlines in Indonesian TV showed similar concern, namely on the issue of forest fire, the variations of which were headlines of forest fires, smoke spot and affected areas. Based on the data in table 3, television media in Indonesia was very concerned about the problem of forest fires as important news that was considered appropriate to be broadcasted on television. These data showed that television media's attention to environmental issues was highly concentrated in one specific news namely concerning forest fires. This is shown from headlines presented to public around smog, hotspot, burning peat land, firefighting effort and the like. These data also provided indications that environmental coverage was more often conducted in the dry season where the forest is burning. The

frequency of forest fire broadcast was really high so that the highest frequency number one to eight occupied by forest fire.

Table 3: Top Issues in Indonesian TELEVISION (July 2017 – June 2018)

Smog	<i>Thick Smog Blankets Residents and Schools; Thick Smog Blankets Some US States; Aceh Governor Requests Police to Investigate the Actor of Land Burning</i>
Hotspots	<i>Joint Team Monitors a Number of Hotspots in Trans Sumatera Street; Land Fires in Three Sub-districts Reduce Air Quality; Minister of Environment and Forestry: Hotspots Increase 20 % Compared to Last Year</i>
Forest fires	<i>Forest and Land Fire Occur in Three Sub-districts; 1 HECTARE OF PEATLAND IS BURNT OUT; Tens of Hectares of Peat Land in Ogan Ilir are Burnt out</i>
Forests and land fires	<i>Behind the Threats to Officials Failing to Deal with Forest and Land Fires; TEAK FOREST FIRE REOCCURS; PANGKALAN BUN FOREST FIRE; PROTECTED FOREST FIRE</i>
Protected	<i>PROTECTED FOREST FIRE; Protected Land Fire; Three Protected Land are Secured by the Lampasiq Sector Police</i>
Efforts	<i>Efforts to Extinguish Land Fires in Alue Siron Village Continue to be Done; Tens of Hectares of Peat Land in Ogan Ilir are Burnt out; Tens of West Aceh Military District Commando Soldiers are Deployed to Extinguish Land Fire; Actors of land Burning is arrested; Aceh governor Requests Police to investigate the Actor of Land burning</i>

The forest fire that was very often broadcasted on TV was covered in various perspectives, from events, extinguishing efforts, areas where fire occurred and the type of forest lost due to the fire. Mitigation was also broadcasted with the show discussing the arrested actors of fire. This reflected that TV journalists had adequate knowledge related to forest fire. However, environmental problems in Indonesia is not only forest fire, there are many other issues that also threaten the existence of Indonesia in the coming years such as the predicted decline in land surface annually which will eventually sink Indonesia. Since, Indonesia is one of the countries with a surface below the sea level. Rainy season issues such as floods and landslides have not been existed in TV coverage in the period of this study.

Informant in news, according to the several previous studies became important in environmental research in media. The importance of informant was assumed to be able to influence editorial decision. Therefore, identification of informant often quoted by the media

in environmental news coverage show was important in this study. From the news obtained from this study, informant having most frequency cited by TV stations in Indonesia was the informant from the government. In fact, it can be said that all contents broadcasted in on TV was from the government/State, either from central or regional government.

More specifically, the contents derived from Ministry of Environment and Forestry (MEF) and the one represented by Minister Siti Nurbaya was in the first sequence. The second sequence of informant that was often cited by the media is President Jokowi and Alex Nurdin, Governor of South Sumatera in which forest issue and its variations are frequent and recurring. This results shows that TV still seems to be the government's mouthpiece in delivering environmental news to public. Other environmental stakeholders mentioned by previous studies, such as the people, industries, NGOs (Aalberg et al., 2010; Dahlstrom & Scheufele, 2010; Hamidah, 2012; Konieczna, Mattis, Tsai, Liang, & Dunwoody, 2014) has not been in account.

CONCLUSION

Among the 63 TV stations in Indonesia, in the period of 1 year, only 11 TV stations broadcasted environmental news. The number of environmental news broadcasted appearing in 11 TV stations is 425 broadcasts in a year or can be averaged between 1 and 2 broadcasts in a day. The study concludes that Indonesian TV station is lack of broadcasted environmental news. Seen from the issue that is aired, the broadcast news is concentrated on the issues related to forest fire that is always emerging in dry season. There is lack of coverage related to environmental problems happens in rainy season such as floods and landslides while it happens all the time and have huge impact to the people.

The news sources almost entirely from the government. From this conclusion, it is seen that awareness on environmental problems is a responsibility of all stakeholders and there are many other issues on environmental problems has not been in existence. The role of TV to be used in environmental communication still needs to be optimized in improving societal concern on environmental issues which in previous several studies were considered really

significant for Indonesia. Not to mention, TV media are the media that are most often consumed by Indonesian society. Ideally, it should be broadcasts more environmental problems issues to raise the people awareness of environmental problems and engaging them to be part of the solution.

In order to find out the involvement of journalism in mainstreaming environmental news, there is a need to conduct study pertaining to how media other than TV in Indonesia present environmental news. This need becomes significant considering that the media in various countries have succeeded in mainstreaming environmental issues and contributing to educating and encouraging activities that lead to manage environmental degradation, environmentally friendly actions, and even efficient use and management of natural resources.

LIMITATION AND STUDY FORWARD

This article presents baseline data on television stations who did environmental communications, by broadcasted environmental news in the year of 2017-2018 cycle of dry and rainy season in Indonesia. Research on timing of the 425 broadcasted environmental news, content analysis on tone from government officials quoted, and qualitative study on media ideology would complement this article.

REFERENCES

- Aalberg, T., Van Aelst, P., & Curran, J. (2010). Media systems and the political information environment: A cross-national comparison. *The International Journal of Press/Politics*, 15(3), 255–271.
- Allen, W. (2001). A News Media Perspective on Environmental Communication: The culture of newsrooms and the culture of science differ considerably, but by understanding these differences, biologists can make communicating science news to the public efficient, enjoyable, and productive. *BioScience*, 51(4), 289–291.

- Althaus, S. L., Edy, J. A., Entman, R. M., & Phalen, P. (1996). Revising the indexing hypothesis: Officials, media, and the Libya crisis. *Political Communication*, 13(4), 407–421.
- Andersen, J., & Christensen, F. S. (2001). Wittgenstein and indexing theory. In *Advances in classification research. Proceedings of the 10th ASIS SIG/CR classification research workshop* (Vol. 10, pp. 1–21). Information Today Medford, NJ.
- Anderson, A. (2015). Reflections on environmental communication and the challenges of a new research agenda. *Environmental Communication*, 9(3), 379–383.
- Bolsen, T., & Shapiro, M. A. (2018). The US news media, polarization on climate change, and pathways to effective communication. *Environmental Communication*, 12(2), 149–163.
- Bonfadelli, H. (2010). Environmental sustainability as challenge for media and journalism. In *Environmental sociology* (pp. 257–278). New York: Springer.
- Briandana, R. (2019). Television and National Identity: An Ethnography of Television Audience in the Border of Indonesia-Malaysia. *Jurnal Ilmu Sosial Dan Ilmu Politik*, 23(1), 72–85.
- Brookes, R., Lewis, J., & Wahl-Jorgensen, K. (2004). The media representation of public opinion: British television news coverage of the 2001 general election. *Media, Culture & Society*, 26(1), 63–80.
- Campbell, V. (2014). Framing environmental risks and natural disasters in factual entertainment television. *Environmental Communication*, 8(1), 58–74.
- Chao-Chen, L. (2013). Convergence of new and old media: new media representation in traditional news. *Chinese Journal of Communication*, 6(2), 183–201.
- Cox, R. (2013). *Environmental communication and the public sphere*. London: Sage.
- Dahlstrom, M. F., & Scheufele, D. A. (2010). Diversity of television exposure and its association with the cultivation of concern for environmental risks. *Environmental Communication*, 4(1), 54–65.
- Eveland, W. P., & Scheufele, D. A. (2000). Connecting news media use with gaps in knowledge and participation. *Political Communication*, 17(3), 215–237.

- Giannoulis, C., Botetzagias, I., & Skanavis, C. (2010). Newspaper reporters' priorities and beliefs about environmental journalism: An application of Q-methodology. *Science Communication, 32*(4), 425–466.
- Hamidah, A. H. (2012). *Communication and environment: sustainability and risks*. Penang: Penerbit Universiti Sains Malaysia.
- Hansen, A. (2009). Media and environmental change. *Media Development, 56*(2), 3–8.
- Hansen, A. (2011). Communication, media and environment: Towards reconnecting research on the production, content and social implications of environmental communication. *International Communication Gazette, 73*(1–2), 7–25.
- Hansen, A. (2018). *Environment, media and communication*. London and New York: Routledge.
- Hansen, A., & Machin, D. (2013). Researching visual environmental communication. *Environmental Communication: A Journal of Nature and Culture, 7*(2), 151–168.
- Hill, D. T., & Sen, K. (2011). *Politics and the media in twenty-first century Indonesia: Decade of democracy*. Routledge.
- Holbert, R. L., Kwak, N., & Shah, D. V. (2003). Environmental concern, patterns of television viewing, and pro-environmental behaviors: Integrating models of media consumption and effects. *Journal of Broadcasting & Electronic Media, 47*(2), 177–196.
- Jönsson, A. M. (2011). Framing environmental risks in the Baltic Sea: A news media analysis. *Ambio, 40*(2), 121–132.
- Kitley, P. (2000). *Television, nation and culture in Indonesia*. Ohio: Ohio University Center for International Studies.
- Konieczna, M., Mattis, K., Tsai, J.-Y., Liang, X., & Dunwoody, S. (2014). Global journalism in decision-making moments: A case study of Canadian and American television coverage of the 2009 United Nations Framework Convention on Climate Change in Copenhagen. *Environmental Communication, 8*(4), 489–507.

- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4(1), 70–81.
- Liem, S., Marta, R. F., & Panggabean, H. (2019). Sanitation Behavior and Risk of Stunting: Understanding the Discourse of a Public Service Announcement. *Jurnal The Messenger*, 11(2), 168–181.
- Lindenfeld, L. A., Hall, D. M., McGreavy, B., Silka, L., & Hart, D. (2012). Creating a place for environmental communication research in sustainability science. *Environmental Communication: A Journal of Nature and Culture*, 6(1), 23–43.
- Lopez, A. (2010). Defusing the cannon/canon: An organic media approach to environmental communication. *Environmental Communication*, 4(1), 99–108.
- Nugroho, Y., Siregar, M. F., & Laksmi, S. (2012). *Mapping media policy in Indonesia*. Manchester: Centre for Innovation Policy and Governance.
- Rianto, P. (2018). Media Baru, Visi Khalayak Aktif dan Urgensi Literasi Media. *Jurnal Komunikasi Ikatan Sarjana Komunikasi Indonesia*, 1(2), 90–96.
- Rubiyanto, R. (2018). Strategi membidik ketersediaan audiens dalam industri televisi (Studi deskriptif tayangan film India ANTV). *Bricolage: Jurnal Magister Ilmu Komunikasi*, 4(1), 83–94.
- Wahyudin, U. (2017). Strategi Komunikasi Lingkungan Dalam Membangun Kepedulian Masyarakat Terhadap Lingkungan. *Jurnal Common*, 1(2).
- Zhang, N., & Skoric, M. M. (2018). Media use and environmental engagement: Examining differential gains from news media and social media. *International Journal of Communication*, 12, 24.