



LEUPHANA

UNIVERSITÄT LÜNEBURG

**ENVIRONMENTAL COMMUNICATION AMONG THE MEDIA AND
ENVIRONMENTAL NON-GOVERNMENTAL ORGANISATIONS (ENGOs)
IN MALAYSIA: A ROLLER COASTER RIDE?**

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Abstract

This study aims to answer four main research questions regarding the roles, strategies, barriers, and representation of the media and environmental non-governmental organisations (ENGOS) in environmental communication in Malaysia. From a theoretical lens, this study has incorporated the essential concepts of media, ENGOS, and environmental communication from both Western and Asian, particularly Malaysian perspectives as primary points of reference. For the purpose of this study, a total of 13 interviewees from Media A and Media B and 11 interviewees from ENGO A and ENGO B were chosen for the qualitative interview while 2,050 environmental articles were collected as samples from Media A's and Media B's newspapers along with ENGO A's and ENGO B's newsletters from the period 2012 to 2014 for the quantitative content analysis. Specifically, the findings from interview confirmed that both the Malaysian media and ENGOS have shared quite similar roles in environmental communication, particularly in environmental legitimacy (creating trust, credibility, and relationships with the public), in democracy (acting as a watchdog and mobilising the public sphere), and in constructing public mind about environmental problems. Pictures undoubtedly were one of the most vital tools in social construction, especially for presenting the reality of the environmental problems to the public. This was in harmony with the results of the quantitative content analysis, where more than 60% of pictures were found on environmental articles in media newspapers and ENGOS newsletters. Malaysian media and ENGOS have shared two common strategies in environmental communication, namely campaigning and collaboration with other stakeholders, while the ENGOS have two extra strategies: advocacy and lobbying strategies. Malaysian media and ENGOS also have collaborated with each other and the level of collaboration between them was at the coordination (medium) level. Both social actors especially the media were also relied heavily on their sources for environmental articles and the result of quantitative content analysis showed that the government was the main source for media newspapers, whereas other ENGOS and laypersons were the main sources for ENGOS' newsletters. There are also colossal barriers faced by both Malaysian media and ENGOS throughout the process of environmental communication and some of the barriers faced by both media and ENGOS include the problem with limited knowledge of the environment, while some other barriers, like media laws and ownership, were only faced by the media; other barriers such as funding problems were specifically faced by the ENGOS. In terms of representation of environmental information, the Malaysian media make more presentations on environmental problems, especially on topics like floods, wildlife and water crises in their newspapers, while ENGOS have given more attention to environmental effort topics such as conservation and sustainable living in their newsletters. Surprisingly, not only the media but also the ENGOS used the same (news) values like timeliness, proximity, and impact as criteria for the selection of environmental issues for their publications. Other factors such as the background of the organisation and the interest of journalists or editors also influence the selection of environmental issues. It is hoped that the proposed theoretical framework of this study can serve as a crucial guideline for the development of environmental communication studies, especially among the media and ENGOS not only in Malaysia but also in other (Southeast) Asian regions that share a similar background.

Zusammenfassung

Ziel dieser Arbeit ist die Beantwortung von vier Forschungsfragen bezüglich der Rollen, Strategien, Barrieren und der Darstellung durch Medien und environmental non-governmental organisation (Nichtregierungs-Umweltorganisationen; ENGOs) in der Umweltkommunikation in Malaysia. Von der theoretischen Betrachtungsweise her bezieht die Studie die essentiellen Konzepte von Medien, Nichtregierungsorganisationen im Umweltbereich und westliche sowie asiatische Umweltkommunikation mit ein, insbesondere malaysische Perspektiven als Hauptverweise. Für die Zielsetzung dieser Studie wurden qualitative Interviews mit 13 Vertreter(innen) der Media A und Media B sowie mit 11 Vertreter(innen) der ENGO A und ENGO B geführt. Zudem wurden 2050 Umweltartikel aus den Zeitungen der Media A und B und Newsletter der ENGO A und ENGO B aus dem Zeitraum 2012 und 2014 gesammelt und mittels quantitativer Inhaltsanalyse ausgewertet. Vor allem die Interviews ergaben, dass sowohl die Medien als auch die ENGOs ähnliche Rollen innerhalb der Umweltkommunikation innehatten: Umweltpolitische Legitimität (Schaffung von Vertrauen, Glaubwürdigkeit und Beziehung zur Öffentlichkeit), Demokratie (Wächter-Funktion und die Mobilisierung der Öffentlichkeit) und bei der Konstruktion öffentlichen Denkens über Umweltprobleme. Fotografien waren zweifellos eines der wichtigsten Werkzeuge in der sozialen Konstruktion, vor allem für die Präsentation der Realität von Umweltproblemen in der Öffentlichkeit. Dieses steht im Einklang mit den Ergebnissen der quantitativen Inhaltsanalyse, in denen mehr als 60% der Umweltartikel in den Medien und ENGO-Newsletter Fotos enthielt. Die malaysische Medien und ENGOs hatten zwei gemeinsame Strategien in der Umweltkommunikation, nämlich Kampagnenarbeit und die Zusammenarbeit mit anderen Akteuren. ENGOs hatten zudem zwei zusätzliche Strategien: Anwaltschaft und Lobbying-Strategien. Malaysische Medien und ENGOs arbeiteten miteinander zusammen. Das Niveau dieser Zusammenarbeit bewegte sich auf der Koordinationsebene (mittlere Ebene). Beide sozialen Akteure - vor allem die Medien – verließen sich stark auf ihre Quellen für Umweltartikel. Das Ergebnis der quantitativen Inhaltsanalyse zeigte, dass die Regierung die Hauptquelle für die Medien war, während die wichtigsten Quellen für ENGO-Newsletter andere ENGOs und Laien waren. Es konnten tiefgreifende Barrieren in dem gesamten Prozess der Umweltkommunikation der malaysischen Medien und ENGOs identifiziert werden. Mit einigen Hindernissen, wie das Problem des begrenzten Wissens über die Umwelt, waren sowohl Medien als auch ENGOs konfrontiert, während Barrieren, wie Mediengesetze und Eigentumsverhältnisse, nur die Medien betrafen und Finanzierungsprobleme nur ENGOs. In Bezug auf die Darstellung von Umweltinformationen thematisieren die malaysische Medien eher Umweltprobleme, in Bezug auf Hochwasser, Wildtiere und Wasserkrisen in ihren Zeitungen, während ENGOs in ihren Newslettern mehr Aufmerksamkeit auf pro-Umweltfragen wie etwa die Erhaltung der Umwelt und eine nachhaltige Lebensweise richteten. Überraschenderweise verwendeten Medien und ENGOs die gleichen Kriterien - wie Pünktlichkeit, Nähe, und Auswirkungen - für die Auswahl von Umweltfragen für ihre Publikationen. Andere Faktoren, wie der Hintergrund der Organisation und das Interesse von Journalisten oder Redakteuren, hatten ebenso Einfluss auf die Auswahl von Umweltfragen. Der vorgeschlagene theoretische Rahmen dieser Arbeit kann als eine Leitlinie für die

Entwicklung von Umweltkommunikationsstudien dienen, nicht nur bei den Medien und ENGOs in Malaysia, sondern vor allem auch in anderen (Südost) asiatischen Regionen, die einen ähnlichen Hintergrund teilen.

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Declaration

I hereby certify that the submitted dissertation entitled “Environmental Communication among the Media and Environmental Non-Governmental Organisations (ENGOS) in Malaysia: A Roller Coaster Ride?” has been written by me without using unauthorised aids. I did not use any aids and writings other than those indicated. All passages taken from other writing, either verbatim or in substance, have been marked by me accordingly.

I hereby confirm that I have not taken or registered to take another doctoral examination and this dissertation has not yet been submitted to any other university for review.



Mohamad Saifudin Bin Mohamad Saleh

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List of Abbreviations

BN	<i>Barisan Nasional</i>
CAP	Consumers Association of Penang
CEO	Chief Executive Officer
CSR	Corporate social responsibility
ENGOs	Environmental Non-Governmental Organisations
EPSM	Environmental Protection Society Malaysia
EU	European Union
FOE	Friend of the Earth
ISA	Internal Security Act
IUCN	International Union for Conservation of Nature
MCA	Malaysian Chinese Association
MIC	Malaysian Indian Congress
MNS	Malaysian Nature Society
NGOs	Non-Governmental Organisations
NRE	Ministry of Natural Resources and Environment Malaysia
NST	New Straits Times
NSTP	New Straits Times Press
OSA	Official Secrets Act
PAA	Peaceful Assembly Act
PPPA	Printing Presses and Publications Act
SAM	<i>Sahabat Alam Malaysia</i>
S&T	Science and Technology
UK	United Kingdom
UMNO	United Malays National Organisation
UN	United Nations
UNESCO	United Nations Organisation for Education, Science and Culture
US	United States
WCED	World Commission on Environment and Development
WWF	World Wide Fund for Nature

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CHAPTER 1

INTRODUCTION

1.1 Motivation of the Study

“We have allowed these chemicals to be used with little or no advance investigation of their effect on soil, water, wildlife, and man himself. Future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports all life.”

(Rachel Carson, 1962, p. 13)

In writing about the dangers of chemical pesticides in her famous book entitled *Silent Spring*¹ (*Der stumme Frühling* in German) in 1962, Rachel Carson successfully shocked and awakened the world to the dangers of chemical pesticides to human well-being and the potential for a natural catastrophe. By the virtue of her catalytic book, Carson triggered a widespread global discourse about environmental concerns (Recher, 1992; Lowden, 1997; Sachsman, 2000a) and also caught the attention of the former president of the United States (US), John F. Kennedy, who later appointed the Science Advisory Committee to review Carson’s claims about the effect of chemical pesticides. This step led to new, vigorous environmental protection policies in the US. For instance, the Environmental Protection Agency was established in 1970 and the use of dichlorodiphenyltrichloroethane (commonly referred to as DDT) was banned by the federal government of the US later in 1972 (Dreier, 2012). In fact, in the same year (1972), the first historic world environment conference, the United Nations Conference on the Human Environment (also known as the Earth Summit) was held in Stockholm. This conference successfully brought developing and

¹ *Silent Spring* is a book written by the former aquatic biologist Rachel Carson in 1962. There are 17 chapters in this book regarding human and environmental topics. Carson wrote of the effects of synthetic pesticides on the environment and humans, especially the effect of consuming fruits and vegetables with pesticides that were likely to increase the risk of cancer. *Silent Spring* has received very much positive feedback around the world and more than two million copies have been sold.

developed countries together, where they had agreed to issue guidance and principles for the preservation of the world's environment. Afterwards, various subsequent international environmental conferences were held, including the United Nations Conference on the Environment and Development (UNCED) held in Rio de Janeiro 1992 and the Johannesburg World Summit on Sustainable Development in 2002, which fruitfully turned a large amount of public concern and attention towards environmental issues (Carpenter, 2012).

Certainly, Carson was one of the earliest influential figures of the environmental movement who proved that communicating about the environment through the medium of a book was able to enhance the public's knowledge and understanding of nature. Undeniably, she also demonstrated the broad-spectrum power of the media, especially via individual works and texts, which are pivotal for moulding public opinion (Pleasant et al., 2002). Although Carson had already passed away from an aggressive breast cancer in 1964, her inspired book, *Silent Spring*, is still remembered and remains relevant and evocative to this day. In particular, *Silent Spring* will always be remembered by the world as a pivotal turning point and a milestone in the birth and development of the philosophy of environmental communication, which has had a huge positive impact on environmental protection on the global stage for over 50 years.

At the onset of the 21st century, considering the ongoing explosive growth of wanton environmental degradation, many countries around the world, regardless of their economic status, are acutely aware of and have extensively explored environmental protection. Malaysia, one of the swiftest developing nations in the Southeast Asian sphere, does not want to fail in its tremendous endeavours towards environmental protection. Environmental stewardship in Malaysia has been occurring since Malaysia's involvement in the Stockholm Earth Summit conference in 1972 (Kadaruddin, Gerrard, & Martin, 2006). In fact, the participation of Malaysia in the

UNCED in 1992 helped to bring about the implementation of the local Agenda 21², which aims towards holistic and sustainable development through the integration of all stakeholders including the government, private sectors and the participation of the local community (Pereira et al., 2005). With the goal of Vision 2020³ being to inexorably transform Malaysia from a developing to a developed country by the year 2020 (Saadatian et al., 2012), the former Prime Minister of Malaysia, Tun Mahathir Mohamed, has positively emphasised the importance of sustainable development with respect to environmental issues as follows:

“We must also ensure that our valuable resources are not wasted. Our land must remain productive and fertile, our water unpolluted, our forest resources capable of regeneration and able to yield the needs of our national development. The beauty of our land should not be desecrated; for its own sake and for our own economic advancement.”

(Mahathir, 1991 as cited in Dahlia, 2011, p. 3)

Therefore, in line with this goal of sustainable development⁴, environmental communication must take place, especially by the media and the environmental non-governmental organisations (ENGOS), which are two of the most vital vehicles in Malaysia (Aida Nasirah, Kalthom, & Noraini, 2009). The media is a great channel for distributing scientific information (Liverman, 2008), and both mainstream and entertainment media can provide an immense and substantial amount of important environmental information (Cox, 2006a) that can be referred to by other stakeholders

² Agenda 21 is a global partnership among countries all around the world to support the sustainable development agenda. The agenda consists of 40 items, which (in Chapter 35) emphasised the role of science for sustainable development, especially scientists' role in providing science information.

³ Vision 2020 is a national plan unveiled by the former Prime Minister of Malaysia, Tun Mahathir Mohamed, in 1991. The main objective is to reach the status of a developed nation by 2020. There are nine objectives in Vision 2020, including achieving sustainable development.

⁴ The World Commission on Environment and Development (WCED), known as the Brundtland Commission, defined sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

like ENGOs and the public. In fact, the media is a powerful tool and a major weapon for persuading and influencing public opinion (Ladle, Jepson, & Whittaker 2005). Through environmental writing and reporting, it is possible to make people think that they are part of the environment and not the owners of the natural resources who can simply continue with unsustainable exploitation (Bavadam, 2010). Similarly, the ENGOs are also prominent stakeholders in communicating environmental issues and promoting sustainable lifestyles in Malaysia. The ENGOs not only play a highly significant role in protecting the pristine environment (Rohani et al., 2010), but they also offer meaningful environmental information and materials to journalists for their reports. More importantly, the ENGOs are able to conduct their own scientific research (Princen, Finger, & Manno, 1994) and also have the extensive capacity to lobby and educate people and the government about environmental issues (Princen & Finger, 1994).

After distilling the main ideas in the discussion above, my research motivation emerged from two elements: (1) my profound admiration of the power of environmental communication as displayed by Carson along with (2) my realisation of the fact that both media and ENGOs are known as the two most influential social actors other than stakeholders like the government and industry in producing environmental information (European Environment Agency, 1999), which obviously required further exploration and investigation. The urgent need for environmental communication among the Malaysian media and ENGOs will be discussed in the next section.

1.2 The Urgent Need for Environmental Communication among the Media and ENGOs in Malaysia

Indisputably, environmental degradation is not a new subject in Southeast Asian countries like Malaysia. With most its members being developing countries, Southeast Asia has endured various types of environmental degradation, which has reached at alarming levels over the last 20 years (Lee, 2012). There are numerous

precarious environmental degradation issues such as air and water pollution, logging and deforestation, which have been going on in most Southeast Asian countries and need urgent attention. Historically, in Malaysia, environmental degradation has occurred since the British colonial period and subsequent economic development, which relied heavily on tin mining and rubber plantation activities. Mining operations have led to environmental degradation not only in developing countries (Burke, 2006) like Malaysia, but also all around the world. Mining activities and rubber plantations obviously brought various extensive and unprecedented environmental pressures, including river pollution, landscape degradation, deforestation and destruction of aquatic habitats. It is clear that Malaysia has inherited a legacy of environmental degradation that has taken place since the colonisation era. This degradation has become more serious through Malaysia's economic development, especially after 1980, when Malaysia switched from being an agricultural to being an industrial nation. Since then, Malaysia has experienced extraordinary economic development, especially in the areas of industrialisation, urbanisation and motorisation. As a consequence of these rapid developments in Malaysia, the environment is facing further threats and hazards (Sakari et al., 2010).

After more than five decades of independence, Malaysia is still faced with various environmental problems arising from heedless disturbances by human activities that totally contradict the goal of achieving and maintaining environmental sustainability. By all accounts, the most common forms of environmental degradation in Malaysia include cross-border water and air pollution, and wastewater and solid waste management (Sharifah et al., 2011; Aminrad et al., 2013). Taking the case of water pollution, particularly the river pollution problem, for example, the Department of Environment Malaysia has recorded 19,320 cases of river pollution; 48.35% of this was from 640 sewage treatment plants, 45.1% was from manufacturing industries, 4.0% came from pig farming and 2.5% was from other agricultural industry (Department of Environment Malaysia, 2016a). In parallel, numerous recent studies over recent decades have consistently discussed the severe extent of environmental degradation in Malaysia, as noted by Muhammad Barzani et al., (2011) in their study

about the tragic landslides in Bukit Antarabangsa, Ampang, Kuala Lumpur on 6th December 2008, which resulted in death and property damage involving more than 20 homes. On the other hand, Norrimi Rosaida et al. (2013) found that urban areas in Malaysia have faced ozone pollution caused by industrial and urban development, whereby urban residents are exposed to high ozone concentrations. In addition, in 2013, Malaysia experienced the most serious case of atmospheric haze in its history due to forest fires in Indonesia, where the haze index came under the 'hazardous and unhealthy' category (Palanissamy, 2013).

Broadly speaking, although there is extensive environmental degradation in Malaysia, which is getting more serious and is adversely affecting people, the level of public awareness and concern about environmental issues is very minimal and is generally low (Mohammad Ghazi & Haliza, 2011; Agamuthu & Fauziah, 2010). In fact, public participation in environmental issues in Malaysia is also still low due to a lack of knowledge and understanding of these issues. The failure of several environmental campaigns such as the recycling campaign in 2001 (Hong & Narayan, 2006) is evidence of the lack of public awareness, knowledge and participation regarding environmental issues. Looking at these deteriorating environmental conditions, it is clear that communication can play a predominant and strong role in improving public understanding of environmental problems (Stamm, Clark, & Eblacas, 2000), especially in Malaysia.

Undoubtedly, communication has played a very powerful role in environmental protection since ancient times. The great philosophers like Socrates put endless emphasis on the role of communication in educating youths and citizens in general (Kamboura, 2008). Hence, it is legitimate to mention that communicating about environmental issues is not new in any country. Every human gives and receives environmental messages because all of us are environmental communicators (Jurin, Roush, & Danter, 2010). Among all the environmental communicators, the media, as part of daily life (Couldry, 2009) have played the most crucial role in helping to improve public understanding of environmental problems (Stamm, Clark,

& Eblacas, 2000) such as air pollution, global warming, haze, floods and more. Most people have learnt almost all we know about the environment through the media (Hansen, 2011a), as well as more traditional channels of instruction such as parents and school teachers. The media not only enlightens the public about environmental issues but may also help them to understand some of the more complex environmental issues like climate change by simplifying the technical language (Batta, Ashong, & Bashir, 2013). In short, the mass media play a significant role in transmitting information to the public (Boykoff, 2008a).

Furthermore, in addition to the media, ENGOS also play a mammoth role in environmental issues (Roue, 2003), especially in educating the public about environmental problems through published materials and campaigns (Robinson, 2013). By all accounts, both ENGOS and media are undeniably the two most essential social actors in communicating environmental messages to the public (Lück, Wozniak, & Wessler, 2016). It is therefore both ENGOS' and the media's responsibility to communicate environmental information to the public so that people become more aware of the environment. Sadly though, the situation today shows that the Malaysian media fails to communicate environmental issues in Malaysia (Romlah, Mohamat Sabri, & Nurisyah, 2010), especially regarding "heavy" topics such as climate change (Nor Jijidiana et al., 2015). This could be because the Malaysian media allocate more air time and column space to issues such as racial-political issues and thus this kind of issue is more dominant (Hasrina, Wan Norshira, & Ramli, 2013) than the environment in local newspapers. This circumstance does not only happen in Malaysia but also occurs in other countries regions Africa, where the local press, through its agenda, has made environmental issues become less important so these lag behind other social issues (Chagutah, 2010).

Despite these apparent environmental journalism problems, the limited space given to environmental reporting in the media also puts pressure on the ENGOS who champion environmental issues. Limited space in the media, especially newspapers, will automatically limit the chances of the ENGOS to deliver environmental

information via the media. Not only that, when we discuss the task of reporting or delivering information in the media, particularly newspapers in Malaysia, we need to admit that although Malaysia is known to be a democratic country, the media in Malaysia are not totally free. The media have been controlled by the state through various authoritarian laws and regulations, such as the Printing Presses and Publications Act (PPPA), which controls the media under an annual licencing scheme (Ali et al., 2011). Although the ENGOs are freer from direct control, as they are independent groups by definition, they are still controlled indirectly if they wish to publish any environmental information independently or via the media. Therefore, it is apparent that the media does not reflect public opinion (Cox, 2006a). As a consequence, the quality and credibility of newspaper reports on environmental issues are affected and the importance of these issues is slowly and steadily degraded. In other words, the public always questions the transparency and trustworthiness of the environmental information presented by the Malaysian media. When the recipients do not trust the senders of information anymore, the effectiveness of communication can naturally be disputed (Liu, Horsley, & Yang, 2012).

Somewhat ironically, ENGOs also face their own barriers such as being new, small and poorly funded (David, Wesley, & Evan, 2007). The limitations of funding constrict ENGOs from conducting research and subsequently disseminating the results to the media and the public. According to Balbanis, Philips & Lyall (1998), there is a correlation between environmental reporting and good economic performance. Due to these restrictions and insurmountable barriers, the ENGOs in Malaysia seem to be less active, particularly in delivering environmental information to the public. On the other hand, the greatest barrier of the environmental communication is that ENGOs or the media must have great understanding and knowledge about the subtle complexities of the environmental issues before they can communicate these to the public. An environmental communicator must be able to judge if the information is accurate and relevant enough to be disseminated to the audience (Jurin, Roush, & Danter, 2010). Previous researchers into scientific journalism problems and perspectives like De Semir (2000a) have stated that the

scientific reporter is a translator and must translate the information from specialised sources to something that can be understood by the audience. Therefore, without a thorough understanding of science and environmental issues, it is almost impossible for environmental agencies to communicate and outline the subject well.

Furthermore, some environmental issues like climate change and global warming are also complex, convoluted and difficult to explain to the public. For instance, in their research about communicating climate change, Schweizer et al. (2009) indicated that it is very challenging to explain climate change, as agencies often do not have many local examples or stories to show that climate change really happens. Indeed, it is difficult enough to convey certain phenomena to the public if they have no knowledge pertaining to the subject matter or the issue.

Alongside the barriers in environmental communication, it is worth noting that both the media and ENGOS have their own strategies for environmental communication. The ENGOS, for example, depend on newsletters as a medium to communicate about the environment and they also conduct lobbying, campaigning and collaboration with other stakeholders as part of their strategies in environmental communication. As for the media, their main strategy is to use newspapers to publish environmental information via news articles, feature write-ups, advertorials, columns and editorials. It is quite interesting to discover that the media and ENGOS share a common collaboration strategy. The media usually collaborate with other stakeholders like ENGOS, as they are one of their vital sources of environmental information for their news articles. Put simply, the media needs the ENGOS as their news source and the ENGOS need the media as a channel for communicating about the environment. Presumably, ENGOS and the media have a symbiotic relationship; this has been proven by past researchers like Xie (2011). In her research about environmentalism in China, Xie found that the ENGOS and the media worked closely together, where the media always assisted the ENGOS to broadcast their ideas, articles and reports to the public. However, the collaboration between the media and ENGOS is not always in a good condition and can be somewhat fragile. Krøvel

(2012), for example, found that that Norwegian ENGOs struggled in their relationship with the media in order to promote their stories and organisation. Thus, it is critical for the ENGOs to maintain their collaboration with the media, as they need to properly understand the news making process and the journalists' needs (Waisbord, 2011). On the other hand, sometimes, the media can often become frustrated with the ENGOs if they do not fulfil their requirements and this may end with the relationship turning sour. Even worse, a widening gulf can be formed between the media and the ENGOs and may eventually lead to failure of the collaboration.

To prevent such a failure, we need to consider the roles played by the media and ENGOs in environmental communication, the gamut of barriers faced by both types of agency in environmental communication, the importance of collaboration between them as part of the environmental communication strategy and, most importantly, the environmental information to be presented in newspapers and ENGOs' newsletters to improve public knowledge, awareness and practices. This research will therefore be conducted with the aim of strengthening the existing deficiency in mutual understanding and to achieve a better direction for environmental communication especially between the Malaysian media and ENGOs in the near future. The research aims and questions of this study will be outlined in the next section.

1.3 Research Aims and Questions

In light of the discussion on the urgent need for environmental communication among the media and ENGOs in Malaysia, this research will seek to explore the current status of environmental communication in Malaysia, especially on the roles, strategies, barriers and representations of environmental information in the Malaysian media and ENGOs in Malaysia. Based on the overarching research aims, I have constructed four specific research questions along with the sub-questions that have guided this study, as stated below.

Firstly, what kinds of roles are played by the Malaysian media and ENGOs in environmental communication? This question contains the sub-question: Are roles in environmental legitimacy, democracy and social construction part of the roles of the media and ENGOs in environmental communication?

Secondly, what kinds of strategies are used by the Malaysian media and ENGOs in environmental communication? This question includes the sub-question: Do collaboration with each other and source reliance for publications are part of the strategies of the media and ENGOs in environmental communication?

Thirdly, what kinds of barriers are faced by the Malaysian media and ENGOs in the process of environmental communication? This question contains the sub-question: Are barriers as environmental communicators, barriers of environmental information, and barriers imposed by the organisation are part of the barriers encountered by the media and ENGOs in environmental communication?

Finally, what kind of environmental information is represented by both social actors in their respective newspapers and newsletters? This question includes the sub-question: What are the characteristics of the environmental information presented in newspapers and ENGOs' newsletters? How are certain environmental topics selected over others?

By answering the four research questions and sub-questions, I hope to explore the similarities and differences in the roles, strategies, barriers, and representations of environmental communication between the media and ENGOs. At the end of this study, I would like to also propose a theoretical framework for environmental communication among the media and the ENGOs in Malaysia. Of course, the development of this theoretical framework is not a straightforward process and it will be constructed after conducting an extensive literature review, particularly on the previous concepts, theories, and frameworks along the same lines as the topics explored in this study. This proposed theoretical framework may serve as a guideline

for further studies and the development of environmental communication among the media and ENGOs in future. The significance of the study will be discussed in the next section.

1.4 Significance of the Study

This study is important, as it may help to improve the current state of environmental communication practices, especially among the media and ENGOs in Malaysia as a result of the research findings and recommendations of the study. As mentioned earlier, environmental communication, especially among the media and ENGOs, is indispensable for achieving sustainable development in Malaysia. Through newspapers and ENGOs' newsletters, Malaysians are able to obtain an enormous amount of environmental information that can assist to increase their knowledge and understanding about local and global environmental issues, and take action towards environmental stewardship. Therefore, it is worthwhile identifying the extent of how the media and ENGOs' communicators are directly involved in environmental communication in Malaysia, particularly the roles, strategies, barriers and representations in environmental communication. My research will provide a better understanding of the current status of environmental communication, especially among ENGOs and the media, and it is hoped that it will serve as a guideline that can assist the development of the environmental communication field in Malaysia and (Southeast) Asian regions. Policymakers in Malaysia, for example, could use the outcomes of this study a guideline, at least in part, if they want to organise a programme, workshop or training session on environmental communication for the media and ENGOs in Malaysia. Additionally, both the media and ENGOs can benefit from this study by taking the results of this study as a guideline for improving the quality of their environmental communication.

At present, relatively limited and insufficient published research into the roles, strategies, and barriers in communicating environmental issues by the media and ENGOs is available. This is especially true in the context of Malaysia and Asian

countries. Most of the previous studies focus on Western countries and these studies have generally examined the role of ENGOs and the media as communicators and mediators. It was very hard to find previous studies that investigated the connection between the media, ENGOs, democracy and environmental communication areas especially in Malaysia and Asia. It was also very hard to find earlier studies that specifically explored the representation of environmental information in ENGOs' newsletters. It is legitimate to conclude that this area is still underexplored, as most of previous studies have focused on the analysis on media representations of the environment in newspapers and not in ENGOs' newsletters. Therefore, I believe it is valuable to conduct this research, not only to contribute to the body of knowledge and fill the gaps in the literature, but also to compare my findings with previous significant research carried out locally and elsewhere, in order to identify the right way to improve environmental communications in Malaysia. In this comprehensive research, I hope to point out a better direction not only to the Malaysian media and ENGOs, but also to the entire world, especially developing countries that share the same conditions or background as Malaysia. To this end, I will also make use of findings in journal articles published locally and internationally.

It should also be noted that the media and the ENGOs have a different foundations for their emphasis when communicating the environmental information to the public. Therefore, this comparative study between the media and ENGOs is vital for exploring the similarities and differences between both social actors regarding their roles, strategies, barriers and representations of environmental information. In other words, it could be interesting to find whether the background of the media and ENGOs has an influence on their effort in environmental communication or not. With these research findings, ENGOs' communicators and the media's journalists or editors will be able to learn from each other, especially on how to minimise the barriers in environmental communication. This is trivially vital because effective environmental communication between these agencies will ensure better dissemination of environmental information to the public and the public will

thus become conversant with environmental issues, both locally and globally. The structure of the study will be explained in the next section.

1.5 Structure of the Study

This study is arranged into 11 chapters. **Chapter 2** clarifies the three key concepts of this study, including the concepts of environmental communication, media and ENGOs, based on Western perspectives. Next, **Chapter 3** will discuss the theoretical concepts and the framework related to roles and strategies in environmental communication, as well as the barriers faced by Western media and ENGOs in environmental communication, along with the representations of environmental information. Multiple Western theories are used in this study, including Shannon's communication model, Cox's environmental communication theory, Habermas' democracy theory, Hannigan's social construction theory, to name a few that will be discussed comprehensively in this chapter. Afterwards, **Chapter 4** will explore the suitability of the theoretical concepts and framework in the context of Malaysia and Asia. As we all know, some Western concepts and theories are shaped to suit the practices of those Western countries, and thus may not be suitable to the Malaysian context. It is important therefore, to explain Malaysia's situation, particularly the social, political and economic background that has influenced the development of environmental communication in Malaysia. A brief description of Malaysia also will be included in this chapter.

Chapter 5 will present the proposed theoretical framework of this study that will guide the journey of this research. In this chapter, I hope to obtain a holistic understanding and meaning related to my research direction. Subsequently, **Chapter 6** will outline the design and methodology used for this research. My study will apply a mixed methods approach that integrates qualitative interviews as the main method and quantitative content analysis as the second method. All in all, the result of the quantitative content analysis of newspapers and ENGOs' newsletters will mostly be used as a cross-check against a selected segment of the interview data from this

study. In this chapter, I will also explain in detail how the qualitative interviews will be conducted, along with the sampling technique, the results of the pilot interview will be presented. Similarly, details of how the quantitative content analysis will be conducted on newspapers and ENGOs' newsletters will also be presented, together with the results of an inter-coder reliability test by two coders.

Taken as a whole, Chapter 7 to 10 will present the results of this study along with the discussion. Specifically, **Chapter 7** will present the results and a discussion of the roles of the media and ENGOs in environmental communication, chiefly their roles as watchdogs and mobilising the public sphere in democracy, roles in environmental legitimacy (creating trust, relationship and credibility between the organisation and the public) and roles in constructing public mind on environmental matters by using evidence like pictures, words, videos and music. The results of the quantitative content analysis on the use of pictures by both newspapers and newsletters will also be presented. **Chapter 8** will show the results and a discussion of the strategies adopted by the media and ENGOs in environmental communication, particularly the advocacy and lobbying strategies used by the ENGOs, and the strategies of campaigning and collaboration with other stakeholders used by both the media and ENGOs. Within this chapter, I will also reveal the current status of collaboration between the media and ENGOs in environmental communication. The results and a discussion of sources reliance for the publication by the media and ENGOs will also be presented in this chapter, together with the results of a quantitative content analysis on the sources used for environmental articles in newspapers and newsletters.

Next, **Chapter 9** contains show the results and a discussion of the barriers faced by the media and ENGOs in the process of environmental communication, especially the barriers arising from (news) sources, barriers imposed by the environmental information, barriers imposed by senders (environmental communicators), barriers from the media or ENGOs' organisations, barriers on destinations (gatekeepers) and barriers on the receivers of environmental information.

Chapter 10 will present the results and a discussion of the representation of environmental information by the media and ENGOs in their newspapers and newsletters. In this chapter, I will explain the types of environmental topic most and least often presented in newspapers and ENGOs' newsletters, the factors influencing environmental topic selection and the characteristics of environmental information in newspapers and ENGOs' newsletters (e.g. the frequency of publishing environmental articles publication on a daily, monthly and yearly basis; genre, geographical location and the authors of environmental articles).

Finally, **Chapter 11** concludes the study by summarising the main theoretical and practical contribution and a discussion of all the essential findings. This chapter also explains how all the objectives and research questions have been answered. I close the chapter by giving recommendations to future researchers and a discussion of the limitations of this study that might indicate a direction for future work.

CHAPTER 2

ENVIRONMENTAL COMMUNICATION, THE MEDIA AND ENGOS: THE WESTERN PERSPECTIVES

2.1 Introduction

This chapter will comprehensively investigate the three main concepts of this study, namely environmental communication, the media and ENGOS from the Western perspective, where the majority of past studies, especially on environmental communication, emanated from (Lee, 2008). The definition of the “Western” hemisphere is conspicuously vague and embraces a variety of definitions that draw on historical, cultural, religious and political perspectives. For instance, the German historian Heinrich August Winkler defined the Western world according to a cultural values perspective, whereby the “West” is viewed as a “community of values” encompassing Europe, the US, Canada, New Zealand, Australia and Israel (only since 1948) (Winkler, 2010 as cited in Stuenkel, 2011, p. 183). However, for the purpose of this study, Western means the Western countries where the earliest forms of the media and ENGOS and, more importantly, environmental communication started, emerged and developed, especially in the United States of America, Britain (the United Kingdom (UK)) and Germany. Hence, it is pivotal to address these Western perspectives within a context where environmental communication between the media and the ENGOS has had a long history before the discussion of the Malaysian condition is embarked on in Chapter 4.

In brief, this chapter is divided into three main parts as follows: in the next section (Section 2.2), the concept of environmental communication is explored. Section 2.2.1 teases out the differences among environmental communication, science communication and sustainability communication; Section 2.2.2 explains the process of environmental communication. The next part of this chapter begins with a discussion of the historic origins and conceptual backdrop of the Western media in

Section 2.3, followed by an explanation of environmental news journalism in the Western media (Section 2.3.1). Next, this chapter presents an outline of the historical origins and conceptual landscape of the Western ENGOs (Section 2.4) and continues with an overview of Western non-governmental organisations (NGOs) and civil society in Section 2.4.1, and Western ENGOs in Section 2.4.2. This chapter concludes with a brief summary (Section 2.5).

2.2 Defining Environmental Communication

Generally speaking, environmental communication is considered to be an interdisciplinary term that incorporates the meanings of the words “environment” and “communication” (Coppola & Karis, 2000). Milstein (2009) pointed out that environmental communication is a “meta-field” within communication (p. 344) that emerged in the early 1980s in the US. If we wish to consider the hybrid term “environmental communication”, it is vital to have an excellent understanding of the terms “environment” and “communication”. In general, the word “environment” is a relatively common buzzword encountered in the arena of scientific academic discussion and is often heard in company with certain words like “ecology”, “nature”, and “green”. Briefly, the word “environment” originates from the French word “*environ*” or “*environner*”, which can be literally interpreted as “around” (Mir, 2013, p. 46). The Dictionary of Epistemology defines the environment as “all that surrounds the human, which constitutes a wide array of “physical, biological, social, cultural”, and other elements that share its importance to the human health status” (Last, 2001, p. 59). Clearly, this definition illustrates the close relationship between the human health and the environment. If we combine all these definitions, the environment, in the context of this study, can be understood as all the components surrounding and intertwined with human life, including air, water, soil, animals, etc.

On the other hand, the word “communication” originated from the Latin word “*communicare*”, which can be roughly translated as “to make known, to involve, and to share something common” (Bisen, & Bisen, 2009, p. 1). Very often, in most media

and communication studies, scholars have collectively defined “communication” as a process or action of proving, disseminating, exchanging and transmitting information from the sender to the receiver (Axley, 1984; Losee, 1999; Leonard, 2004; Hovland, 2005; Al-Fedaghi, Alsaqa & Fadel, 2009; Debasish & Das, 2009). In short, communication is about “how we come to know” and “to know about” (Hansen, 2010b, p. 6). Communication also is an integral part of human life because every day, we communicate with each other, whether verbally (speech) or non-verbally (writing or signs). More importantly, communication is an essential opportunity for humans to interact and develop a relationship with each other (Bisen & Bisen, 2009). Without a doubt, via communication, humans can understand about environmental issues and be aware of them (Hansen, 2010b).

Combining the definitions of the environment and communication, many academic scholars have clearly defined the term “environmental communication”. For instance, Cox (2013b) considered environmental communication to be the process of transmitting or discussing the environmental information about, for example, global warming between one agent and another. Cox also argued that environmental communication is a crisis topic, similar to the conservation biology field (Peterson et al., 2007; Heath et al., 2007) due to its focus on communicating information about environmental degradation and crises to the public. Other scholars like Jurin, Roush & Danter (2010) defined environmental communication as the process of exchanging messages between or among human beings about what is happening around them and their unique interactions. According to Nofri (2013), environmental communication involves people informing others about the environment. Ralston (2011) argues that the environmental communication is a field related to the “health of humans and the health of the environment”.

On the other hand, Adomßent & Godemann (2011) pointed out that environmental communication is not necessarily delivered by the media, but can also originate from individuals and institutions because environmental communication involves all types of communication. It is also intriguing to note that the concept of

environmental communication includes the process of sending and receiving environmental information not only via words or pictures, but also through actions (Corbett, 2006a). For instance, we communicate about the negative impact of climate change by sending pictures and stories about melting Arctic ice to our friends and relatives; our actions in not using chlorofluorocarbon products, which can contribute to climate change and global warming as well as depleting the ozone layer in the upper atmosphere, can also be considered as environmental communications.

Besides, Corbett (2006a) has proposed eight criteria to use when evaluating environmental communication: (1) it can be seen in beliefs, texts, gestures or daily life activities, (2) it is more open to individual interpretation, (3) it is influenced by history and the culture, (4) it results from an ideology, (5) it is rooted in society as a tool for appreciating nature, (6) it has a strong association with pop culture like music and film, (7) the media are the actors that give the report to society, and (8) it is facilitated by stakeholders like the government. Taking all definitions into account, environmental communication in this study can be understood as the process of transmitting or exchanging environmental information from the sender, who are the media and ENGOs in this study, to the receiver, who is the public. However, it is easy to confuse the concepts of environmental, science and sustainability communication, so it is appropriate to spend some time distinguishing these.

2.2.1 Environmental Communication versus Science and Sustainability Communication

The terms environmental communication, science communication and sustainability communication have often been linked or conflated with each other and are somewhat vague or confusing. This is similar to the case of environmental, science and sustainability education. People might think that environmental, science and sustainability education are the same; in reality, they are actually three different types of education that are nevertheless interrelated. This same confusion arises with environmental, science and sustainability communication, where people also take all

three of these terms as synonymous. Considering the confusion among these three terms, it is therefore important to clarify and unravel all three terms to avoid confusion.

As mentioned in Section 2.2, environmental communication is the process of sending and transmitting information about environmental matters, such as landslides, climate change, wildlife trafficking, etc. from the sender to the receiver. By contrast, science communication has been defined as the activity of communicating science-related issues from science communicators like journalists, public information officers and scientists to receivers (Treise & Weigold, 2002). As the foundational term of “science communication” is “science”, it is therefore worthwhile to have a brief look and understand the true meaning of science.

Historically, “science” derives from the Latin word “*scientia*”, often understood to mean “knowledge” (Wilderer, 2007, p. 2). The German word commonly translated as “science”, “*Wissenschaft*”, can be understood as a combination of two words: “*Wissen*”, meaning knowledge, and “*schaft*”, meaning the totality of (Wilderer, 2007, p. 2). According to Barrett (2002), science, in the context of scientific knowledge, is the process of finding the truth. Another scholar, Ziman (2004), pointed out that science produces knowledge (scientific knowledge). Within the science communication sphere, the word science generally refers to pure sciences such as biology, mathematics, chemistry, and so forth (Burns, O’Connor, & Stocklmayer, 2003). Ultimately, the purpose of science communication is to communicate and present scientific issues to the non-scientist community (Das, 2013). At first sight, science communication might refer to communication on scientific subjects such as biology, chemistry or physics. However, some scientific or technological subjects like climate change, global warming and green technology, for example, fall into the categories of both science communication and environmental communication. Therefore, for the purpose of this study, science communication is considered to be under the umbrella of environmental communication, as long as the issues are related to the debate on environmental issues. In making this point, it is

vitaly important to note that scientific issues that are unrelated to the environment, like breast cancer, plastic surgery, food poisoning and very many others, should not be considered under the category of environmental communication, except where these topics can clearly be linked to environmental issues, such as the link between pesticides and increased cancer risk highlighted by Carson in *Silent Spring* (see the Introduction in Chapter 1).

Likewise, the concept of sustainability communication is often allied with the concept of environmental communication. If we consider sustainability communication, the foundational word is “sustainability”. The word “sustain” derives from the Latin word “*sustinere*”, which means to hold or maintain. Historically, the word sustainability was first introduced by a well-known German scientist, Hans Carl von Carlowitz (1713) in his landmark work on “*nachhaltige waldwirtschaft*” (sustainable forest economy), where he suggested the importance of the “*nachhaltige entwicklung*” (sustainable development) principle for forest management (Wilderer, 2007, p. 2). The World Commission on Environment and Development (WCED) and the Brundtland Commission have taken this concept as a policy-oriented term (Wilderer, 2007; Kuhlman & Farrington, 2010). In comparison to the words “environment” and “science”, the word “sustainability” gained popularity rapidly after the Brundtland Report in 1987. Since then, many academic scholars have been using the word sustainability in their academic works. So, what exactly is sustainability?

In brief, the Oxford English Dictionary defines the word “sustainable” as “the ability to maintain and sustain” (Brown et al., 1987, p. 714). The World Conservation Union, along with the United Nations Environment Programme and the World Wide Fund for Nature (WWF) (1991), as cited in Karlsson & Rydén (2012), defined the word sustainability as the improvement in the quality of life in society without going beyond the capacity of what can be carried by the ecosystem. In a related vein, the WCED and the Brundtland Report (1987) explained “sustainable development” as “the

development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”.

The definition of sustainability implies that sustainability communication is the process of transmitting or delivering the idea of sustainable development from the sender to the receiver. Newig et al. (2013) stated that sustainability communication is the process of transmitting information or messages about sustainability and persuading the receiver, and it should also be able to encourage public debate on this topic. McDonagh (1998) pointed out that communicating about sustainability issues is focused on changing people’s mindset from dominating nature to preserving it for future generations. Similar to science communication, it is hard to distinguish between sustainability communication and environmental communication because sustainable development is a subcategory of the environmental theme. Godemann & Michelsen (2011) stated that sustainability communication also involves the communication process regarding the issues of “biodiversity, climate, mobility, consumption”, etc. (p. 10). Simultaneously, biodiversity and climate change are also come under the environmental communication umbrella. Therefore, any sustainability issues that are related to the environment such as biodiversity will be included in this study, but not non-environmental sustainability issues such as poverty. The discussion on the process of environmental communication will be offered in the next section.

2.2.2 The Process of Environmental Communication

In general, communication is the process of sending information from the sender to the receiver. The process of environmental communication can be understood through the basic communication model that has been proposed by Shannon (1948), simply known as the model of communication process. This model has been recognised as “the mother of all models” and is pivotal in the area of communication regarding the environment and science (Wendland, 2013, p. 53). Shannon developed this communication model through a robust mathematical framework for modern

communication theory. Shannon was an engineer in one of the telephone companies in the US. She first established this model to expand the proficiency of radio and telephone. However, this model has been widely used, not only in communication and journalism studies, but also in other studies like rhetoric, linguistics and business studies (Debasish & Das, 2009). Shannon's model of the communication process is illustrated in Figure 2.1 below.

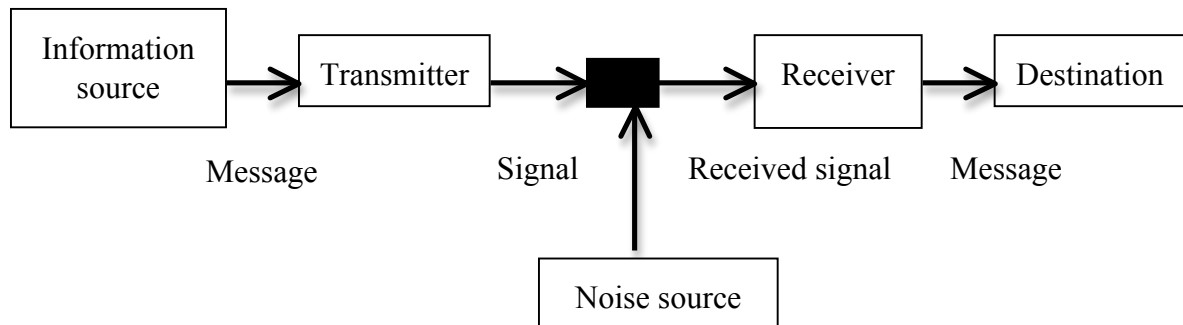


Figure 2.1: The model of the communication process (Adapted from Shannon, 1948)

As shown in Shannon's communication process model (Figure 2.1), communication is a linear process that begins from the information source or the sender who creates the message and delivers the meaning to receiver (Bowman & Targowski, 1987; Keyton & Beck, 2010; Kelly 2014). Within the context of this study, the information source or sender is the media and the ENGOs. The message is the information that is disseminated by the sender to the receiver. According to Shannon (1948), all messages in communication have a specific meaning. A message in this study refers to the environmental messages, including words, graphics and pictures from the media and ENGOs to the public. In his discussion about messages or information, Shannon argues that freedom in choosing information is important because with more freedom of information choice, more information is retrieved (Al-Fedaghi, 2012). On the other hand, the transmitter, according to Shannon, is the medium that creates the signal. In face-to-face communication, for instance, our mouth, gestures, tones of voice, facial expressions, etc. transmit the signal.

The small unlabelled black box in Figure 2.1 is the channel of communication where the signals go through. A channel means the medium of communication

(Shannon, 1948). During the 1940–1950s era, Shannon mentioned the use of teletype and telegraphy as common communication channels. However, in this study, the media and ENGOs have different channels of communicating environmental issues. The ENGOs' environmental communication channel is through their newsletters, whereas the channel for the media is via newspapers⁵. Noise, according to Shannon, is any distraction or disruption by physical noise like horn sounds during the transmission of information, especially via telephone. The presence of noise cannot be underestimated because miscommunication and a failure of communication can occur between the sender and the receiver if there is excessive noise during communication (De Ruiter & Cummins, 2012). However, with the advancement of technology nowadays, noise is a problem that happens considerably less often in communication. For a newspaper, noise is visual and interferes with the ability to read the message (e.g. blurred typeface). The receiver, according to Shannon, is an instrument or tool for receiving information such as a computer with a modem (for the internet), a telephone or a radio set.

Last but not least in the communication process is the destination, which refers to the receiver. As far as this study is concerned, the receivers are mostly the public and other stakeholders, like the government and scientists who receive environmental information from the media and ENGOs. However, it is interesting to note that the destination also can be the editor or “gatekeeper”⁶, as the journalists or the ENGOs need to submit their work. In this situation, censorship can occur and the information can be changed before it is delivered to the public.

It is worth remembering that although Shannon's communication model is said to be indispensable to communication studies, there are some criticisms of this model. First and foremost, this transmission model depicts linear or one-way

⁵ The media can use other channels such as television, radio and the internet. However, newspapers are the main channels considered in this study, as explained later.

⁶ A gatekeeper is usually referred to the news editors who have the highest position in the newsroom and who hold ultimate power over news decision making, especially in selecting and deciding which articles can be published or broadcasted.

communication, whereby the sender is the primary communicator and the receiver is the secondary or passive communicator. Unfortunately, there is no element of feedback or two-way communication in this model. Critiques claim that communication should be two-way and not one-way (Wendland, 2013). Secondly, some scholars, like Craib & Frankel (2011), also argue that this communication model is more relevant to digital communication than visual communication like newspapers and magazines. Due to the weaknesses in Shannon's model, some recent scholars like Carvalho & Burgess (2005) have rejected the idea of a dominant producer and a passive receiver in the linear communication model. Via their "cultural circuit" model,⁷ Carvalho & Burgess, for example, emphasise two-way communication, whereby the public has an opportunity to voice their opinions about environmental issues in the public sphere. The deliberation on the historic origins and conceptual backdrop of Western media will be displayed in the next section.

2.3 Historic Origins and Conceptual Background of the Western Media

In general, "media" is a word that arose from the Latin word "*medius*", which can be understood as "middle" (Guillory, 2010, p. 321). In English, "media" is the plural of "medium", which means a medium of communication between (in the middle of) a sender and a receiver of a message (Croteau & Hoynes, 2012, p. 12). When people hear the word "media", many will think of television or newspapers. It is desirable, therefore, to understand what exactly the types of media are. Within the context of media and communication research, there are two main types of media, namely traditional (sometimes, also known as old) and new media. Both the traditional and the new media are indispensable institutions in mediating information to the community (O'Neill, 2013). The traditional or old media can be understood as the media in the era before the rise of the internet, which encompass meet four: (1) various or one communication, (2) unknown receivers, (3) a one-way medium, and (4) dissimilarities between the receiver and senders (Croteau & Hoynes, 2012).

⁷ The cultural circuit model came from Carvalho & Burgess' study on the representation of the climate change issues in British newspapers.

In short, the traditional or old media are newspapers, radio, books and other media that are non-electronic and conventional. On the other hand, the new media have been defined in contrast of the old media and cover the digital media that incorporate interactivity and two-way communication, and involve computer systems (Logan, 2010). The emergence of new media with the massive increase in new technology and devices like computers, smartphones, websites and social media, has facilitated and increased interactive communication among humans (Sundar & Limperos, 2013). In the effort to differentiate between the old and new media, some scholars believe that new media are merely a reincarnation and improvement of the old media and are not completely novel. Even the old media can be merged and aligned with the new media through media convergence. Media convergence has been defined by scholars (e.g. Borders, 2003), as the blend of old media like magazines, newspapers and radio with the new media like the internet to deliver its content and messages. One simple example of media convergence between the newspaper and the internet is online newspapers. For the purpose of this study, the old media, particularly the printed newspapers will be discussed accordingly.

Customarily, newspapers can be understood as a publication that provides updates of information on a (usually) daily basis (Wurff, 2005) or that has a lifespan of one day and has passing value (Krtalic & Hasenay, 2012), with groups of stories in several categories like sports, entertainment, the environment, etc. (Leurdijk et al., 2012). The earliest recorded newspaper in history is *Acta Diurna* (Daily Events), which was introduced in Rome around 59 BC by Julius Caesar, the Roman Emperor at that time. The introduction of this newspaper was related to the intention of Caesar to inform his nation about updates of social and political issues. However, Germany played a larger role in the history of the newspaper with Gutenberg's invention of the movable-type printing press in 1455.

The first weekly newspaper was known as *Relation* and was published in 1605 in Strassburg, Germany. It has been said that the modern newspaper press was founded in Belgium in 1605 (Altschull, 1984, as cited in Oloyede, 2005). In contrast,

some scholars claimed that the US began developing its newspapers much earlier than other countries, beginning in the 1830s (Hallin & Giles, 2005). As early as 1830, the US had an impressive 650 weeklies and 65 dailies in the country with 1200 daily circulations and a total daily circulation of about 78,000 copies (Schudson, 1978). Nowadays, almost every Western country has its own newspaper producer, either small or large scale, depending on their population size and the demand. Färdigh (2010) found that Germany is the largest market for the newspaper industry with over 21 million copies of newspapers being distributed per day; the UK is the second largest with 18 million copies per day. *Bild* is the newspaper (tabloid) from Germany that recorded the highest circulation with 3.7 million copies per day, followed by *The Sun* from the UK with 3.1 million copies sold per day (Färdigh, 2010). Still, there are some large European countries with low circulation of newspapers, like Italy (about 10.3 million) and France (about 9.3 million) (Färdigh, 2010).

However, after more than 500 years of providing information to readers, newspapers, particularly the print versions, have started to slow down and are now threatened by the emergence of the advanced new media like the internet and social media. Sadly, many people confidently speculate that the printed newspaper industry will be sluggish and decline substantially in the near future. The American fiction writer Philipp Meyer in his book *The Vanishing Newspaper* (2004), for instance, predicted that in 2043, no American would read newspaper on a daily basis if the declining phenomenon continues (Bakker, 2013). In the US today, the printed newspapers have continued losing readers: the number of people who read the print versions of newspapers on a daily basis has declined from 54% in 2004 to 38% in 2012 (Pew Research Centre, 2012a). This has obviously affected the daily circulation of the newspapers, where plenty of them have declined in circulation (Krumsvik, 2006). For example, one of the most widely circulating newspapers, *The USA Today*, has seen a 7.9% decline rate (Yu, 2013). The decline of the newspaper industry has also come as a tsunami hitting the European media industry. Taking Germany as an example, the newspapers have lost about 30% of their readers in Berlin, Hamburg

and Munich; the circulation of the Munich daily paper, *Abendzeitung*, has dropped from 300,000 to 107,634 copies in 30 years (Schnibben, 2013).

From the discussion above, it is obvious that the circulation and readership rates of printed newspapers in the Western world have declined and make the media concerned about the near future of the newspaper industry. Until recently, although the newspapers have declined, we cannot deny the fact that the role of the printed newspaper is still relevant in the 21st century, especially for certain groups of people like those who live in rural areas⁸ who have limited internet access and elderly people who have limited knowledge of using the new media like the internet. Ramsey & Moss (2009), for instance, in their research into six forms of traditional media, including newspapers, televisions, radios, community newsletters, bulletin boards and interpersonal communication areas like restaurants, reported that most business people and volunteer groups use newspapers as their main form of communication in rural areas of Canada. Even traditional newspapers are still famous among their readers due to their roles as informers, educators, and entertainers and as a medium of the public to engage with the government's activities (Babalola, 2002). Pew Research Centre (2013b) also indicated that younger people in the 18–29 age range are the majority group using the internet for their news source (71%), whereas older people (65 years old and above) are still slow to use the internet for news (18%). Therefore, the traditional newspapers, undoubtedly, perfectly suit people in rural areas and elderly people. Considering these advantages of printed newspapers, this study will only focus on the traditional printed newspapers.

Within the discussion of background of Western media, it is also worth note that the patterns of readership can influences the direction of media coverage on one particular issue. In this light, media as a profit-making organisation would rather provide more attention to the issues highly demanded by the readers to ensure people keep reading their newspapers and maintain the circulation. In the meantime, it is also

⁸ Frequently, people in rural areas have limited access to new technology, especially the internet, due to their location.

observed that the pattern of readership is different between one to another country. Bastos & Zago (2013) on their research on the readership between American and European for example discovered that German readers are more interested in issues of politics and economy while people from Britain and America like to read more on opinions and world news. Therefore, it is not surprising to find that the issues focused by newspapers from vary from one country to another. Knowing the importance of readership, some media organisations have even conducted their own survey to find out readers' interest. Hansen (1994c) on her study on British newspaper coverage on scientific issues discovered that British newspaper company did a lot of readership survey in order to discover the topic that readers like to read. Consequently, journalists rely on these surveys as the main consideration in choosing or writing one issue over another. The debate on the environmental news journalism in the Western media will be provided in the next section.

2.3.1 Environmental News Journalism in the Western Media

Historically, it has been said that the modern environmental news journalism began in the early 1960s with the release of Rachel Carson's book *Silent Spring* (Keating, 1993). Since then, environmental news journalism has flourished massively in the Western world. Taking the US for example, the New York Times has been recognised as one of the earliest newspapers creating an environmental news beat as early as 1969s, which was followed by many other major newspapers in this country (Sachsman, 1996b). Concomitantly, in Canada, Canadian journalists started publishing stories about the effects of toxic materials on the environment in 1970 (Keating, 1993). Now, after more than 40 years, environmental news journalism has developed rapidly due to the development of scientific knowledge, the occurrence of various environmental events like oil spills and nuclear tragedies, and the involvement of environmental groups (Hessing, 2003).

In general, the word "news" can be operationally defined as the production of a story, event or activity of public interest (Blankenburg, 1970). There are two

general types of news: hard and soft news. Very often, hard news is defined as news with high value and worthiness, which requires immediate publication for the readers (e.g. political, economic and social news); soft news has less value and is less important, such as gossip and entertainment (Lehman-Wilzig & Seletzky, 2010). It has been said that the US journalists were the first to use these two terms in an effort to differentiate and classify the types of news, and these terms have been widely applied in communication studies for over 30 years (Reinemann et al., 2012). In the light of these definitions, many researchers have argued whether environmental news is in the category of hard or soft news. In this study, environmental news is considered to be hard news, parallel to some definitions from previous scholars like Patterson (2000), who defined hard news as coverage of breaking events that are indispensable to the citizens' information, including disaster and earthquake stories.

Extensive academic studies have offered several explanations and understanding of the meaning of environmental news. At first glance, environmental news can be understood to be news reports on the environmental issues like pollution, climate change, global warming etc. Environmental news content like many other types of news is developed from the journalists' choice (Massey & Ramanathan, 2001) depending on the value of the news. This is in parallel to the constructivist approach, which holds that environmental news journalism is constructed by the journalists when they frame some topics or events in the theme of the "environment" (Djerf-Pierre, 2012) and are usually involved with scientific data and research (Davydova, 2013). Environmental news journalism is mostly a cross-sectional subject that combines political, economic and cultural issues (Davydova, 2013). For instance, climate change issues are intertwined with economic and political news stories (Mäkinen, 2009). Some other scholars (e.g. Giannoulis, Botetzagias, & Skanavis, 2010) specifically define environmental news journalism as an advocate beat or journalism with an environmental purpose.

In light of this, it is worthwhile noting that some researchers might agree or disagree with the idea that environmental, science and sustainable development

journalism are related to each other. Therefore, within the context of this study, environmental, science and sustainable development journalism are considered to be conceptually related. Science journalism, as the name suggests, means coverage of “science” or “scientific” issues (Murcott & Williams, 2012, p. 152), like ozone depletion, climate change, biology, animals and many other issues that are related to environmental journalism. Of course, the scientific issues that are more associated with health like breast cancer, diets and cholesterol, for instance, cannot be considered to be in the category of environmental news. Moreover, it is important to note that sustainable development is often treated as one of the facets of environmental news (Rodrigues & Costa, 2015), particularly issues of environmental protection (Lourenço, Jones, & Jayawarna, 2012), which are usually considered to be a topic of sustainability communication, is also accepted as a the topic of environmental news in the context of this study. We now turn from the media to the second key agent considered in this study: ENGOs, which will be investigated in the Western context.

2.4 Historical Origins and Conceptual Landscape of the Western ENGOs

As noted, the ENGOs are a subset of NGOs. Therefore, this section begins with a brief overview of the history, concept and development of the Western NGOs, followed by a discussion about ENGOs specifically. Historically, a range of evidence suggests that the concept of NGOs has existed in the Western world for more than 150 years (Nalinakumari & MacLean, 2005). It has been said that the oldest modern NGO is the Young Men’s Christian Association, which was established in 1855 in Wisconsin in the US (Clarke, 1998). The goal of the Young Men’s Christian Association is a religion purpose, namely putting Christian principles into practice. Some other scholars like Spar & Mure (2003) believe that NGOs had already emerged as early as 1755 with the emergence of Quaker activists in the Pennsylvania Society who had the goal of promoting the abolition of slavery, especially of Blacks. It is interesting to note that many secular NGOs emerged in the 19th century, particularly the Red Cross movement and anti-slavery organisations (Ferris, 2005).

The Save the Children Fund is an NGO that was established in 1919 in the UK with the aim of protecting children's rights; Oxfam is another NGO, established during World War II in 1942 with the goals of finding solutions for poverty and injustice (Ferris, 2005). In 1945, the United Nations (UN) officially promulgated the concept of NGOs for consultation purposes (Martens, 2002a), as stated clearly under Article 71 of Chapter 10 of the UN Charter⁹:

“The Economic and Social Council may make suitable arrangements for consultation with non-governmental organisations which are concerned with matters within its competence. Such arrangements may be made with international organisations and, where appropriate, with national organisations after consultation with the member of the United Nations concerned”.

The UN also specifically defined NGOs as civil society organisations that are free and independent from the government and that address issues for the public good (United Nations Rule of Law, 2013). In addition to the UN, the World Bank (1970) also defined NGOs as independent groups with a focus on humanitarian or cooperative purposes, rather than commercial interests (Bagci, 2003). In brief, both the UN and the World Bank have conceptualised NGOs as independent groups with a significant role in policy formulation and development (Holmén & Jirström, 2009). A substantial number of previous researchers like Gillespie (2006); Beyer (2007); Lehman (2007); Clement (2009); and Rehman & Ismail (2012) have agreed with the definition of NGOs set by the UN and World Bank. These researchers have collectively defined NGOs as independent groups or organisations that are free from state control (non-state). How Western NGOs interact with civil society needs to be explored further.

⁹ The UN Charter was written on 26 June 1945 in San Francisco after the UN Conference on International Organisation. This Charter was enforced on 24 October 1945 with a total of 19 chapters and 111 articles.

2.4.1 Western Non-Governmental Organisations (NGOs) versus Civil Society

Echoing the concept of NGOs, it is also universally acknowledged that Western NGOs have regularly engaged closely with the concept of civil society. Generally, the terminology of civil society can be described as an independent organisation that promotes the idea of a self-generating, self-supporting, self-interested, state-independent organisation that allows citizens to express their individuality in the public sphere (Jaysawal, 2013). On this basis, the concept of civil society has been widely used in describing the often antagonistic relationship between NGOs and the state (Matanga, 2000; Eisele, 2005). The principle of civil society emphasises the diverse power of NGOs as a democratic and autonomous organisation without any restrictions, dictatorship or control by the territorial state. Nevertheless, it must be noted that the ideal of civil society has emerged from and been popularised by the US and Western European model (Howard, 2005). In US history, the concept of a civil society has become deeply entwined with the community tradition. Alexis de Tocqueville (1805–1859) was one of the best-known first political philosophers who discussed and explained in detail about US civil society. According to Tocqueville, civil society is a free organisation that plays the role as a mediator between the citizens and the state; through civil society, citizens realise their social freedom and equality (Woldring, 1998).

The modern concept of civil society arose in the Scottish and Continental Enlightenment in the late 18th century. It was developed by the political theorist Hegel and considered individuals as separate from the state and free citizens (Carothers, 1999). Hegel viewed civil society as a concept to differentiate the state and society, with the emphasis on the power of individuals and corporations to protect society (Piotrowski, 2009). On the other hand, Anjum (2010) indicated that the concept of civil society first arose from the Greek concept of *koinonia politikè* (political community), which was inaugurated and pioneered by Aristotle (384–322 BC), who acknowledged the different status of people in the community during those

times. This shows that the idea of a civil society has been well established and developed across a long history in the Western world.

In the contemporary period, Western NGOs are part of democracy and play multiple roles in a thriving civil society in Western countries. In Europe (including the UK), Canada, Australia and the US, civil society has played a very powerful lobbyist role (Maxton, 2013). The NGOs are a means of exercising democracy, as they allow citizens to criticise or give suggestions to the government. The NGOs also play a pivotal role as checks and balances or as a watchdog (observer) role in any of the state's actions. Undoubtedly, the climate of democracy has encouraged a rapid and flourishing growth in civil society groups (Cornwall & Goetz, 2005). In the US, by 1984, a wide range of NGOs had emerged representing interest groups from religious organisations (churches), anti-racism and human rights organisations (Guay & Doh, 2006). Freedom House, for instance, is one of the most prominent lobby groups in the US that believes in freedom and democracy. This NGO urged their government to enter World War II with the aim of stopping fascism (Stuvland, 2007).

Likewise, many European countries have incorporated a high degree of democracy in their political system, whereby the power held by the state is strictly limited and less autocratic. It gives vast freedom to the NGOs to act autonomously without any form of direct control from the state. Even today, the European Union (EU) is working on improving its democratic persona and aims to include many forms of civil society organisations in its decision-making processes (Saurugger, 2007). Seliger (2002a), in his analysis about NGOs in a civil society in Germany for instance, reviewed the importance of NGOs in political decision-making. He found that the rise of students' organisations (*Burschenschaften*) who fought for freedom and unity during the liberation wars against Napoleon and during the *Biedermeier* period (1820s to 1840s) brought about the growth of innumerable cultural links, especially during the early days of Germany as an independent and united state in the post-Napoleonic period (Seliger, 2002a).

One can say that liberal democracy has created overarching opportunities for the European NGOs to play a successful civil society role in fighting and voicing human rights for the sake of a better nation. One excellent example of NGOs acting for social change can be seen in the success of the “Clean Clothes Campaign”¹⁰ in 1990, which was run by a group of Dutch NGOs. According to Kryst (2012), this campaign was a response to the exploitation of female Filipino workers in the Dutch textile manufactory, where these workers protested against being underpaid (at or below minimum wage) and then abandoned after the factory had shut down. As a result, the Dutch NGOs organised public action and specific research into labour conditions in the textile sector. Later, this issue came to other European countries’ attention with collective involvement from German NGOs in this campaign in 1995, followed by a coalition and network of NGOs in 16 countries, with the European secretariat based in Amsterdam (Kryst, 2012). Other protests and local conflicts happened in other European countries like Ireland and Italy (Boudourides & Kalamaras, 2002), where people stood up to defend and fight for public rights or interests. To sum up, most Western countries have attracted much with their views on NGOs as mouthpieces of democratic and free civil society that can be greatly involved in the arena of political decisions. ENGOS are a specialised type of NGO and these will be discussed in the next section.

2.4.2 Western ENGOS

NGOs or civil society groups have acted in various areas with many different aims and goals (Martens, 2005b), ranging from religious, medical and human rights groups to ENGOS. As mentioned in the beginning of the discussion above, only ENGOS are discussed thoroughly in this study. There is a plethora of definitions of ENGOS by previous scholars and definitions of ENGOS that are too broad to be useful. In

¹⁰ The Clean Clothes Campaign still exists today with a coalition of organisations, including the labour unions and NGOs in European countries. Its goals still remain to improve working conditions and to encourage the workers from the textile and sportswear industries around the globe. For further information, see <http://www.cleanclothes.org>, accessed 5 April 2016.

general, the ENGOs can be characterised as a group of NGOs that are focused on preservation of the environment (Corbett, 2006a). The ENGOs focus their activities on educating the public about the environment, conserving the environment, preserving endangered species, giving consultations on policy matters, and so forth (Yang, 2005). ENGOs undoubtedly are groups of “environmentalists”, which, according to Milton (1996), are aware of and concerned about environmental protection, especially protection from persistent human destruction.

The types of ENGOs can broadly be clustered into three categories, namely, eco-fascism, eco-developmental and ecological democracy or environmental democracy (eco-populism) (Dietz, 1996 as cited in Bambang, 2012, p. 88). Eco-fascism refers to a group of people who fight, sometimes literally, for environmental issues for the purpose of the environment itself, whereas eco-developmentalists are a group of people who fight for sustainable development; eco-populism concerns a group of people who fight about environmental issues for the sake of the well-being of a community (Dietz, 1996 as cited in Bambang, 2012). In this research, the ENGOs are defined as groups of NGOs that pursue their missions of environmental protection. Some of them are also called “green NGOs”, “environmental activists”, “the environmental movement”, “environmental groups” and “environmental civil society”.

Previous scholars have estimated that about 13,000 ENGOs are found in industrialised countries and 2230 in developing countries in early 1980 (Tsukasa, 2003 as cited in Samuel & Thanikachalam, 2003). It is also difficult to determine exactly when ENGOs emerged for the first time, but most environmental historians believe that ENGOs have existed and flourished before 1900 (Rome, 2003). It has been said the emergence of new social movements like ENGOs started from 1960 and onwards in Western countries (Van der Heijden, 2002). Taking America as an instance, ENGOs emerged in this country as a response towards the threat of violence and environmental deterioration brought about by human activities. Silveira (2001) described the rise of grassroots American environmentalism, which began with the

story of wilderness and the West, alongside the huge changes in landscape due to the impact of urbanisation and industrialisation. Even in the 1870s, the natural resources in America were being destroyed by economic activities like mining, deforestation and many more (Silveira, 2001). Here, it has to be noted that the Romantic Movement in literature and the arts (approximately 1800–1850) had already begun the process of shaping public mind about nature and the wilderness. “Romantic” literature and writers such as Wordsworth and Coleridge in the UK, and Goethe and Schiller in Germany popularised the idea of nature as being a force greater than humanity and the wilderness as something to be valued rather than tamed for human use; in parallel, movements such as the Arts and Crafts movement promoted the view of industrialisation as being ugly and evil rather than a symbol of progress and economic wealth.

Mindful of these issues, American ENGOs arose as saviours to cherish and protect the environment. The Sierra Club¹¹ is one of the earliest American ENGOs, which was established in 1892 with the mission of protecting the intrinsic value of the environment. For example, in its first environmental campaign, the Sierra Club vigorously fought for the preservation and conservation of Yosemite National Park and against reducing its boundaries. The majority of its members were scientists, and The Sierra Club has produced many forms of publication, including its own magazines *The Sierra* and *The Planet*, and its newsletter, *The National News Report*. All its publications endeavour to inform citizens about and advocate for the importance of environmental protection and stewardship. These days, The Sierra Club is still playing an active role as one of the predominant ENGOs in the US. At the same time, there are abundant ENGOs in the US; the most influential are the Natural Resources Defence Council, the Environmental Defence Fund, Friends of the Earth (FOE) and Greenpeace (Schreurs, 2002, p. 33). The ENGOs in the US have the

¹¹ The Sierra Club is still active in the US with the motto, “Explore, enjoy and protect the planet”. Their focus nowadays is more on coal, oil and natural gas issues. See <http://www.sierraclub.org/aboutus>, accessed 5 April 2016.

mission of improving the quality of environment through education, direct action, policy reformation and litigation (Schreurs, 2002). In summary, all of these US ENGOs share the common goal of protecting the earth from human destruction.

The situation in the UK was similar. ENGOs in this nation have emerged in the middle of the 19th century, aided by the popularity of the Romantic Movement. The Commons Preservation Society was one of the first established ENGOs in England (as early as 1865) with the aim of protecting public access to open land (Rootes, 2009a, p. 205). The Royal Society for the Prevention of Cruelty to Animals was established in 1824 to protect all animal life, including wildlife, and the Selborne Society for the Protection of Birds, Plants and Pleasant Places was organised in 1885 with the goal of protecting wildlife in all forms (Rootes, 2009a, p. 205). It is very noticeable that the earliest ENGOs in the Great Britain have similar aims to the ENGOs in the US, namely to protect the environment from human destruction.

In Europe, the emergency of ENGOs arose from grievances about and reactions to environmental problems that occurred in these countries. Taking Germany as an example, like many other Western countries, this country is renowned for its diversity of voluntary groups (Seliger, 2003b) and it is also a leader in proactive action towards environmental matters and protection (Schreurs, 2002). The *Landesausschuss für Naturpflege* in Bayern, which was established in 1905, and the *Bund Naturschutz*, formed in 1913, are two examples of the earliest active ENGOs in Germany (Hözl, 2006). As in the US and the UK, ENGOs in Germany emerged to curtail the extensive negative impact of industrialisation and urbanisation on human life and the environment, particularly air and water pollution (Rucht & Roose, 2001). Germany, Denmark and the Netherlands are three European countries with strong ENGOs that brought environmental concerns to the level the EU in the 1970s and 1980s (Guay & Doh, 2006).

Nowadays, ENGOs are indispensable actors in the EU. The “Green G-8” is a coalition of the eight most active European ENGOs, composed of Climate Network

Europe, Friends of the Earth, WWF, the European Policy Office European Environmental Bureau, and the European Federation for Transport and Environment, BirdLife International, Greenpeace and International Friends of Nature. These ENGOS are united together in giving recommendations towards the EU's decision-making process. They are also active in protecting the European environment, especially in sensitive and risky areas like the sea, and encourage European citizens to be involved in civil society activities (European ENGOS, 2001). Besides the Green G-8, the European Environmental Citizens' Organisation on Standardisation is also another collective of ENGOS with the aim of voicing environmental protection via the enforcement of ecological standards on European products and services (European Environmental Citizens' Organisation on Standardisation, 2013). The integration of European ENGOS (the Green G-8 and the European Environmental Citizens' Organisation on Standardisation) make them more powerful and provides more opportunities to stand together in giving opinions and criticism about environmental protection issues in Europe.

To summarise, the overall discussion shows that Western countries have a long and well-established history of NGOs and ENGOS. Both NGOs and ENGOS started and grew rapidly in the US, the UK and Europe. Western ENGOS in the US, the UK and Europe have emerged to protect the environment from human destruction. Without doubt, the Western countries have shown ENGOS to be independent and democratic civil society groups that are free from state control. The concept of democracy in Western countries is embedded in the concept of ENGOS, which facilitates ENGOS to become more powerful, not only in achieving environmental protection but also taking the opportunity to raise their voices regarding environmental policy and legislation decisions. The summary of this chapter will be presented in the next section.

2.5 Summary

To sum up, this chapter has discussed three pivotal concepts of this study: environmental communication, media and ENGOS according to Western perspectives. It is very important to understand all these concepts to avoid misconceptions; especially when there are certain concepts (e.g. environmental communication) look identical to other concepts (like sustainability and science communication). As a whole, within the context of this study, environmental communication is defined as the process of communicating or transmitting environmental information from the sender (namely as the media and ENGOS) to all the other stakeholders. Meanwhile, it is also crucial to note that this study is more focused on the traditional printed and media: newspapers and ENGOS' newsletters. Therefore, the media in this study refers to the printed media and the ENGOS are the non-profit group of NGOs who are dedicated to environmental issues such as wildlife and climate change, etc. as their championed issues. Overall, environmental communication in the Western media and by ENGOS was established a long time ago and the history is worth discussing as background to this study. However, an explanation of the theoretical concepts and a framework of the roles, strategies, barriers and representations of the media and ENGOS in environmental communication within the Western sphere need to be presented, which forms the next chapter.

CHAPTER 3

ROLES, STRATEGIES, BARRIERS AND REPRESENTATION IN ENVIRONMENTAL COMMUNICATION BY THE MEDIA AND ENGOs: THE WESTERN PERSPECTIVES

3.1 Introduction

This chapter specifically explains the theoretical concepts and frameworks of the roles, strategies and barriers in environmental communication including the representation of environmental information in newspapers and newsletters. Similar to Chapter 2, the orientation of these theoretical concepts and frameworks is set out with respect to the Western perspective. This chapter begins with a discussion on the roles of the media and ENGOs in environmental communication (Section 3.2), followed by an exploration of the roles of the media and ENGOs in environmental legitimacy in Section 3.2.1; the roles of the media and ENGOs in Western democratic society in Section 3.2.2, including a discussion of the freedom of the Western press Section 3.2.2.2; the roles of the media and ENGOs in social constructions of reality in Section 3.2.3; and the pivotal use of language and pictures in environmental communication and social construction of reality (Section 3.2.3.1). The second part of this chapter discusses the strategies used by the media and ENGOs in environmental communication (Section 3.3), followed by an investigation of the environmental communication activities used to carry out the ENGOs' strategies (Section 3.3.1) and the sources reliance and collaboration as part of the media's strategies (Section 3.3.2). We conclude with a discussion of the level of collaboration between ENGOs and the media in Section 3.3.3. The next part of this chapter describes the barriers faced by the media and ENGOs in environmental communication (Section 3.4). The final part of this chapter discusses the representation of environmental information (Section 3.5) and the types of environmental topics represented by the Western media and ENGOs in Section 3.5.1. This chapter finishes with a brief summary in Section 3.6.

3.2 Roles of the Media and ENGOs in Environmental Communication

In more general terms, the word “role” has frequently been defined as any kind of activity of an employee that is specified by the organisation or employer (Katz & Kahn, 1966a). On the other hand, “role” also can be understood as the activities or expected behaviour that belongs to a position (Katz & Kahn, 1978b). Other researchers, like Reitzes & Mutran (2002), suggested that roles could be social positions that are limited to only one individual (such as the President of the US) or shared by many persons such as government employees. Within an organisation, although the roles of employees of ENGOs and the media’s journalists are usually determined and allocated by the organisation in question (the employer), this study is more interested in exploring three specific roles in environmental communication of the media and the ENGOs themselves (rather the individual employees), particularly roles in environmental legitimacy, roles in democratic society and roles in social construction of reality. This is instead of focusing on general roles in environmental communication determined by organisation, such as the media being responsible for environmental news reporting while ENGOs concentrate on research and conservation. The main reason for choosing these three specific roles (environmental legitimacy, democracy, and social construction of reality) is because these roles represent the economic, political and social aspects of environmental communication. The discussion on the roles of media and ENGOs in environmental legitimacy will be portrayed in the next section.

3.2.1 Roles of the Media and ENGOs in Environmental Legitimacy

In general, the legitimacy theory, undoubtedly, is related to the concept of a social contract, which was first outlined by Rousseau. In explaining the concept of a social contract, Shocker & Sethi (1973) indicated that the survival and growth of organisations in society are totally dependent on two factors: (1) the transmission of good social benefits to society, and (2) the dissemination of economic, social and politic advantages to groups that obtain power. A plethora of definitions of

“legitimacy” have been discussed theoretically and conceptually by previous literature. Suchman (1995), for instance, defines legitimacy as an ‘assumption’ that any action of an organisation is right, proper and desirable within society’s norm and beliefs. This is in harmony with Vergne’s (2011) elucidation of legitimacy as a ‘perception’ by society that an organisation operates within the social norms and values. At its simplest, the legitimacy theory posits the importance of organisations to legitimise themselves and ensuring that they operate within society’s expectations; failure to fulfil these expectations will affect the survival of the organisation (Deegan, 2006). In other words, legitimacy is associated with ‘public approval’ of the rightness of an organisation and its activities (Herlin, 2015). Based on the idea of legitimacy theory, Bansal & Clelland (2004) defined ‘environmental legitimacy’ as the ability of an organisation to meet society’s environmental expectation and desires (e.g. that the organisation will not release waste into the water systems and cause pollution).

Undoubtedly, legitimacy is an essential element in any organisation in order to sustain their power and influence over other stakeholders¹² (Marquez, 2015), both the internal and the external stakeholders who are affected by the organisation, so that these stakeholders keep on supporting the organisation’s goals, missions and activities (Elsbach & Sutton, 1992; Stephen, 2015). Therefore, a legitimate organisation must have two basic characteristics including: (1) being lawful, and (2) being credible or reputable (Thrandardottir, 2015). Legitimacy can be obtained via normative legitimacy (acceptable norms) or cognitive legitimacy (activities the fit society’s expectations) (Lister, 2003; Walton, 2008). Many prior studies have been devoted to the corporate companies’ roles in environmental legitimacy, yet it is very hard to find a study on NGOs’ legitimacy (Lister, 2003) or even the media’s legitimacy. Regarding corporate companies’ roles in legitimacy, studies like

¹² The word ‘stakeholder’ emerged from R. Edward Freeman's seminal book called *Strategic Management*, published in the mid-1980s. According to Freeman (1984), stakeholders mean individuals or groups that can affect or are affected by an organisation. In the ENGO context, stakeholders can refer to the media, government, scientists, the community, and many other groups or individuals that are related to the ENGOs’ goals and missions.

Pellegrino & Lodhia (2012) found that BHP Billiton and Rio Tinto legitimised themselves by using the ‘annual and sustainability report’ as vehicles to inform society about their internal processes, systems, methods and outputs so that the public acknowledged that their companies are doing well in environmental performance and put great effort into tackling climate change issues. Similarly, Summerhays & De Villiers (2012), in their research into the six largest oil companies’ response towards oil spill in the Gulf of Mexico, revealed that most of the companies, especially British Petroleum, have used and increased their ‘environmental annual reports’ in order to explain their responsibilities towards the oil spill event.

Indeed, like many other types of organisation such as firms that use their annual reports as vehicles for legitimacy, the media and ENGOs also need to legitimise themselves, particularly by using the environmental articles in newspapers and ENGOs’ newsletters, or even through other environmental activities. In the effort towards legitimacy, WWF and Greenpeace, for example, not only come up with reports, but also act as facilitators and invite scientists from all over the world to discuss climate change issues (Gough & Shackley, 2001). Greenpeace has also provided a large amount of technical expertise to present environmental issues to the society (Ossewaarde, Nijhof, & Heyse, 2008). This has made both of these ENGOs organisations appeared as credible scientific organisations in the world’s eyes. As for the media, although they are often labelled as the ‘legitimising body’ for other stakeholders such as politicians (Sheafer, 2001) or even if it is the ENGOs that receive legitimacy via media reports on their activities (Lee, Johnson, Prakash, 2012), the media themselves also need the legitimacy, especially to be seen as a proper and desirable organisation in the constituents’ eyes. This has been somewhat understudied by previous media studies. Alacovska (2015) suggested that media legitimacy is highly dependent on the ‘genre’ or ‘product’ meeting society’s values, norms and belief expectations. Within the context of this study, it is therefore appropriate to conclude that the media’s environmental news reporting is one of the best genre or product that can be used by the media to display its legitimacy. When the media communicates environmental information via news articles, features, columns, etc.,

the public perceive the media as being ‘green’ and as a ‘proper’ newspapers organisation that takes responsibility towards nature rather than being profit-oriented and aiming for sensationalism. In fact, similar to the ENGOs, communicating environmental messages also creates a relationship between the media and ENGOs, especially when the public contacts the media to make a report about environmental problems or when a journalist asks an ENGO to be a news source.

Despite their advantages of legitimacy, the media and ENGOs also must always be aware of the “illegitimacy” and the “legitimacy gap”. Illegitimacy is the situation when an organisation’s actions are seen as undesirable and against social norms (Patterson & Allen, 1997). For example, an oil spill event can confer illegitimacy to the oil company if the citizens start to develop a negative perception of the organisation (Summerhays & De Villiers, 2012). The legitimacy gap is the situation when a gap exists between how organisation should act and how it is perceived that the organisation has acted (Deegan, 2006). Therefore, it is important for an organisation to not only fulfil the expectations of society, but also to manage the gap to avoid a lack of support. The ENGOs, for example, need to disclose their sustainability reports as much as they urge corporate companies to disclose their reports in order not to lose their legitimacy (Joensuu, Koskela, & Onkila, 2015). Most importantly, they need to always be accountable (transparent in their work) to ensure they are legitimate in citizens’ eyes (Hughes, 2014). Herlin (2015) also suggested that NGOs, for example, can avoid the co-branding campaigns that risk their brand being misused by other companies, which can lead to a legitimacy crisis. The media must also aware of its be morality to ensure they are legitimate in the eyes of other stakeholders (Ugland, 2008). Simultaneously, due to the believability and credibility of Western media, particularly those in the USA, declining (Pew Research Center, 2012c), the media need to be more accountable and fair, especially in their environmental news reporting to avoid a legitimacy crisis where the public does not trust the media anymore. The roles of environmental legitimacy in the media and ENGOs are simplified in Figure 3.1:

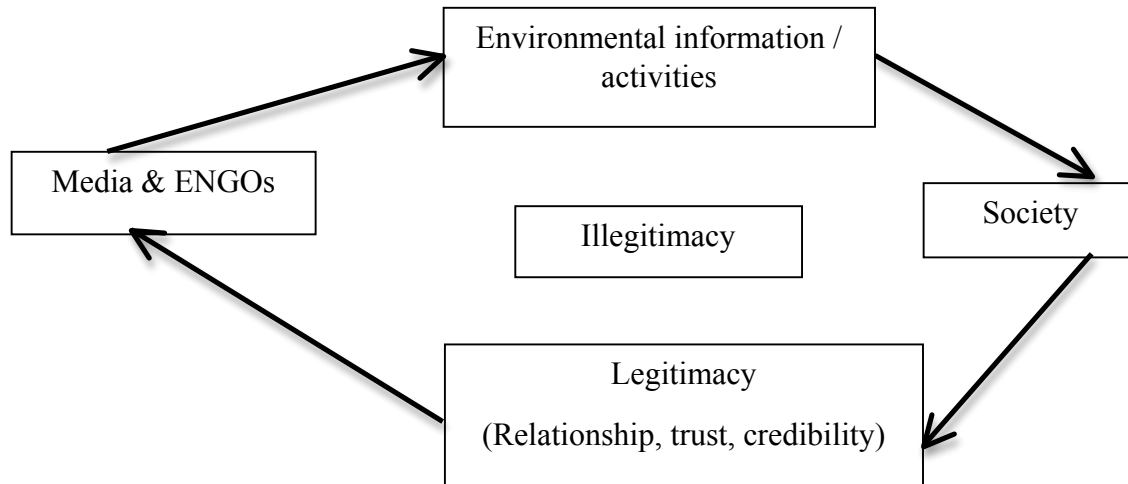


Figure 3.1: Visualisation of environmental legitimacy among the media and ENGOS

Figure 3.1 shows the importance of the roles of environmental legitimacy in the media and ENGOS. Environmental legitimacy can be viewed as a circular process that begins with the media and ENGOS distributing environmental information to the public via articles or activities such as giving consultations to the public and creating legitimacy, particularly creating relationship, trust and credibility among the media, ENGOS and society. This will take place as long as all the environmental communication by the ENGOS fulfils society's norms and expectations. However, illegitimacy could occur at anytime if the media and ENGOS conduct some activities that are undesirable in the public's eyes. The discussion on the roles of media and ENGOS within the Western democratic society will be offered in the next section.

3.2.2 Roles of the Media and ENGOS in the Context of Western Democratic Society

In the Western tradition, the word “democracy” originates from the classic Greek words “*demos*”, which can be understood as ‘the people’, and “*kratia*”, which means ‘to rule’ (Fayemi, 2009, p. 104). These ancient Greek words indicate the power of the people, in contrast to autocratic state leadership. True enough, a real democratic country will give its citizens the right to active participation in state decisions (Plattner, 2010; Bula & Espejo, 2012; Peters, 2016). It is intriguing to note that the

idea of democracy has caught more attention and has become a ‘new religion’ in Western society since the 1960s (Peters, 2016). The concept of democracy has been extensively discussed by previous scholars such as Jürgen Habermas, the social theorist known as the “father of democracy” who promoted the idea of democracy through his two influential books: *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society* (1962) and *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (1992).

In his first book, Habermas explained the ultimate birth of democracy through bourgeois society in the 18th and 19th centuries and how democracy has become a public discourse among bourgeois society (Staats, 2004), where the media and the elite controlled the public sphere (*Öffentlichkeit*) during that period (Kellner, 2000). Habermas firmly sketched out the “bourgeois public sphere” model in the development of the UK, France, and Germany (Kellner, 2000, p. 262), and explained the prominence of the public sphere as a space where the people can sit together and discuss their common interests and organise themselves against arbitrary rulings (Kellner, 2000; Verovšek, 2012). Moreover, in his second monumental book, Habermas discussed the Anglo-American political theory, especially the nature and the limits of liberal democracy (Baynes, 2002).

Via his theory of democracy, Habermas indicated three elements of modern democracy: (1) the private autonomy of citizens, which means that everyone is entitled to freedom to live as they want; (2) democratic citizenship, which means that citizens that are free from political control; and (3) the public sphere, which serves as a free system to connect the state and the public (Habermas, 2006a). Indeed, within the parameters of Habermasian’s democracy theory, the role of social actors and institutions (such as the media and NGOs) is crucial for the democratic process (Dahlberg, 2014), especially for advancing the public sphere. Habermas argues that the media must be independent from the political and economic systems to create a so-called “media society” (Habermas, 2006a). In other words, democracy cannot exist without an independent media (Dennis & Snyder, 1998; Dispensa & Brulle,

2003) as the independent media plays a dominant role in the realm of democracy, especially in facilitating the public sphere for society to discuss and voicing public opinion. In this respect, public opinion has been recognised as one of the most indispensable elements and the cornerstone of democracy (Aalberg & Curran, 2012). Alternatively, the terms of 'free' and 'independent' apply not only to the media but also to NGOs or civil society, where Habermas clearly noted that these agencies should be self-regulating and free from domination (Habermas, 1962b). This enables them to play their significant roles in enabling space within the public sphere (Lehman, 2007) and, most importantly, inspiring the democratic actors to become involve in the public sphere and minimise the chance of communication being invaded and conquered (Habermas, 2006a). We should always keep in mind that a nation can only been recognised as truly democratic if it manages to exercise independent media and ENGO scrutiny without any control from the state regime.

On the other hand, it is worth noting that there are two roles for the of media and ENGOs in Western democratic systems including: (1) the elitist model, where the media and NGOs plays a traditional role as an observer (watchdog), monitors society, and provides in-depth information; and (2) the deliberative model where the roles cover engagement and working together with the public and making the public clear about a fact (Carcasson & Sprain, 2010). The role of watchdogs among the media has a long history in Western democratic society and now the public expects environmental information from the media (Moore, 2001). In playing the watchdog or observer roles, the media act on behalf of the public and provide them with enough information so that they can be involved in democratic decision-making (Tsfati, Meyers, & Peri, 2006). More importantly, as a watchdog, the media also play a pivotal role as a check and balance to monitor the state so that they do not misuse power (Sæther, 2008; Elmasry, 2012; Voltmer & Wasserman, 2014). Like the media, Western NGOs also constantly perceived their roles as being that of watchdogs (Eizenstat, 2004), particularly as the 'eyes and ears' of the public that always monitor the government's action (Holmén & Jirström, 2002). Certainly, the watchdog's role

of the media and ENGOs is only possible if democracy and freedom of information truly exist, as suggested by Habermas' democracy theory.

The second important role of the media and ENGOs is played out in the deliberative democracy model, which is obviously related to the Habermas' public sphere theory. In the public sphere theory, the media and ENGOs play a vital role not only to deliver environmental information to the public, but also to provide them with a deliberative space to debate and discuss certain environmental issues. Previous scholars like Newig et al., (2013) also agree that the media's role in the public sphere is not only to express society's voice but also to provide the public with a place to discuss the issues. Salazar (2011), for instance, indicates that the increased amount of climate change coverage in the media after 1995 has led to global public engagement in climate change issues. The knowledge and understanding of people about climate change increase year by year and the people are more concerned about and aware of the effect of climate change. This is obviously related to the effect of repetition and consistent messages from the media, which helps to change the public's opinion (Iman Khalid & Yuserrie, 2011) about environmental issues. Therefore, in the deliberative model, it is vital for the media and ENGOs to inform and observe the public and the state, and, more importantly, to increase the public's understanding about environmental issues and then actively engage in public discussion.

For the purpose of this study, both roles, especially that of informing and educating the public about environmental issues, are included. The media and ENGOs do not only report about environmental events or inform society about certain environmental issues happening surround them, but, more importantly, they also educate the public to have a positive attitude towards the environment. As we might expect, some scholars may not agree on the roles of media in environmental education, but as far as this research is concerned, the media are like the ENGOs and can be seen as environmental educators because the public does not only receive information but also gains knowledge and awareness from the media's news reports and features (Talero, 2004). Ryan (1991) stated that we can never underestimate the

guidance from the media because people are educated by the media. For example, in the US, people are really concerned about many environmental issues because they read in the media about the dangers of water pollution or pesticides to their children and health. The discussion on the privilege of Western press freedom for the media and ENGOs will be displayed in the next section.

3.2.2.1 Western Press Freedom: A Privilege for the Media and ENGOs

It has been widely known that the phenomenon of a democratic and free media has a remarkably long history of establishment and is still active in much of the Western world, especially European countries. According to Björkstrand & Mustonen (2006), in 2006, Sweden and Finland celebrated their 206th year of freedom of information since the world's first freedom information legislation was introduced by the Swedish parliament in 1766. Successful press freedom also has been achieved in other European countries like Austria, which revoked the pre-publication censorship law in 1862, and Bismarckian Germany, which established its national press law in 1874 and also terminated pre-publication censorship and the state licensing of newspapers (Humphreys, 1996). These are some examples of the long history of the freedom of information and the democratic media in European nations.

In fact, if we glance at the recent Global Press Freedom Rankings 2014¹³, European countries still dominate in the top ten of the presses with the most freedom, with Netherlands, Sweden and Norway being ranked number one, followed by Belgium, Finland, Luxembourg, Switzerland, Iceland, and Denmark out of 197 countries around the globe (Freedom House, 2014a). Therefore, if we take Norway as an example, the press in this country has freedom, although they have a “press subsidy system” from its government. The press subsidy system has been introduced

¹³ Global press freedom rankings are produced by the Freedom House from its survey of independent media from 197 countries. This survey has been conducted on a yearly basis since 1980. There are three categories of freedom: free, partly free and not free. The result of the survey for 2012 showed that out of 197 countries, only 63 countries (32%) are free, 70 countries (36%) are partly free and 64 countries (32%) are not free.

in order to support the economy of the weak press company through exemption from taxes, state advertising and subsidisation (Skogerbø, 1997). This press subsidy system, undoubtedly, keeps the press companies alive and improve their technical quality; however, more importantly, the journalists who work under this system can still work on creating original news (Skogerbø, 1997) without any control from the government.

Akin to other Western countries, the tradition of a free press in the US is very obvious in its liberal media model, whereby the media system is principally free (Hallin & Giles, 2005; Benson et al., 2012). De Tocqueville ([1840] 1990) stated that the US media were the leading example of freedom in the world (Woodring, 2009). The media in the US enjoys freedom and the autonomy of information that has led to professional journalism (Joseph, 2012). In the US context, Woodring (2009) highlights four categories that contribute to a free press: (1) the legal environment, which protects free reporting from legal restrictions; (2) the political environment, where the press is not censored by the government and is able to get numerous sources, and is free from physical violence and intimidation against journalists; (3) the economic environment, whereby the media should be free from economic manipulation from the government (although they may receive subsidies) and should encourage private media ownership, which can provide competition among the media companies for better information dissemination to the public; and (4) a working climate that allows the journalists to work as watchdogs, observing and reporting about the state without control, and where the media must provide a public voice and avoid self-censorship by the journalists.

Although the Western media is claimed to have more freedom due to the practice of private ownership, that usually gives more attention on the quality of journalism (Dunaway, 2013), some other scholars like Hanretty (2014) and Rohlinger & Proffitt (2016) argued that private ownership especially, by a conglomerate or corporate entity has given a negative impact on the freedom of the Western media. Hanretty, for example, mentioned that there are still concerns on how corporate

ownership can influence the independence of the editorial direction, while Rohlinger & Proffitt stated that conglomerate ownership is somehow more focused on profit-making. In this regard, advertising becomes the media's main priority and therefore, the media tries to cut certain cost by minimising the number of journalists doing investigative reporting. This somehow limits the number of environmental news on newspaper as the news beat itself is considered as part of investigative journalism. Most importantly, a higher dependency of media organisation on advertising for profit-making could also economically influence the news content as the journalists are no longer have the freedom to report the news as they ought to consider the interests of advertisers (Hanitzsch & Mellado, 2011). For example, an earlier study conducted by Hays & Reisner (1991) on the influence of advertisers on agricultural journalists discovered that advertisers create a threat when they want to withdraw their advertisements. Furthermore, some journalists agreed that it is difficult for them to be neutral in reporting and they are pressured to please the advertisers.

Put simply, press freedom is related to the right of free speech (McNamara, 2009) and when the press is free, it means it is free from state control over their media activities (Czepek, Hellwig, & Nowak, 2009). Of course, press freedom is important for the sake of its reliability for the consumption by a democratic society (Habermas, 2006a) and is also a privilege for the ENGOs, as they also use the media for environmental communication. Thus independent media ensure that the public will trust the media and, most importantly, the information regarding ENGOs' activities portrayed in the media (Lee, Johnson, & Prakash, 2012). This is linked to how the media and ENGOs construct social perceptions of reality, which will be discussed in the next section.

3.2.3 Roles of the Media and ENGOs in Social Constructions of Reality

In general, the theory of social constructions of reality, proposed by Hannigan (2006), explains the fact that our knowledge and perception about the reality of the “environment” are socially constructed by our surroundings. The term “social

construction of reality” was first introduced by Berger & Luckmann through their well-known book *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Berger & Luckman (1967) clearly spell out the terms “reality” and “knowledge” as follows:

“...Reality is a quality pertaining to the phenomena that we recognize as being independent of our own volition (we cannot “wish them away”), and to define knowledge as the certainty in phenomena that is real and possesses specific characteristic...” (p. 13).

Berger & Luckman (1967) also noted that our knowledge about the reality comes from a social interaction. Basically, Berger & Luckman argue that this world is not a natural entity but one is made up of diverse social arrangements and practices (Potter, 1996). In other words, the social construction reality theory invites us to understand that what we believe about the reality of environmental problems is created via our social interactions.

Needless to say, Berger & Luckman’s idea about the social construction of reality is associated with social constructivism theory, whereby knowledge, meaning and reality are socially constructed (Kecskes, 2014; Zhang, 2009). Social constructivism, which is also known as “socio-cultural constructivism” or “constructionism”, presupposes that an individual constructs his/her knowledge and understanding from social interactions. Vygotsky (1934) is one of the pioneers of social constructivism (1978), which theorised that knowledge is constructed within the individual’s mind and also via social interactions that involve sharing, constructing and reconstructing processes (Jadallah, 2000). Theoretically, humans’ mental functions are mediated by semiotics through language skills and cultural norms (Kecskes, 2014). These two components are pivotal in social interaction.

Within the context of this study, I believe that the reality of environmental problems is socially constructed by the media and the ENGOs. This argument is also

accepted and supported by Hannigan (2006) in his prominent book entitled *Environmental Sociology*, in which he claims that the reality of environmental problems is socially constructed by numerous social actors such as reporters, advocates, researchers and many more. Other scholars, like Hessing (2003), also agree with Hannigan and acknowledge the fact that the reality of environment problems is constructed by social institutions (like families or schools), and the media, particularly newspapers, are the primary source for transmitting the reality of environmental problems to the public.

Meanwhile, in describing the social construction of reality, Hannigan (2006) specifically listed six vital factors of successful social construction, including: (1) the environmental matters must have a scientific authority¹⁴ to validate the issues, (2) the story must have someone who can make the story interesting and popularise it, (3) the environmental matter must grab media attention, (4) symbols and visual representations are used to dramatise the environmental matter, (5) motivation (incentive) is provided for the action of saving the environment, and (6) well-established sponsors are used for the sake of legitimacy.

Without doubt, the roles of the media in constructing the reality of environmental matters was mentioned by Hannigan (2006) in Factor 3, namely that the environmental problems must receive the attention of the media because the media must consider the environmental problem to be “newsworthy” (p. 77). Hannigan (2006) pointed out that large environmental issues, like ozone depletion, climate change, global warming, etc., have failed to be a public issue because the media did not consider these to be newsworthy. Therefore, the media should make environmental problems important and significant for public consumption. Indeed, numerous previous studies also have agreed with the idea of Hannigan that the media play a momentous role in constructing the reality of environmental problems for the public. Lowden (1997), for instance, has noted that the media is one of the main

¹⁴ Scientific authority is the proof needed to validate the claims such as photographs of ice melting in te Arctic to prove that climate change is really happening.

sources of information that has the power to shape the public's perception. Lowden gave an example on the power of media in dramatising oil spills by using a photograph and inserting the element of dangers and hazards as a reality of this issue. In the same way, Smith & Leiserowitz (2012), in their research into risk perception in the US, found that global warming images in the mass media have had a great influence in constructing the way Americans think about and conceptualise the risk of global warming. The "alarmist" image of global warming has made Americans more concerned and worried about the negative effects of global warming. Nerlich, Kotevko & Brownas (2010) also agreed that in communicating climate change issues, words like "warn" and "alarmism" was used and the language was used to match the taste, meaning and concern of the public.

Interestingly, among these six factors determining the success of social construction, the fourth factor, which is the use of symbols and visual images in dramatising the environmental problem is verified by Cox's (2013b) and Hall's (1997) idea of the importance of language and other signs, like pictures, in shaping the reality of environmental problems (the constitution function) and can also be an instrument (pragmatic function) for educating, persuading and helping people to manage the environment, which is discussed below. Hannigan (2006) also gave a specific example of how ENGOs like the Greenpeace, used a dramatic picture in communicating about the deforestation in Vancouver Island and this issue became an international debate. Hannigan (2006) stressed the power of visual images that can simplify a complex topic into something that can be easily understood by everyone. The key role played by language and picture as tools in the social construction of reality needs further discussion.

3.2.3.1 The Pivotal of Language and Picture as Tools in Social Construction of Reality

In his masterful discussion about the realm of environmental communication, Cox (2013b) proposed the dual functions of environmental communication, namely the

pragmatic function and the constitution function. These two functions emerge from the definition of environmental communication as a form of symbolic action¹⁵. According to Cox (2013b), the symbolic action means human communication through language and other forms like films, photographs and art about “doing something”, whereby language and other acts “shape our understanding, create meaning, and orient us to a wider world” (p. 21). As mentioned above, Cox’s idea of the importance of language and images in environmental communication is correlated with Hall’s (1997) and Hannigan’s (2006) work on the representation system, as language and images are pivotal in representing meaning to others.

Cox defines the pragmatic or practical function of environmental communication as how it helps to educate, mobilise, alert, persuade and assist the recipients to solve environmental problems (Cox, 2013b). The pragmatic function explains the powerful capacity of language and other forms in educating and assisting people to manage the environmental problems properly (e.g climate change, global warming, atmospheric haze, etc.). According to Cox (2013b), this pragmatic function is widely used in public education campaigns and environmental advocacy campaigns. For instance, a group of ENGOs may organise a campaign to educate the public about protecting nature and change some perceptions related to the issue (Cox, 2013b). Cox gave another example of an early ENGO: The Sierra Club America, which organised a campaign against dam development in the Grand Canyon by the US authorities (Cox, 2006a). The Sierra Club used full-page advertisements and also prepared a more gripping and hard-hitting article with controversial headlines like “Now only you can save Grand Canyon from being flooded... for profit” together with a mock photo (Cox, 2006a, p. 54). This example displays the pragmatic or instrumental function of environmental communication, as the Sierra Club used the powerful capacity of language and pictures as instruments in influencing environmental policy, persuading and affecting people’s perceptions of and behaviour towards the dam.

¹⁵ The theory of symbolic action was first introduced by Kenneth Burke (1957 [1941]). Clifford Geertz (1973) made it popular and widely used in academic literature to this day (Alexander & Mast, 2006).

Additionally, numerous previous studies have agreed with Cox that language and other tools have a powerful capacity to influence, educate and help people to understand environmental matters. For example, Boykoff (2011b) stated that we could see how the media like Express (2000) used a fearful headline and articles like “It’s the end of the world...” aimed mainly at children to make people aware about the climate change issues (p. 16). Hulme pointed out that this kind of headline and article undoubtedly developed a “public discourse” on climate change (Boykoff, 2011b, p. 17). In a similar vein, Stoddart (2011) also stated that the media have used slogans like “Keep winter cool: fight global warming,” “Protect our winters,” “Save our snow: start global cooling” and “Snow: an endangered species” to indicate the phenomena of shrinking glaciers and short winters, and warning people, especially in the Europe and North America to be more aware of a potential skiing problem due to the risk of climate change (p. 19). Within the German context, other scholars like Peters & Heinrichs (2008) have discovered that German media like *Bild*, one of the most popular tabloids in the country, have used headlines such as “Our planet is dying!” to show their support for the environment and at the same time to attract the public.

On the other hand, Doyle (2009) has argued that a picture of melting glaciers is a powerful and persuasive sign of climate change and this picture has been widely used by ENGOs like Greenpeace in their advocacy campaign to show, persuade and arouse public concern about the reality of climate change. Without doubt, “seeing is believing” (Doyle, 2009, p. 286) and these pictures are pivotally important in making people first believe then learn about particular issues, like climate change; perhaps after this, the public will take action. Therefore, we can never underestimate the capacity and the power of visual evidence in environmental communication. Similarly, DiFrancesco & Young (2010), in their content analysis of the images in Canadian newspapers, have argued that images have powerful capacity for making the viewers not only understand the facts but also stimulate their emotions to engage with climate change issues.

Besides the pragmatic function, the second function of environmental communication is the constitution function. According to Cox (2013b), the constitution function means environmental communication helps to “constitute, compose, or represent” environmental problems for human understanding and awareness (Cox, 2013b, p. 19). The constitution function supports the pragmatic function, where the power of language and other tools is vital for constituting or shaping our perceptions and help us be more aware of the reality of environmental matters. It is intriguing to note that the constitution function of Cox is also related to Kenneth Burke’s work (Cox, 2006a, p. 56). Burke, in his discussion about “terministic screening”, argues that the nature of language can be divided into two types: “scientific” or language as definition, and “dramatic” or language as an act (Burke, 1966, p. 44). The “terministic” screens symbolic action through verbal (speaking) or non-verbal communication, which involves constitution (Cox, 2006a, p. 56).

Cox also illustrates the importance of controversial issues, such as how ENGOs such as Defenders of Wildlife protested the use of the “dolphin safe” label on tuna traps with encirclement nets (Cox, 2006a, p. 56). Due to this issue, the public grew to be more concerned and became aware of the right word or name chosen to present information (Cox, 2006a). Without doubt, symbols, like language, are a core part of environmental communication. Humans provide meaning to a symbol and express it through a language (Aksan et al., 2009). Brown & Herndl (1996) also agree that we represent the “environment” via a “word” that is constructed via our language. On the whole, both the pragmatic and constitution functions are associated with each other and both functions also emphasise the role of symbolic actions, like language, as the basic means of shaping human perceptions and as instruments for educating people about environmental problems. The explanation on the strategies used by the media and ENGOs in environmental communication will be offered in the next section.

3.3 Strategies of the Media and ENGOs in Environmental Communication

“Strategy” is originally emerged from the Greek word “*strategos*” word, which means taking action or having a thought (Patton, 2001; Steyn, 2007a, p. 147). Although the word “*strategos*” refers to the concept of the strategy in the military sense, it is still relevant to be applied to organisations like the media and ENGOs, especially regarding the importance of thinking and action. In the communication context, strategy makes an organisation be more focused, have a better communication direction and, more importantly, build a relationship with the strategic stakeholders (Steyn, 2003b). In a related study, Koskela (2013) coined the term “communication strategy” as the standard discursive response used when an organisation already knows with whom they would want to communicate. In the process of developing a communication strategy, three major components need to be considered: (1) the stakeholders, (2) the messages, and (3) the communication tools (Mei, Lee, & Al-Hawamdeh, 2004).

Like other organisations, the media and ENGOs must be able to formulate and implement an environmental communication strategy to ensure that all the environmental messages will be well received by all the stakeholders. More importantly, through a communication strategy, ENGOs, for example, will be able to achieve their goals and missions (Dreiling et al., 2008; Dalton, Recchia, & Rohrschneider, 2003). For the purpose of this study, Phills’ (2005) funnel framework has been employed in order to explain the strategy of the media and ENGOs (Figure 3.2).

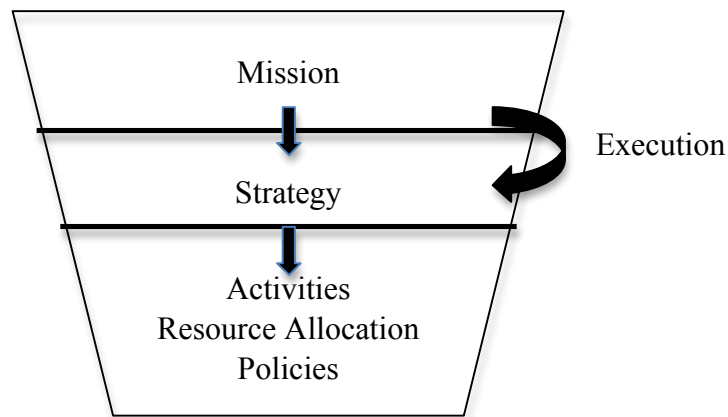


Figure 3.2: The funnel framework (adapted from Phills (2005))

The funnel framework (Figure 3.2) was developed by Phills (2005) by integrating three main components within an organisation, including the mission, strategy and execution. According to Phills (2005), an organisation begins with its mission as the direction for its operation; therefore, the mission is located on the top of the framework. Phills (2005) also noted that missions usually have a broad outline and therefore it is sometimes challenging for an organisation to make a decision on how can they implement or work toward the mission. Within the context of this study, the mission can be viewed as environmental communication by the media and ENGOs for transmitting environmental messages to the public.

Next comes the level that is truly important for this study, which is the strategy taken by the organisation. The strategy is crucial because it can determine if the organisation succeeds or fails (Phills, 2005). In short, strategy will determine the survival of an organisation. More importantly, strategy is also related to the performance of an organisation. Phills has clearly justified the term “performance” in the context of strategy as follows:

“For a for-profit organisation, performance is typically defined in terms of profitability or economic returns to its owners. As for non-profit organisation (as well as for some for-profits), performance is defined more broadly, typically in terms of achieving the mission. Regardless of the specific conception of performance, the role of strategy is to help

managers understand, predict, and control the long-term prosperity of their organisations and industries” (p. 17).

After creating the strategy, it is important for the organisation to know how to execute the mission and strategy. There are three main types of executions: activities, policies and resources allocation. An organisation will usually set out certain policies and allocate a certain amount of money to execute its strategy and achieve its goals. However, for the purpose of this study, only execution via environmental communication activities by the media and ENGOs are considered (discussed in Sections 3.3.1 and 3.3.2).

3.3.1 Environmental Communication Activities as an Execution of Strategy by ENGOs

There are several environmental communication strategies that have been adopted by Western ENGOs in order to achieve their goals, including, tactical lobbying, multi-level campaigning, formation of coalitions and networking (Yanacopulos, 2005) (See Figure 3.3). Amongst these, lobbying is one of the most common and typical strategies that have been widely used by Western ENGOs. Taking the US, for example, lobbying activities have been defined clearly by Federal law and IRS regulations, which classify lobbying into two categories: direct lobbying and grassroots lobbying (Vernick & MPH, 1999, p. 1426). Direct lobbying has been defined as any activities or attempts to influence legislation via communication with the people who are responsible with formulating legislation, such as legislators, staff members or other government personnel (Vernick & MPH, 1999). Conversely, grassroots lobbying is an attempt to influence any legislation by the public or any segment thereof (Vernick & MPH, 1999). Therefore, lobbying can generally be understood as one of the strategies used to influence the legislation and public policy decisions (Gullberg, 2008; Berg, 2009; Boin & Marchesetti, 2010; Adelle & Anderson, 2013). It has been said that lobby activities by ENGOs began during the Stockholm Conference when ENGOs were active in giving recommendations,

including submitting reports to the conference secretariat, drafting initial negotiation documents, publishing conference newsletters, issuing joint statements, hosting side events and publishing alternative treaties (Egelston, 2013).

To date, an extensive growing body literature that has discussed lobbying strategies used by the Western ENGOs. Marziali (2006) for example, stated that there are about 13,000 lobbyists who practice lobbying in Brussels, Belgium, for various interests, including ENGOs. Gullberg (2008) found that Climate Action Network Europe and Greenpeace EU are two of the most active organisations lobbying the European Climate Change Programme and the European Emissions Trading System, whilst FOE Europe mainly focuses on grassroots lobbying. On the other hand, Arts & Mack (2003) found that although only a few ENGO participants have attended the international biosafety meeting, these ENGOs have successfully lobbied the delegates and influenced political decisions about biosafety protocols.

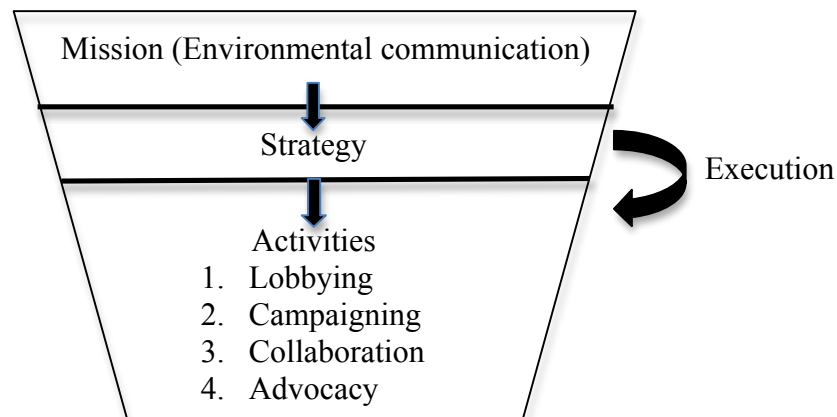


Figure 3.3: Environmental communication activities by Western ENGOs (Source: Phills, 2005; Yanacopulos, 2005)

Alongside lobbying strategies, ENGOs also use campaigns as one of their pivotal environmental communication strategies. A campaign is a strategy of social control via provocation (Paisley & Atkin, 2013). ENGOs usually provoke and create emotions towards one particular issue so that people will be aware. Gueterbock (2004), for instance, found that the “StopEsso” campaign was a key climate change

campaign, as it highlighted several effects of climate change like floods, storms, droughts and diseases. Throughout the campaign, Greenpeace collaborated with other ENGOs like FOE and also distributed 30,000 posters around the UK, placed advertisements in the newspapers and created a special website (www.stopesso.com). Consequently, this provocative campaign successfully made over one million people in the UK (5% of the population) boycott Esso (Gueterbock, 2004). Another controversial and well-known campaign is the Anti-Whaling campaign¹⁶ that has been organised by Greenpeace since 1975. Greenpeace has worked hard on this campaign due to the decreasing number of blue whales (less than 6000 in 1970) (Greenpeace, 2011). Greenpeace has organised this campaign all around the world by delivering flyers and running petitions to pressure for international action (Greenpeace, 2011). This provocative campaign brought huge improvement to Japan's "scientific whaling program", stopped people hunting whales and turned public opinion against whalers (Greenpeace, 2011).

Furthermore, partnership and collaboration are other indispensable strategies used by ENGOs in environmental communication. The ENGOs usually do not work alone but make coalitions and network, especially with other ENGOs that have mutual goals and missions. Coalition and networking undoubtedly make them stronger and more powerful than if they work alone. Coalitions can increase commitment, share resources, reduce the costs and, more importantly, can increase legitimacy and power as one voice (Yanacopulos, 2005). As mentioned in Section 2.4.2, in Europe, there is a coalition of the eight leading and most vocal ENGOs, which has been recognised as the "Green G-8". The main goal of this Green G-8 is to push environmental issues into the heart of the EU's policy making and decisions (Boin & Marchesetti, 2010). Another successful example of coalition among ENGOs is the coalition between the WWF and the International Union for Conservation of

¹⁶ The anti-whaling campaign was organised by Greenpeace as a response to the mass exploitation and hunting of whales by humans and industry. In 1972, the population of blue whales was less than 6000, which required serious action. The anti-whaling campaign is still one of the most successful campaigns around the world.

Nature (IUCN) in formulating the World Conservation Strategy and providing expert advice, training and research in many developing countries (Jamison, 1996).

NGOs are also aware of the importance of networking and collaboration with other social actors (Dreiling et al., 2008) especially the media. The NGOs are aware of the significant role of the media, especially in broadcasting their environmental messages and supporting their campaigns (Hall & Taplin, 2007). Nonetheless, the media also need the NGOs for their environmental news. For instance, in 1985, Greenpeace's environmental campaign ship the *Rainbow Warrior*¹⁷ was bombed and a photographer was killed, which became a hot issue and received widespread coverage from the media at that time (Friedman & Miles, 2002). Similarly, Motion & Weaver (2005) found that Greenpeace successfully attracted the media's attention through its protest campaign against genetically modified organisms. According to these authors, Greenpeace managed to make themselves a source of news leads and were successful in providing criticism of genetically modified organisms.

Besides lobbying, campaigning and collaboration, NGOs use advocacy as another strategy in environmental communication. In short, advocacy can be understood as "speaking up" for others (Atkinson, 1999 cited in Forbat & Atkinson, 2005). To be specific, advocacy can be defined as an act of pleading a cause and encouraging people to support an environmental action (Johnson & Mappin, 2005). Therefore, environmental advocacy is an act of communicating about the environment that has been taken by the NGOs to disseminate information to influence the public; specifically regarding the environmental issues it champions via newsletters or magazines. The advocacy strategies used by NGOs in the Western world are very obvious and common. In the UK, for instance, due to the negative

¹⁷ The *Rainbow Warrior* was the Greenpeace ship that had been built for three purposes: (1) fast and reliable ocean travel, (2) a scientific base, and (3) a scientific communication hub with an on-board satellite communication system.

effects of nuclear power, ENGOs like Greenpeace and FOE are very active in advocating rejection of building a nuclear power for mitigating climate change (Bickerstaff et al., 2008). The prime example of this is Greenpeace, who advocates and clearly informs the public about the dangers of nuclear waste and the risk of terrorism. According to Greenpeace, nuclear power not only costs a lot of money but also, most importantly, contributes to environmental pollution (Greenpeace, 2005 as cited in Bickerstaff et al., 2008). The collaboration and sources reliance strategies among the media will be presented in the next section.

3.3.2 Collaboration and Sources Reliance as the Media's Strategies in Environmental Communication

Unlike the ENGOs, which use various strategies in environmental communication, including lobbying, campaigning, networking and advocacy, the media use a single common strategy and that is to have good partnership or networks with various stakeholders, who are important as a source of news and quotes. Hannabuss (1995) stated that journalists usually develop good contacts and collaborate with regular experts and local organisations that become their (news) sources. It is a known fact that new sources are pivotal to journalists as these can assist to ensure the credibility and diversity of news contents (Miller & Kurpius, 2010; Lacy et al., 2013).

In brief, a news source has been defined as a person who contributes by giving information or quotes to the media (Dimitrova & Strömbäck, 2012). Sources play a vital role as transmitters in giving information or news to the media (Gans, 1980). Sources can be obtained through various ways (e.g. face-to-face, telephone, internet, and other ways), yet journalists are encouraged to get sources face-to-face through conversations with people (Campbell, 1997). There are several common types of sources used by the media in general, including politicians and the mass public (Dimitrova & Strömbäck, 2012).

In a related vein, Culbertson (1975), in an analysis of the New York Times and the Washington Post, indicated that three different sources can also be recognised: (1) officials, (2) spokespeople, and (3) sources. Sources are usually selected by the media according to the suitability of the news (Gans, 1980). Gans listed six factors determining the suitability of sources: (1) past suitability: sources that have provided information before and have become a regular source, (2) productivity: the ability of sources to provide a large amount of information, (3) reliability: reliable source makes journalists' job easier and less effort is needed for checking the information, (4) trustworthiness: an honest source and can be trusted, (5) authoritativeness: sources from certain official positions, and (6) articulateness: the ability of sources to speak clearly and fluently during interviews (p. 129-131).

In an overview of the importance of sources to the media, the Ventriloquist Model (Figure 3.4) has been adopted for this study, which is one of the “Muckraking Models” that emerged during the history of investigative journalism in the US in the early 20th century (Feldstein, 2006a). This model explains the process of communication as starting from the sources and not the reporter. The (news) source in the model below (Figure 3.5) sometimes is also portrayed as a “news shaper”, which means that the sources involved in the news producing process. According to Soley (1992), the primary function of a news shaper is to deliver a comprehensive analysis to the readers and provide a clear background and commentary on certain issues that are difficult to understand. This model also indicates the role of the source as a “ventriloquist”, whereby the source provides a voice to the media. More importantly, sources are very crucial in the beginning of news production and publication; without a source, news stories and environmental information are incomplete and less credible. Nevertheless, in this model, the source also can provide a “loop”, whereby the source also has its own particular agenda (Feldstein, 2007b). In reality, the media perceives the source as “potential”, but the source sees a “chance” to promote their interests and ideas in print (Gans, 1980, p. 117).

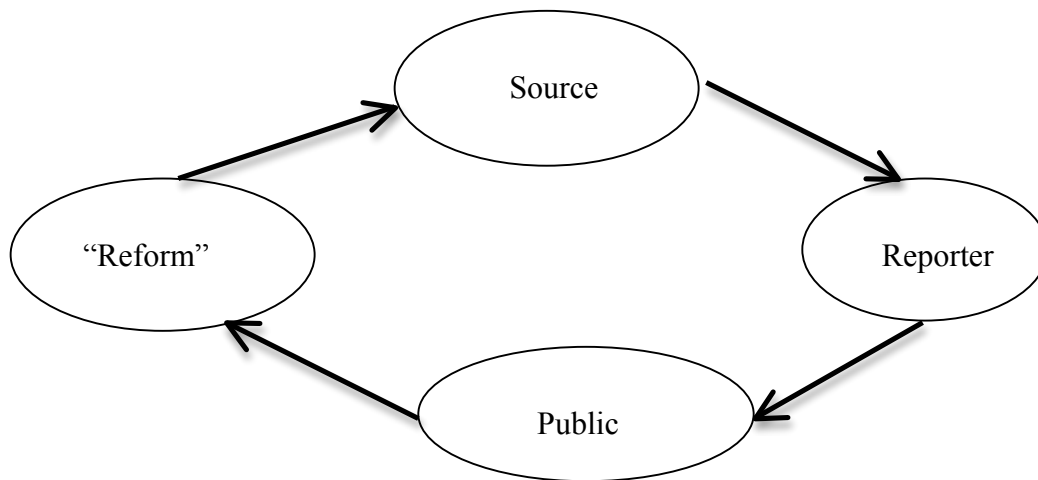


Figure 3.4: The ventriloquist model

As mentioned earlier, many prior studies focus on the collaboration between the media and (news) sources. According to previous literature, amongst all the stakeholders, environmental journalists most often quote the government. Lasorsa & Reese (1990) noted that most journalists quote government officials as their news sources rather than other stakeholders. At the same time, ENGOs and scientists are also vital scientific sources for the media due to they have many experts who have vast experience in certain environmental issues that they champion in. Taking the WWF as an example, this ENGO has many experts on wildlife issues like the Senior Vice President of WWF, Jason Clay, who had 25 years' working experiences in human rights and environmental organisations before joining the WWF in 1999. With the ENGOs' expertise, the media do not only have a good contact for the purpose of news sources, but can also get expert advice and consultation about coverage of environmental issues. The same applies to scientists: the media cannot deny that scientists are one of the most important news sources for them. Some environmental issues are complex (like climate change or global warming) and need scientific explanation by scientists. The public wants to hear about science "from the horse's mouth" (De Semir, 2010b) and this is why environmental journalists really need scientists. This point has also been supported by Nisbet & Scheufele (2009) in their research in the US, where they found that the US public wants scientific issues like climate change discussed by scientists rather than others like the government or religious groups. Therefore, scientists' opinions on environmental and scientific

issues are critically important to ensure that the news is accurate (Trumbo, 1996) and more credible for public consumption.

From this brief review, it is clear that the media sometimes have a complex relationship with other stakeholders. Coman (2009), for example, pointed out that the media do not trust public relations practitioners because they always include self-promotion inside the messages and tend to give incomplete information. On the other hand, scientists sometimes are uncooperative (Treise & Weigold, 2002) and may fail to give simple and clear messages (Somerville & Hassol, 2011), which sometimes makes the media tend to avoid them. Although collaboration between the media and these stakeholders, especially ENGOs, faces problems, the media use collaboration as a strategy to establish good contacts for news production. The details about the level of collaboration between the media and ENGOs needs to be discussed further.

3.3.3 The Level of Collaboration between the Media and ENGOs

As mentioned above, the collaboration between the ENGOs and the media is undoubtedly crucial for both parties. The ENGOs need the media to publish their works or articles, while the media need the ENGOs as their news and information sources. Loosely speaking, the term “collaboration” has been widely defined by several academic studies and disciplines. D’Amour et al. (2008) and Frey et al. (2006), for instance, have defined “collaboration” as two or more entities working together and sharing the same goals. At its barest sense, the essence of collaboration can be described as follows:

“Collaboration is a mutually beneficial and well-defined relationship, entered into by two or more organisations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards” (Parkinson, 2006, p. 3).

In describing the levels of collaboration, Horwath & Morrison (2007) have proposed five different levels of collaboration: (1) communication, (2) cooperation, (3) coordination, (4) coalition and (5) integration (p. 56). Although this level of collaboration framework was originally developed for the study of the Western child welfare services system, it is still appropriate to be applied for this study, especially for explaining collaboration between the media and ENGOS in environmental communication. This collaboration framework is shown in Figure 3.5 below.

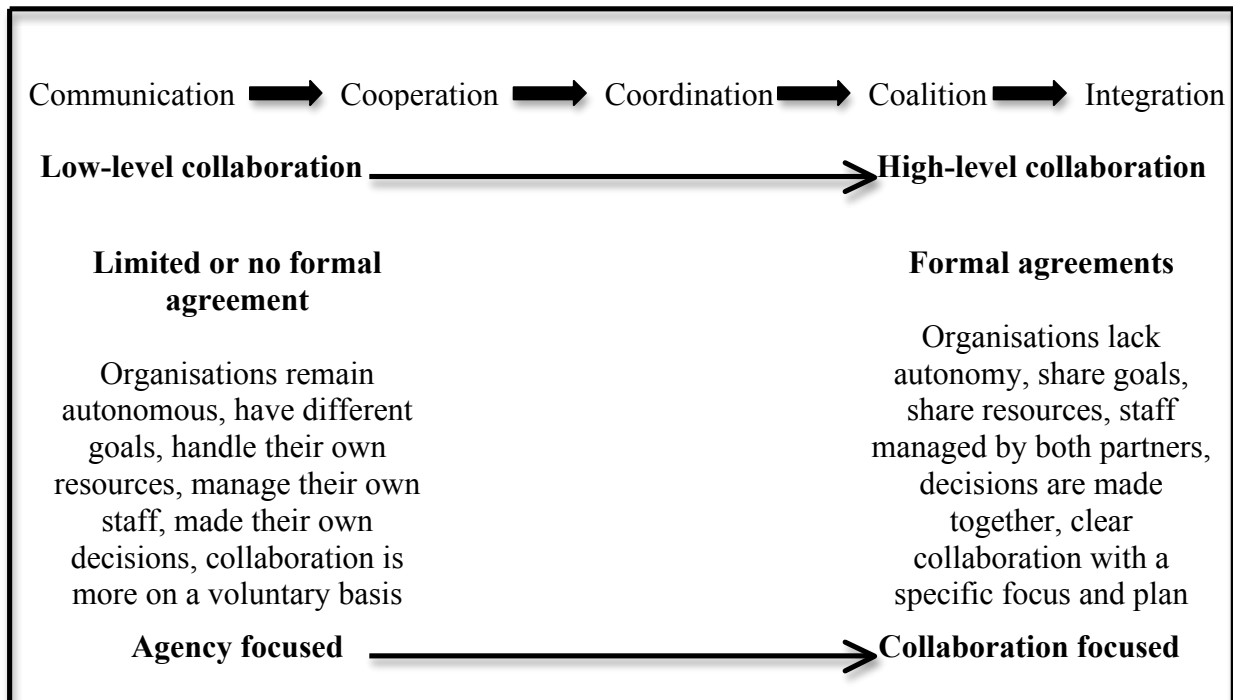


Figure 3.5: Characteristics of collaborative endeavours (adapted from Horwath & Morrison (2007, p. 57))

As illustrated in the formal framework of collaboration, the process of collaboration begins with communication activities as the lowest level (Figure 3.5). Horwath & Morrison (2007) define communication as a process of “two or more individuals from different disciplines talking and discussing together” (p. 56). It is worth remembering that an organisation is designed to conduct communication, whether internal or external (Leonard, Van Scotter, & Pakdil, 2009). Communication is also known as a basic process of interaction between two or more groups of people (Park & Song,

2005). Through myriad forms of communication like conversation, manuscripts and others (Cooren et al., 2011), together with varied methods of communication, particularly email, telephone and face-to-face (Dreiling et al., 2008), individuals or groups can start and develop a strong relationship with each other. The second level of collaboration is cooperation, which is defined as “low key joint working on a case-by-case basis” (Horwath & Morrison, 2007, p. 56). In this level of cooperation, an organisation is mostly focused on sharing information and expertise. Previous scholars like Kabdiyeva (2013) also agree that real cooperation involves sharing skills, resources and expertise, and sharing risks.

The third level of collaboration is coordination, which is determined as “more formalised joint working, but no sanctions for non-compliance” (Horwath & Morrison, 2007, p. 56). At one level, coordinated collaboration indicates the interdependence and connection between two organisations, where these organisations actively pursue a common goal and adjust themselves for working together. In addition, it is important to understand that although the two organisations are coordinated with each other, they still have the power to control their own operations. The fourth level of collaboration is a coalition, sometimes known as a temporary alliance, which means “a joint structure in sacrificing some autonomy” (Horwath & Morrison, 2007, p. 56). The word “coalition” emerged from two Latin words: “*coalescere*”, which signifies togetherness in growth, and “*coulitio*”, which indicates the act of unification (Butterfoss, Goodmanl, & Wandersman, 1993, p. 316). A coalition is the union of people or groups that can only happen when these people or groups have shared goals and are banded together (Kaplan, 1986).

The final and the highest level of collaboration is the integration, which can only occur if two organisations “merge to create a new joint identity” (Horwath & Morrison, 2007, p. 56). Integration can occur only when two organisations and their administrative structures merge together and become less autonomous. In short, integrative collaboration makes two different systems of organisations a unified whole. Through integration, organisations must be able and willing to allocate their

resources to each other (Schiller & Almog-Bar, 2013). Throughout these five levels of collaboration, an organisation or agency, like the media and the ENGOS, has more autonomy at the lowest levels of collaboration. For instance, if the media and ENGOS only have communication or cooperation as their form of collaboration, then the level of collaboration is still low, and the media and the ENGOS operate completely independently and with autonomy. By contrast, through coalition and integration, both agencies are less autonomous in many aspects, including decision-making, staff management and strategic plans. Within the context of this study, considering the importance of collaboration between both social actors, it is therefore interesting to investigate the level of collaboration that occurs between the media and ENGOS in environmental communication. The discussion on the barriers faced by the media and ENGOS in environmental communication will be displayed in the next section.

3.4 The Barriers Faced by the Media and ENGOS in Environmental Communication

In the real world, there are many diverse barriers to communicating about environmental issues to the public. Epistemologically, barriers in communication can be understood as challenges, obstructions or obstacles that impede the process of transmitting information from the sender to the receiver (Lonie, 2010; Shrivastava, 2012). Although studies of the barriers in communication are quite common, there are almost no previous theoretical frameworks or models that specifically discuss the barriers of environmental communication, especially among social actors like media and ENGOS. For this reason, the barriers of communication process theory are used, which was originally proposed by Eisenberg (2010) to explain the barriers of environmental communication between the media and ENGOS.

According to Eisenberg (2010), there are six barriers in the process of communication, including: (1) sender barriers, (2) encoding barriers, (3) medium barriers, (4) decoding barriers, (5) receiver barriers and (6) feedback barriers. All six barriers were developed from the original communication process model proposed by

Shannon (1948), which included the components of sender, messages, channel of transmission, noise, receiver and destination (See Section 2.2.2). Therefore, these six barriers in the process of communication proposed by Eisenberg (2010) and Shannon (1948) can be used in the new model of environmental communication among the media and ENGOs. Only five barriers are discussed in this study: (1) sender barriers, (2) environmental information barriers, (3) medium barriers, (4) destination barriers and (5) receiver barriers (Figure 3.6).

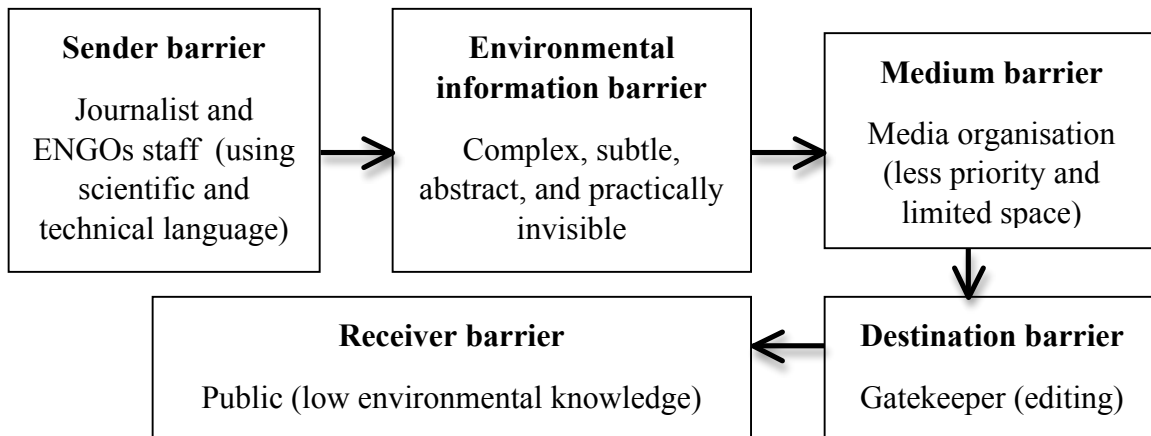


Figure 3.6: Barriers in the process of environmental communication among the media and ENGOs (adapted from Eisenberg (2010) and Shannon (1948))

As shown in Figure 3.6, the first and fundamental barrier in environmental communication is the sender barrier, which is the media, and ENGOs communicators themselves. As we have noted, environmental communication often involves a large amount of technical and scientific language like ‘stratospheric ozone depletion’, ‘anthropogenic climate change’ and ‘significant probability’ etc. (Van Der Linden, 2014), which require great understanding and knowledge by the senders. In this respect, Patel (2006), from his experience as an environmental journalist, stressed that “rafts of understanding” on environmental issues are a must for an environmental communicator in order to skilfully deliver good stories to the public (p. 148). Similarly, McCluskey (2008) also stressed that when working the environmental news beat, environmental journalists must have a great understanding of and knowledge about the environment. Although it is known that environmental and

scientific knowledge among the senders are generally vital, some senders still lack knowledge. In prior literature, Vestal & Briers (2000), in a multiple-choice test of food biotechnology knowledge among journalists, found that the journalists' knowledge of food biotechnology issues was relatively low and the mean number of correct answers was only 30%. Under circumstances where environmental and scientific knowledge is relatively low among the senders (e.g. journalists and ENGOs), communicating well with the public could be a huge challenge.

The second barrier is the environmental information itself. It is essential to keep in mind that environmental information is complex and subtle (Archibald, 1999; Corbett, 2006a; Schmierbach, 2005; Doyle, 2009; Adomßent & Godemann, 2011). Taking climate change issues as an example, this environmental issue is always considered to be very complex issue and one that requires long-term observation and important data (Weingart, Engels, & Pansegrau, 2000). Alongside the climate change issue, there are many other environmental risk issues like nuclear radiation, which are very complicated to explain to the public and there is a high possibility of the public being misinformed (Putnam, 2002). Due to the complexities of these kinds of environmental issues, senders like journalists and the ENGOs sometimes have problems in the process of translating, simplifying and delivering meaningful environmental messages to the public (Hijmans, Pleijter, & Wester, 2003). Worse, some of the environmental communication messages end up less profound. Recher (1992) pointed out that environmental communication by journalists is mostly superficial and often lacks in-depth information. Needless to say, the challenge of complexity applies not only to the content but also to how environmental issues are related to other issues like the economy or politics, which requires environmental journalists to get more contacts from other sources (Archibald, 1999).

Responding to this issue, it has been recognised that some environmental and scientific information (e.g. climate change and global warming) are too abstract and are practically invisible (Trumbo, 1996), which makes it hard to explain to the public. Filho (2009) pointed out that climate change is one of the abstract issues that

are less connected to the “day to day reality” of human life (p. 10). Indeed, climate change is a recent buzzword but people are still unable to feel the reality of climate change in their daily life and it is therefore quite difficult for them to believe and they are even less motivated to engage with the problem. On the other hand, Seiler, Engwall & Hollert (2013) used a metaphor for some of the more abstract science issues as being messages from the “Ivory Tower”, as these messages are not related to everyday life and reality. According to these authors, it is hard for us to imagine the surroundings of the Ivory Tower because we do not live there – it is too far away from our daily life. This metaphor is similar to the argument of Filho (2009) with some issues like climate change is just too vague and disconnected to human life. Perhaps for this reason, environmental communicators sometimes struggle to convince the public about environmental issues, particularly climate change and global warming. To some degree, Bickford et al., (2012) also agreed that it is not an easy task to change people’s mindsets, views and beliefs about certain environmental issues.

The third barrier is the medium barrier, which is the organisation in which the sender works and communicates the environmental information. Needless to say, the barrier of the medium is related to the limited amount of coverage and information about the environment provided to the public. This is especially seen by journalists, as they have no power to decide if the environmental news can be published. It is a challenging for environmental journalists to communicate all the scientific data due to the limited space in the newspaper pages (Archibald, 1999). According to Kostarella, Theodosiadou & Tsantopoulos (2013), their survey of Greek news editors found that environmental news on newspapers is limited because environmental news is boring, hard to understand and not a daily problem for the public. It is also often claimed that scientific issues like climate change are less favoured by and attractive to the media (Weingart, Engels, & Pansegrau, 2000). Bucchi & Mazzolini (2003) argued that other stakeholders such as scientists often blame the media for giving less attention and inadequate spaces for scientific issues and because the media always gives priority to non-scientific news, particularly political issues. Generally speaking,

this kind of phenomenon should not happen because the media can create and foster the public's understanding of environmental issues and lead them to be involved in it (Stamm, Clark, & Eblacas, 2000). Of course, a limited amount of environmental information can cause the public to understand less and in the end, this will lead to a lack of engagement and action by the public (Moser & Dilling, 2010).

Moreover, the fourth barrier is associated with the destination barrier where the gate is controlled by a gatekeeper who is the editor or sub-editor of a media organisation. The editor who ranks at the top of the newsroom hierarchy (Chang et al., 2012) or the sub-editor has the mandate to edit and change the environmental information before it can be published. Dispensa & Brulle (2003) revealed that within journalism, almost 75% of potential news stories were rejected by the editor, who has the power to decide which stories should be run or ignored. In essence, it is legitimate to say that gatekeeping within the media is in contrast to the concept of the freedom of media proposed by Habermas, as journalists, as a rule, have no final say about which environmental stories are selected for the publication and the editor usually edits and changes certain environmental news content they think to be unnecessary for publication. Even worse, due to the lack of space in newspapers, some environmental news stories are cut and become very short, unclear and inaccurate. Gatekeeping is often associated with the media and no past study has mentioned gatekeeping in ENGOs' newsletters, so it is therefore very interesting for this study to discover whether the gatekeeping problem is also faced by the ENGOs or not.

Next is the receiver barrier, which is related to public literacy in environmental and science issues. The term "environmental literacy" here means a deeper understanding and application of knowledge in environmental and scientific issues (Satchwell, 2013; Scholz, 2011). The public's understanding and knowledge really matters in environmental communication. According to Betts & Gibson (2012), with the increasing urgency of environmental problems, a public that is well-informed about environmental issues is vital. Without adequate public understanding of environmental topics, it is hard for the media and the ENGOs to convey

environmental messages. Sadly, the reality nowadays is that the degree of environmental literacy among the public is generally low, especially regarding certain complex environmental issues like climate change. According to Bulkeley (2000), the public is still illiterate, blurred and takes less action towards global environmental issues. Halliday (2009), in her research about the scientific community in the US, also agrees that scientific literacy within society is undoubtedly insufficient, especially in complex scientific issues. Leiserowitz, Smith & Marlon (2010), in their research about adults' knowledge of climate change in the US, found that only a few people (11–14%) were “very well informed”, while another 51–52% indicated that they were “fairly well informed” about climate change. Similarly, Scruggs & Benegal (2012) also stated that there has been a decline in the US public's concern about global warming and climate change issues (a decline of 10–20% over several years).

Overall, as discussed above, many barriers can be faced by the media and ENGOs in the process of environmental communication. Some of the barriers are only faced by the media while some other barriers are faced by both social actors. Taking all these barriers into account, it is important for both the media and ENGOs to recognise, be prepared for and cope with or overcome all these challenges. By coping with the barriers, better and more effective environmental communication can be realised by the future scientific community. The representation of environmental information by the media and ENGOs will be explained in the next section.

3.5 The Representation of Environmental Information by the Media and ENGOs

In general, the word “representation” can be understood as an effort or action of portraying, depicting or describing visual or digital information by the producers or senders to the receivers. To be more specific, Hall (1997) defined representation as a process of communication using language, signs or images to represent meaning to others. The representation process allows people to exchange information among each other (Hall, 1997). Fürsich (2010) pointed out that representation is a concept

that has an association with social construction of reality, where the media constructs reality in readers' minds, in line with Hannigan's (2006) explanation of the social construction of reality. Therefore it is acceptable to say that media representations have a great influence on public attitudes and beliefs (Lyons, 2000). For example, the representation of the drought issue makes people understand it and also the impact of drought on humans (Dow, 2010). Therefore, it will not be a surprise if we find that public's opinion of certain environmental issues like climate change is in parallel with the information represented by the media (Peters & Heinrichs, 2008).

Nonetheless, it is interesting to note that "bias and stereotype" are two very common subjects in the study of representation (Williams, 2003). Indeed, media representations of environmental issues can take place within many arenas, scientific, political and social (Boykoff, 2009c). A study of media representation can allow us to understand more deeply why certain environmental issues are able to grab public attention while other issues disappear from the media and public attention (Hansen, 2011a). However, the "misrepresentation" of environmental information especially in the media can occur, which contributes to the confusion among the public (Cho, 2010). The word environment, as defined in Section 2.2, can be understood as "our natural world surrounding and separated from us" (Milstein, 2009, p. 346). Bringing together the concepts of representation and the environment, the representation of environmental information in newspapers and ENGOs' newsletters can be examined. The explanation on types of environmental topics represented by the Western media and ENGOs will be offered in the next sub-section.

3.5.1 Types of Environmental Topics Represented by the Western Media and ENGOs

Environmental news representation in newspapers depends on the choices of the journalists (Massey & Ramanathan, 2001) and news editors (Young & Dugas, 2011) through the agenda setting process as to which kinds of issue they regard as being important to present to the public (Elmasry, 2012; Hannabuss, 1995). In other words,

the belief and values of journalists can significantly influence the types of news that are represented in the newspaper (Taiwo & Igwebuikwe, 2015). In the press system, the selection of environmental news by the journalists and editors for publication is based on news values or newsworthiness (Major & Atwood, 2004; Sachsman, Simon, & Valenti, 2004a). Caple & Bednarek (2015) listed 10 specific news values that are commonly used by the media in the process of selecting certain topics for coverage including the negativity (the negative aspect of the event), timeliness (a recent event), proximity (geography of the event), superlativeness (scale of the event), eliteness (involving a high-ranking individual or organisation), impact (significance of the event based on the consequences), novelty (new), personalisation (issues with a human face), consonance (a stereotypical event) and aesthetical appeal (interesting or not) (p. 5).

Taking the proximity news values, for example, some of the environmental news represented in the media, based on the current environmental problems occurring in certain places or countries close to the local people there. Various studies have shown that environmental news has been reported according to the environmental condition of the country. Kostarella, Theodosiadou & Tsantopoulos (2013), for instance, found that the Greek media represented the greenhouse effect and recycling as the two most popular issues rather than other environmental issues like air pollution, flooding, etc. According to them, this could be due to the recycling programme and campaigns highlighted by the government and through citizen participation events, while greenhouse effect issues have become more visible in the media since the Kyoto Protocol of 1997 and the Copenhagen Conference of 2010. Similarly, Rowe, Frewer & Sjöberg (2000) found that hazard issues, particularly nuclear coverage, differed among newspapers. According to these authors, in the Swedish newspaper, the hazards issues covered high voltage lines (EMFs), food irradiation and ozone layer depletion, whereas UK newspapers had more coverage on natural background radiation. However, there are also issues that can be found in both newspapers like floods and radiation from in-home radon gas. This study clearly

displays the fact that although they provide the same coverage of environmental hazards, the specific issues could differ according to local conditions.

On the other hand, if we look at the timeliness news value, for example, the type of environmental news represented in the media is also related to the influence of the 'current' environmental issues or debates happening on a global scale such as climate change, global warming, and loss of biodiversity. McManus (2000) found that the Australian daily newspapers, especially *The Age*, increased the amount of the climate change issues represented during the Conference of the Parties (COP4) in Buenos Aires in November 1998. Similarly, Kuha (2009) in research about global warming and climate change coverage in UK and US newspapers found that the coverage of climate change issues in newspapers have increased, especially among the UK's newspapers after the UN Climate Change Conference in December 2007 in Bali. Without a doubt, environmental news reporting runs parallel to environmental global debate and discussion in the global public sphere. According to Eskjaer (2009), media coverage of global issues like climate change has contributed to the global flow of communication and discussion in the global public sphere about climate change. Through his study, Eskjaer (2009) found that Denmark's daily newspaper, *Politiken*, also gave high priority to climate change issues, allocating five front-page stories to this issue.

In contrast to the media, it is very hard to find past studies on the representation of environmental information in ENGOs' newsletters. It is important to understand that different ENGOs will have different representations of environmental issues in their newsletters, depending on the mission and the goals of each ENGO and, most importantly, the environmental concern championed by the ENGO. Therefore, it is important to discuss the type of environmental issues considered by Western ENGOs that usually appear in their newsletters. Firstly, the type of environmental issues considered by the ENGOs depends on the period or era when the ENGO was established. Taking the US as an example, it has been noted that in the first era, ENGOs, like The Sierra Club, which was established in 1800s, were

more focused on the issues of conservation and preservation of the aesthetic environment from the effects of urbanisation and industrialisation. In the second era, more modern ENGOs look into the issues of protection and management of the natural environment (Silveira, 2001). The modern US ENGOs, which were established in the late 1960s and early 1970s, had more concern for natural resources, wildlife, pollution and the quality of life (Johnson, 2008). In European countries, particularly Western Europe, the first major wave of ENGOs (1880s to 1910) was concerned on the issues of wildlife protection, preservation of natural areas and conservation; the new ENGOs have more concern for the current environmental issues and political agenda (Dalton, 1993).

It should be noted that a particular ENGO could have one or even many types of environmental issues of concern. Taking Greenpeace America as an example, this, known as the largest and wealthiest ENGO in the US (Shaiko, 1993) has devoted itself to four major environmental issues: the preservation of ancient forests, ocean protection, global warming and removal of nuclear weapons (Greenpeace International, 2014). Like Greenpeace, other ENGOs are also concerned with a variety of environmental issues. The World Resources Institute of America, for instance, is an ENGO that was established in 1982, with six major environmental issues of concern: climate change, energy, food, forests, water, cities and transport (World Resources Institute, 2014).

Many ENGOs share an interest in similar types of environmental issue, such as biodiversity protection. In most Western countries, the issue of biodiversity has become one of the most urgent environmental issues among the ENGOs due to the serious decline in species biodiversity in the wild. Therefore, in response to the high rates of species loss, degradation and extinction, nature and biodiversity conservation effort has become widespread among US ENGOs. For instance, four ENGOs in the US (the Wildlife Federation, the American Bird Conservancy, the Wildlife Society and the Wildlife Habitat Council) share a common interest in biodiversity protection, particularly forest protection, and they are well-known experts in sustainable forestry

issues (Carmin, Darnall, & Mil-Homens, 2003). Similarly, WWF and Birdlife International also have a similar primary concern for biodiversity issues (Fearnside, 2001), particularly animal protection. Biodiversity and nature protection issues are not only popular among the US ENGOs, but also ENGOs in Germany and the UK. Markham (2007), in a discussion of the five most important ENGOs in Germany (WWF *Deutschland*, *Naturschutzbund Deutschland*, *Bund Umwelt und Naturschutz Deutschland*, *Greenpeace Deutschland* and *Deutscher Naturschutz Ring*), found that these ENGOs have great concern for nature protection. Similarly, according to Rootes (2005b), the UK's ENGOs, notably FOE, Greenpeace, WWF and Earth First all speak about sustainability and biodiversity (p. 29).

Nevertheless, regarding this last point, it is intriguing to also note that the types of environmental issues concerning ENGOs are also related to the current issues happening in certain countries or at a global scale, similar to the media's timeliness news value. According to Hilton et al., (2012), in the 2000s, due to the problem of climate change, many UK ENGOs like the National Trust and FOE, have shown their concern for fighting climate change, including an effort to make a large coalition (Stop Climate Chaos) (p. 54). Gough & Shackley (2001) found that there are 18 predominant ENGOs engaging in the climate change debate, including Greenpeace, WWF, FOE and Ozone Action America. As highlighted by the common concern of these 18 ENGOs, it is clear that the issue of climate change currently dominates the focus of European, UK and US ENGOs.

Overall, as noted in the discussion above, the types of environmental information represented in the media are mostly based on their news value. It is different for ENGOs, which usually publish environmental information in their newsletters that concerns their organisation. However, similar to the media's timeliness news values, some ENGOs also give attention to recent environmental issues at the local and global scale. Thus, it should not be surprise if we find WWF, for example, publishing about nuclear energy in their newsletters if this nuclear issue

has recently been highlighted in global debate. Next, the summary of this chapter will be provided.

3.6 Summary

This chapter has offered insights into all the theoretical concepts and frameworks for this study, particularly on the roles, strategies and barriers in environmental communication, along with the representation of environmental information by the Western media and ENGOs. The Western media and ENGOs play a huge role in establishing environmental legitimacy, particularly in creating trust, relationships and credibility between these organisations and public. Within a Western democratic society, free and independent media and ENGOs are also vital so that both these social actors can play their watchdog and environmental communicator roles successfully. Both the media and ENGOs have a significant role in constructing the reality of environmental matters in the public mind by using appropriate language and pictures. In terms of the strategies used in environmental communication, the ENGOs seem to use more strategies (advocacy, lobbying, campaigning and collaboration) while the media use collaboration with other stakeholders, similar to the ENGOs. Collaboration between the media and other stakeholders is crucial as the media relies on collaborator as news sources. However, there are several barriers in environmental communication including barriers from the sender (the lack of environmental knowledge by the media or ENGOs), barriers of environmental information being overly complex and abstract, barriers of the medium (the media gives less priority to the environment and has limited space for environmental news), gatekeepers that edit and change environmental news, and barriers of the receiver, where the public lacks environmental knowledge. Moreover, in terms of the representation of environmental information in newspapers and ENGOs' newsletters, the type of environmental information represented in newspapers is mostly selected by journalists and editors based on news values, whereas the type of environmental information represented in ENGOs' newsletters is mostly based on the issues related to the ENGO's mission and

vision. We are now ready to shift our focus from the Western world to Asia and Malaysia in particular.

CHAPTER 4

ENVIRONMENTAL COMMUNICATION, THE MEDIA AND ENGOs: THE MALAYSIAN PERSPECTIVES

4.1 Introduction

The preceding two chapters have discussed the theoretical concepts and frameworks from the Western perspective; this chapter provides an explanation of environmental communication by the media and ENGOs in the Malaysian setting. Malaysia has its own unique historical, economic, and political developments, which differ from the Western context or any other countries around the globe. Therefore, in the process of adapting Western concepts and frameworks into the Malaysian context, it is crucial to investigate the strong influence of Malaysia's historical, economic and political background, especially the aspects of virtual economic control via the media ownership system and political control via laws and regulations over environmental communication by the Malaysian media and ENGOs. Nevertheless, this chapter also offers an overview of certain cases of other Asian countries, particularly Southeast Asian countries like Singapore, Vietnam, Myanmar, Thailand, Indonesia and the Philippines, which have analogous political and economic influences on environmental communication.

This chapter is organised as follows: Section 4.2 explains the general background of Malaysia. Next, Section 4.3 discusses the concept of environmental communication according to the Malaysian perspective. Section 4.4 and Section 4.5 explain the background of the Malaysian media and Malaysian ENGOs, followed by an explanation of the types of environmental topics covered by the Malaysian media and ENGOs in Section 4.6. Section 4.7 continues to discuss the strategies used by Malaysian ENGOs and media in environmental communication. The subsequent section (4.8) explores the influence of political systems on environmental communication by the media and ENGOs in Malaysia, particularly media ownership

and media and NGO-related laws and regulations. Section 4.9 explains the implications of media ownership and media and NGO-related laws for environmental communication by the Malaysian media and ENGOS. This chapter concludes with a brief summary in Section 4.10.

4.2 Background of Malaysia

This study investigates the environmental communication by the media and the ENGOS in Malaysia. At the outset, a brief sketch of the background of Malaysia will be helpful for the readers so they can have a greater depth of understanding about these three components. Generally, Malaysia is a developing country and a newly industrialised country in a tropical climate strategically located in the heart of Southeast Asia¹⁸. Malaysia is adjacent to Indonesia, Thailand, Singapore and Brunei. Malaysia has always been known by other Asian countries by its captivating motto, “Malaysia: truly Asia”.

Geographically, Malaysia is a coastal nation that covers a land area of 329,847 km². By comparison, Malaysia is 1.08 times smaller than Germany and 29.72 times smaller than the US (MapFight, 2016). Malaysia is divided into two parts: Peninsular Malaysia (also known as West Malaysia) and Borneo Sabah and Sarawak (also known as East Malaysia) (Figure 4.1). Both parts of Malaysia are separated by about 450 km of the South China Sea (Mustafa, 2012a). Peninsular Malaysia is a more populated area than Borneo Sabah and consists of 11 states. At the time of independence in 1957, the population of Peninsular Malaysia was only 6.5 million, with 60.2% being Malays, 28% Chinese and 10.5% Indians (Ibrahim, 2010). After more than 50 years of independence, the Malaysian population has reached 31.3

¹⁸ Southeast Asian countries are countries that are located south of China, east of India, west of New Guinea and north of Australia. There are 11 countries in the Southeast Asian region, including Malaysia, Indonesia, Singapore, Thailand, Vietnam, Myanmar, Cambodia, the Philippines, Laos, East Timor and Brunei. In Southeast Asia, the most populous country is Indonesia, (253,899,536 million people in 2014) and the least populous country is Brunei with only around 416,000 people. Singapore is the smallest country in Southeast Asia (only 716.1 km²).

million, with the Malay ethnicity as the majority (Department of Statistics Malaysia, 2016b). The population growth rate in Malaysia has risen rapidly since 1994 at a rate of 2.4% or about 600,000 per year (Saheri et al., 2011) and the population has been forecasted to reach 32 million in the year 2020 (Ho, 1996). The life expectancy at birth in Malaysia also has been growing progressively, with that for males being 77.4 years and that for females being 72.5 years in 2015 (Department of Statistics Malaysia, 2016c). In 2000, life expectancy at birth was only 70.0 years (males) and 74.7 years (female). The increase of population and life expectancy could be due to the establishment of the economy and the improvement of the health care system in Malaysia.

As one of the tropical countries, the temperature of Malaysia ranges from 21°C to 32°C with humid, warm weather throughout the year (Behzad et al., 2011). Ecologically, the Peninsular Malaysia is one of the richest regions in Southeast Asia (Thomas, 1984) and has been recognised as the world's twelfth biodiversity-rich country, ranking fourth place in Asia after China, India and Indonesia (Ab. Halim et al., 2012). The carbon dioxide emissions (metric tons per capita) in Malaysia have been reported at 7.90 in 2011 lower than the prior year 2010 (7.99 metric tons per capita) (World Development Indicators, 2016).

The economic framework of Malaysia also shows that the economic development of Malaysia has grown rapidly: the gross domestic product of Malaysia expanded by 5.0% in the fourth quarter of 2015 (Department of Statistics Malaysia, 2016d). In contrast to Singapore and the Republic of Korea, Malaysia is still working hard and is committed to improving its economy after the Asian tsunami financial crisis since 1997 and 1998. Nonetheless, the Malaysian government aims to reduce the level of poverty and reduce the economic gap among the ethnic groups in Malaysia. In order to advance the upper-middle income of its economy, the Malaysian government has introduced the Tenth Malaysia Plan, covering the period from 2011 to 2015. This ambitious Tenth Plan aims to transform the Malaysian economy to a high-income and independently developed nation by 2020 through the

implementation of new economic policies, strategies and programmes. Within the period of this plan, the gross national income per capita is expected to increase to 38,850 ringgit or 12,140 US dollars in 2015 (Tenth Malaysia Plan, 2010). Thus Malaysia needs to attain a gross domestic product growth of 6% every year (Tenth Malaysia Plan, 2010). The rapid economic development of Malaysia recently has made it illustrious as the “tiger of Asia” among other Asian countries.

The unique social framework of Malaysia is created by a blend of ethnicities, cultures and religions. Apart from Malays¹⁹ as the majority ethnicity, with Islam as their religion, Malaysia is also composed of Chinese as the second largest ethnic group with Islam, Buddhism or Christianity as their religion, and Indians as the third largest ethnic group with Islam, Hinduism or Christianity as their religion. Malaysia also consists of 32 officially recognised ethnic groups in Sabah and more than 40 ethnic groups in Sarawak, (Mohd. Shuhaimi, 2009) like the *Kadazans*, *Dusuns*, *Muruts*, *Ibans*, *Bidayuhs* and *Penans*, to name a just few. Unlike numerous other Asian countries, which are characterised a homogenous society, Malaysia obviously is proud to be an ethnically heterogeneous country with various religions and cultural practices. Although this diversity makes Malaysia a unique country, it still faces numerous obstacles, especially in handling social cohesion among all ethnicities. The bloody racial riot in 1969 was one of the greatest lessons for the Malaysian government, especially about being more cautious in stabilising and unifying ethnic relations so that no more racial tragedies could happen in the future. In this sense, as a newly democratised country, since 1970 to this day, the Malaysian government has been working very hard to develop and maintain social cohesion among all ethnic groups. Many racial interaction programmes have been conducted successfully and since the 21st century, Malaysia still remains peaceful despite having very many ethnicities and cultures (Khader, 2012). The debate on the concept of environmental communication in Malaysia and Asia will be offered in the next section.

¹⁹ Malays are heterogeneous ethnics combined of Northern Malays (Kelantan and Terengganu) that associated with *Pattani* and *Acheh*, the *Burgis* community in Perak, the *Minangkabau* folks in Negeri Sembilan and Johor people from Riau (Korff, 2001).

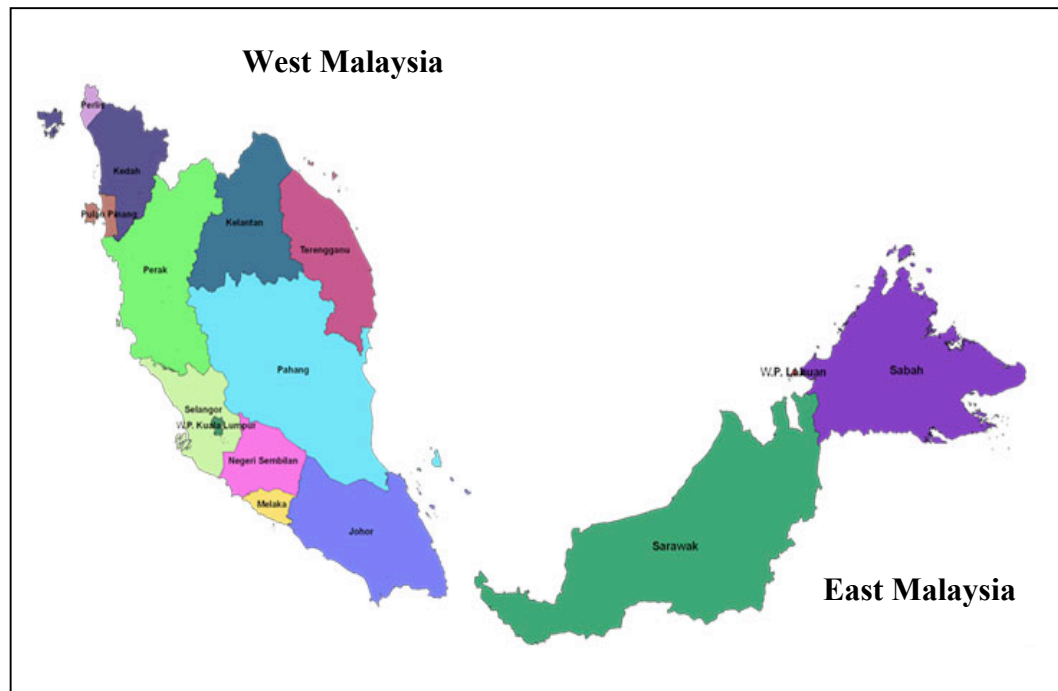


Figure 4.1: Malaysia map

4.3 The Concept of Environmental Communication in Malaysia

In brief, there have been limited studies on the subject of environmental communication in Malaysia and Asia compared to the Western context, where environmental communication has been widely discussed by many Western scholars, as shown in Section 2.2 in Chapter 2. Historically, within the Asian context, it has been said that environmental communication can be traced back to Chinese communications about earth issues to their people during ancient times. For instance, a government officer, Guan Zhong communicated about the importance of environmental protection in his well-known statement: “A king who cannot protect his vegetation is not qualified to be a king” (Guangming Online, 2013). However, even today, there has been little specific documentation or debate about the development of environmental communication in Malaysia or Asia. In order to obtain a holistic overview of the concept of environmental communication within Asia and Malaysia, I have therefore compiled several previous Malaysian and other Asian scholars’ findings on environmental communication, as exhibited in Table 4.1 below.

Table 4.1 Findings about of environmental communication in the context of Malaysia and Asia by past researchers

Researcher(s)	Environmental communication concepts
Bakar (2015)	Environmental communication is the medium for every stakeholder like organisations or the mass public to share, disseminate or obtain environmental information.
Donna et al. (2014)	Environmental communication involves the distribution of environmental information from one to another with the aim of raising awareness and changing practices among the public.
Lee & Chuan (2012)	Environmental communication helps to create awareness and understanding of environmental sustainability among the public.
Fauziah et al. (2011)	The process of strategic communication, along with the media products, assists the competence of policy makers, public involvement and planning for sustainable development.
Noor (2011)	Environmental communication is related to the concept of environmental governance, as environmental communication is important for addressing the environmental challenges and achieving sustainable development.
Aida Nasirah, Kalthom & Mohaida (2009)	Environmental communication is one of the tools helping to attain sustainable development and assisting all stakeholders to obtain an understanding of the environment.
Flor (2004)	Environmental communication is the process of communicating and exchanging environmental information and knowledge for the sake of protecting and managing nature in a pristine condition.
Adnan & Kamaliah (2001)	Environmental communication is a new field that still gets less attention from local (Malaysian) scholars.

General speaking, unlike the development of environmental communication in the Western world, which has flourished since 1960s via Carson's work, the development of environmental communication in Malaysia is rather a new and still evolving field, and therefore undeniably requires more attention from local researchers. In terms of the concept of environmental communication, some previous scholars like Donna et al. (2014) in the Indonesian perspectives, Flor (2004) in the Filipino context and other Malaysian scholars like and Lee & Chuan (2012) in the Malaysian context have collectively agreed that environmental communication is the process of

communicating a broad range of environmental information (landslides, tsunamis, pollution, etc.) to the public with the aim of raising environmental awareness and enhancing environmental knowledge and practices within society. This aligns with most Western scholars' conceptualisations of environmental communication as thoroughly discussed in Section 2.2. Some other researchers like Bakar (2015), and Aida Nasirah, Kalthom & Mohaida (2009) also viewed environmental communication as a medium and a tool for communicating and delivering environmental information.

On one hand, although most Western scholars have differentiated the concepts of environmental communication and sustainability communication, the majority of Malaysian scholars such as Lee & Chuan (2012), Fauziah et al., (2011), Noor (2011), and Aida Nasirah, Kalthom & Mohaida (2009), as shown in Table 4.1 above, relate the concept of environmental communication to the concept of sustainability or sustainable development. Environmental communication is recognised as one of the pivotal tools used to attain sustainable development goals in Malaysia. This could be due to the strong influence of the Malaysian government regarding the importance of sustainable development in this nation. Like many other Asian countries, the wave of sustainable development hit Malaysia after the introduction of the Brundtland Report of 1987 and the Earth Summit of 1992. Since then, Malaysia has shown great interest in achieving sustainable development and has introduced a sustainable development policy in its holistic Seventh Malaysia Plan (1996–2000). For instance, in Chapter 19 of the Seventh Malaysia Plan, the government specifically stated that it will make a continuous effort and commit to achieving balanced and sustainable development in all aspects of national development (Seventh Malaysia Plan, 1996). Therefore, it is unsurprising that the concept of sustainable development and sustainability are strongly embedded within the concept of environmental communication in Malaysia. The discussion on the background of Malaysian media will be displayed in the next section.

4.4 Background of Malaysian Media

As mentioned in Section 2.3 in Chapter 2, this study is only interested in focusing on traditional media, namely printed newspapers. Thus this section will provide a summary of the background of Malaysian newspapers. In brief, Malaysian newspapers have a relatively long established history dating to the colonisation era. The introduction of the first Malaysian newspaper, namely the *Government Gazette* in 1 March 1806 was the starting point of the establishment and development of the media, particularly the newspaper industry in Malaysia (Lent, 1974a). The first Malaysian newspaper appeared in the English language and was published by the East India Company in Penang (Lent, 1974a). In contrast, *Jawi Peranakan* was the first Malay newspaper written in *Jawi*²⁰ script. *Bintang Timor* was the first Malay language newspaper, which was published in 1884 in Singapore and was later published in Penang in 1900 (Ooi, 2009, p. 200). The *Chinese Monthly Magazine* was the first Chinese newspaper introduced by Christian preachers in Melaka in 1815 (Ooi, 2009, p. 200) and the first Tamil newspaper in Malaysia was *Singai Warthanani*, which was published in 1875.

Strikingly, the Malaysian newspapers are published in different languages, especially Malay (the national and first language), Chinese, Tamil and English (as second languages) (Amira, 2006). This arose because of the experiences of the British colonial era, when the population of Malaysia was composed of many races and languages. It is also in line with Article 152 of the Malaysian Federal Constitution,²¹ which states clearly that Malay is the national language but other languages like English, Chinese, Tamil etc. are allowed to be practiced and learnt except for official purposes (Malaysian Federal Constitution, 2010). Admittedly, the various languages used in the local newspapers show that the Malaysian government always works hard

²⁰ *Jawi* is the Arabic alphabet that used to write the Malay language.

²¹ The Malaysian Federal Constitution is the supreme law of Malaysia and encompassed of 181 articles in 14 parts. This written constitution was originally drafted by Reid Commission in 1957 according to the principles of the British government and constitutional conventions.

to preserve racial equality among its people by giving the opportunity and freedom to the readers to choose any newspaper according to their preferred language(s).

In 1974, there were 12 English newspapers, 6 Malay newspapers, 25 Chinese newspapers, 6 Tamil and 2 Punjabi newspapers (Lent, 1975b). The number of newspapers in different languages keeps on changing depending on the demand. Recently, there were 50 newspapers in Malaysia, encompassing 16 English newspapers, 13 Malay newspapers, 19 Chinese newspapers and 2 Tamil newspapers published in the nation (Fong & Md Sidin, 2014). English newspapers are always more numerous than those in other languages as this can be read by many ethnic groups, including Malays, Chinese, Indians and more.

In addition, similar to the Western world, many people assuredly think that the age of the newspaper industry in Malaysia will slow and decline soon. Unsurprisingly, local scholars like Mohd Yahya & Noor Ismawati (2009), for instance, stated that the emergence of the internet and computer games have brought huge competition to the newspaper industry in Malaysia. In such circumstances, it is undeniable that these new media and technologies can bring great challenges to the local newspapers. However, I still believe that the Malaysian newspaper will still be pertinent and pivotal in providing information to Malaysians. Although the readership and the circulation rate of certain newspapers have dropped, there are still a few printed newspapers like *The Sun* that have a dramatically growing circulation (from 100,000 to 300,000 copies per day) due to its free newspaper strategy (Ali et al., 2011). More importantly, like some other parts of the Western world, newspapers still continuously play major roles as information sources and providers to people in rural, less developed and remote areas (Nothwehr, Chrisman, & Andsager, 2014), which still have limited access to new technology. Even though the Malaysian government is working hard to develop rural areas, particularly in remote rural areas through several economic plans, poverty still lingers in rural areas, especially in the eastern and northern regions, Sabah and Sarawak (Roslan, 2008). Considering the pivotal

role of newspapers to Malaysians, particularly villager dwellers, it is therefore relevant for this study to focus on printed Malaysian newspapers.

Within the discussion on the background of Malaysian media, it is also worth to note that the Malaysian media highly depends on advertisement as its main revenues. This is in contrast to Western newspapers like from the US, which can afford to lose some of their advertisers. Consequently, Malaysian newspapers still depend on advertisers that prefer newspapers as their main vehicle for advertisement (Ali et al., 2011). In fact, until June 2005, the revenues from newspaper advertising contribute to more than half (about 63%) of all advertising revenues in Malaysia (Mohamed Hashim, 2006). Within the context of Malaysian newspapers' advertising, it is also pivotal to note that the political advertising also occurred when political parties pay or sponsor pages in newspapers as their medium for advocating their political messages (Mustafa, 2014b).

Meanwhile, in terms readership pattern of Malaysian newspapers, it is safe to say that the environment is not the top issue preferred by Malaysian readers. A past research conducted by Siti Zabedah, Shira Haniza, & Nurul Nafisah (2013) on Malaysian university students discovered that they preferred to read newspapers with less governmental issues and preferred those with sensational news. A similar study conducted by Freeman (2013) investigated the types of news preferred by young adults in Malaysia and discovered that majority of them like news on entertainment, people or community issues. Therefore, it is not surprising to find that less sensational environmental topic would be less favourable compared to entertainment news, for the readers in Malaysia.

On the other hand, as expected, the social background of Malaysia as a Muslim majority country also greatly influence on the practices and views of media on environment. In this light, in Islam, aspects on nature, particularly the word 'earth' was cited for four hundred times in the Koran, while the word sky has been cited for three hundred times. Furthermore, Muslims are always taught to be responsible in

protecting the nature from degradation (Kamaruzaman & Siti Akmar, 2011). Thus, the Islamic point of view on environment has made strong connection between the environmental issues and Islam and somehow, this has indirectly influenced the journalistic values and environmental news reporting among the Malaysian media, especially Malay newspapers like *Utusan Malaysia*. In terms of journalistic values for instance, past researchers like Steele (2011) through her study on Malaysian and Indonesian journalist discovered that Islamic values such as being truthful in reporting are strongly embedded as the journalistic values among Malaysian and Indonesian journalists. On one hand, when looking at on some environmental articles published on newspapers such as *Utusan Malaysia*, we could find environmental articles related to Islamic view and environment, such as one feature article entitled “when rain of blessing (hujan rahmat) changed to disaster” that have been written in Islamic way with citations of Koran verses about the pivotal roles of water for human, along with the explanation on the factors for flash flood. The discussion on the background of Malaysian ENGOS will be explained in the next section.

4.5 Background of Malaysian ENGOS

Similar to discussion on the background of Western ENGOS in Section 2.4.2 in Chapter 2, this section will offer a synopsis of the background of Malaysian ENGOS. In Malaysia, NGOs in general are set up by a group of professionals or individuals who have a great concern for one particular issue (Irin & Norazlina, 2012). The emergence of Malaysian NGOs is quite different from that of the Western world because the earliest Malaysian NGOs emerged as a group to assist the government in developing rural communities (Sharifah Munirah, 2003). However, the good relationship between NGOs and the Malaysian government was only maintained for a short period because nowadays, most NGOs are viewed by the government as a “threat” that is always opposing them (Hooi, 2013). There are two common types of Malaysian NGO: (1) state NGOs, sometimes known as government-organised NGOs, as the NGOs are sponsored by the government (e.g. the National Council of Women Organisations), and (2) autonomous NGOs, which work independently.

According to Sharifah Munirah (2003), under the category of autonomous NGOs in Malaysia, there are another ten categories of NGO: (1) community-based organisations, where the groups focus on issues of ethnicity and religion; (2) community service organisations, where the groups focus on services; (3) worker-employer-oriented organisations, which focus on trade unions and trader committees; (4) women's organisation, which is gender-oriented and works towards women's rights; (5) youth organisations, which focus on youth and teenagers; (6) professional organisations, which consist of groups of professional like the Malaysian Bar Council; (7) political groups that focus on political issues; (8) human rights groups like Suhakam; (9) environmentalists; and (10) academic groups (p. 68-69). Thus under this classification, ENGOs fall into the environmentalist group, which should run as an autonomous group in Malaysia. Malaysian ENGOs should act as the environmental voice of the local people and work independently without receiving any form of control by the government.

In specifically describing the character of Malaysian ENGOs, it is essential to note that the first and oldest ENGOs (Malaysian Nature Society (MNS)) only emerged in the 1940s with the aim of countering the negative impacts on the environment and promoting conservation within Malaysian society. Besides the MNS, the Consumers' Association of Penang (CAP) and the Environmental Protection Society of Malaysia (EPSM) are two other early ENGOs, not only in Malaysia but also in other developing countries (Aida Nasirah, Kalthom, & Mohaida, 2013). The majority of Malaysian ENGOs are set up by volunteer groups, and operate as non-profit entities (Rohani et al., 2010). The number of ENGOs has proliferated recently.

Under Act 335, the Societies Act (1966) by Malaysian law, all ENGOs are categorised as "local society" groups, which requires them to be registered as an organisation or company under this Act. A local society means any organisation (society) that has or plans to have its operation in Malaysia (Laws of Malaysia, Act 335, 2016). Without registering under this Act, an ENGO can be considered as an

illegal entity. As of January 2016, there are 1072 organisations that have been registered under the Registry of Societies Malaysia²².

Kamaliah et al. (2012) listed 17 ENGOs that have registered under this Act; 11 of these have registered as organisations and another eight are registered as companies. The 11 Malaysian ENGOs that have been registered as organisations are: the Malaysian Karst Society (MKS), WWF Malaysia, Water Watch Penang, MNS, EPSM, Sahabat Alam Malaysia (SAM), CAP, HUTAN–Kinabatangan Orangutan Conservation Project, Sustainable Development Network Malaysia, Sarawak Dayak Iban Association and Partners for Community Organisations. On the other hand, the six ENGOs that have registered as companies are the Socio-economic & Environmental Research Institute; Wetlands International; TRAFFIC Southeast Asia; Centre for Environment, Technology and Development Malaysia; Borneo Resources Institute Malaysia and the Wildlife Conservation Society (p. 332-333).

Interestingly, some of these have also registered as members of the Malaysian Environmental Non-governmental Organisations (MENGOs) group²³, which was established in November 2001 under the Danish International Development Assistance programme (MENGO website, 2013). The admirable role of MENGO in advancing the development of the environmental movement in Malaysia has received great acknowledgement from the first Environment Minister of Malaysia, Tan Sri Ong Kee Hui (Ramakrishna, 2003). Today, MENGO still plays a crucial role in the development and management of ENGOs in Malaysia.

²² For more information, see: <http://www.ros.gov.my/index.php/my/statistik-perkhidmatan/statistik-pendaftaran> (accessed 11 March 2016).

²³ MENGOs is a coalition of 24 ENGOs, encompassing Biji-Biji Initiatives, Blue Life Ecoservices, Borneo Resources Institute Malaysia, Camp Borneo, Ecocentric Transitions, EcoKnights, Environmental Management and Research Association of Malaysia, EPSM, the Global Environment Centre, Jaringan Orang Asal SeMalaysia, the Malaysian Karst Society, MNS, the Malaysian Society of Marine Sciences, Partners of Community Organisations, Reef Check Malaysia, Sabah Wetlands Conservation Society, Tatana Roots, Penang Institute, Sustainable Development Network Malaysia, TRAFFIC Southeast Asia, Treat Every Environment Special Sdn Bhd., Wetlands International (Malaysia), WWF Malaysia and Water Watch Penang. See the MENGO website for further details about MENGO's members: <http://mengo.org/members> (accessed 11 March 2016)

Besides the explanation on the history and characters of the Malaysian NGOs, it is also pivotal to discuss the Malaysian NGOs' source of funding that can influence their environmental communication work. Malaysian NGOs, as non-profit organisations are best known to obtain their funding from various types of sources such as from the members, donors, and foreign aids. Furthermore, a majority of NGOs have their own members who pay membership fees as way of supporting the NGOs' championed issues. MNS, for example, offer membership to the public, where members local can pay RM70 (about 18USD) for the yearly membership (MNS's website, 2016). Meanwhile, other NGOs such as WWF-Malaysia offer the public an opportunity to donate for their conservation project such as paying RM38 per month (about 9USD) or RM456 (about 112USD) for one-time donation to support their forest conservation work for the period of two months (WWF-Malaysia's website, 2016a). On the other hand, some NGOs also receive international aids, such as WWF-Malaysia, which latest financial statement ending 30th June 2015, stated that they have received the amount of RM14,116,621 (about 3,452,341,21 USD) in form of international grants (WWF-Malaysia's website, 2016b). Inherently, various types of resources obtained by the NGOs are utterly crucial in ensuring the smoothness of their operation, especially in conducting certain activities, projects researches and development. Most importantly, the resources of NGOs can also influence their strategy in environmental communication. Prior scholars like Rusli & Cheh (1999) for instance, had confirmed that the number of members along with their geographical location could influence the type of strategies used by the Malaysian NGOs. For example, NGOs that have a massive number of members will have more capacity to arrange strategy such as campaigning, as they have more members to handle such programmes. This is not only save the cost, but also save the NGOs' energy and time (Rusli & Cheh, 1999). The explanation on the types of environmental topics concerned on Malaysian media and NGOs will be presented in the next section.

4.6 Types of Environmental Topics Covered by the Malaysian Media and ENGOs

In general, this section seeks to explain the type of environmental topics covered by the Malaysian media and ENGOs as a brief comparison to the discussion of the types of environmental information represented by the Western media and ENGOs in Section 3.5.1 in Chapter 3. Environmental issues are nothing new to the local Malaysian media. Most of the media, particularly the newspapers, have one or more articles about environmental issues in their publications, covering topics including air pollution, landslide, atmospheric haze and more. In their study about the environmental issues in two Malaysian newspapers, Mariah, Raihanah & Md. Salleh (2004), for example, found that 63% of the issues of *Utusan Malaysia* and 81.5% of the issues of *The Star* published articles about environmental issues within the period of 1 July to 31 December 2003. Interestingly, the majority of the environmental issues in these two mainstream newspapers were associated with environmental disaster coverage. This finding is in harmony with Hamidah's et al. (2012) research, where they discovered that disaster topics were greatly represented by four Malaysian newspapers (*The Star*, *Utusan Malaysia*, *Nanyang Siang Pau* and *Tamil Nesan*). However, in terms of the proportion of environmental news, Nik Norma (2007), in her research into the representation of environmental news in four Malaysian newspapers (*New Straits Times (NST)*, *The Star*, *Berita Harian* and *Utusan Malaysia*) discovered that the proportion of environmental news dropped 30% from 1996 to 2004 but the English newspapers have double the amount of environmental news (63%) compared to the Malay newspapers (37%).

In addition, similar to Western newspapers, Malaysian newspapers' coverage of environmental issues also depends on the news value such as coverage of the recent events occurring at a particular time. Rahmat & Nor Jijidiana (2013), in their study on the *NST* and *Berita Harian*, for example, found that the coverage of climate change issues in these two newspapers increased when there was a major event and decreased when no event had occurred. Similarly, a study conducted by Siti Suriani,

Liana & Lee (2013) also revealed that news values such as being an interesting story for the readers, being a recent story discussed by the public (timeliness) and proximity (geographical location) were used as the main criteria for news selection. However, other factors such as the editors' decision, journalists' experience and the location they work for, and the readers' interest also account for news selection (Siti Suriani, Liana, & Lee, 2013).

On the other hand, for Malaysian ENGOs, the types of environmental topics covered are varied, based on each organisation's background, as the ENGOs have different objectives and interests (Smeltzer, 2008; Rohani et al., 2010), similar to Western ENGOs. Kamaliah et al. (2012) listed the different environmental issues covered by 17 ENGOs according to their mission and vision, as shown in Table 4.2 below.

Table 4.2 Environmental issues concerned by registered Malaysian ENGOs

Types of Environmental issues	Registered Malaysian ENGOs
River	World Wide Fund Malaysia (WWF-M), Wetlands International (WI), Water Watch Penang (WWP), Malaysian Nature Society (MNS), Sahabat Alam Malaysia (SAM), Consumers Association of Penang (CAP), Sustainable Development Network Malaysia (SUSDEN), Borneo Resources Institute Malaysia (BRIMAS), Sarawak Dayak Iban Association (Sadia), Environmental Action Committee Sabah (EAC), Partners for Community Organisations (PACOS)
Sea	WWF-M, WWP, MNS, SAM, SUSDEN, EAC
Wildlife	WWF-M, WI, MNS, SAM, HUTAN, SUSDEN, BRIMAS, Wildlife Conservation Society (WCS), PACOS
Forest	WWF-M, WI, WWP, MNS, SAM, HUTAN, SUSDEN, BRIMAS, SADIA, WCS, PACOS
Highlands	WWF-M, WWP, MNS, Consumers Association of Penang (CAP), SAM, SUSDEN, SADIA, PACOS
Air	WWF-M, MNS, SAM, WI, WWP, CAP, SAM, SUSDEN, EAC
Rays	SAM, SUSDEN
Waste	Socio-economic & Environmental Research Institute (SERI)
Others	Malaysian Karst Society (MKS), WI, WWP, Environmental

Protection Society of Malaysia (EPSM), Centre for Environment, Technology and Development, Malaysia (CETDEM), SUSDEN, SADIA, EAC

(Source: Adapted from Kamaliah et al., 2012, p. 334)

From Table 4.2 above, it can be clearly seen that there are seven environmental topics covered by the Malaysian ENGOs, including river, sea, wildlife, forest, highlands, air, rays and waste. All these environmental topics are often publicised as environmental articles published in Malaysian ENGOs' newsletters or magazines. It is crucial to note that just like Western ENGOs, one particular Malaysian ENGO can have one or even many environmental concerns, depending on its mission or vision. Taking the oldest ENGO, MNS for example, in relation with its mission to protect Malaysia's natural heritage, this ENGO has put great emphasis on several issues, including rivers, the sea, wildlife, forests, the highlands and air. This is similar to SAM, which has various environmental concerns such as deforestation, water, dams etc. By contrast, CAP and Socio-economic & Environmental Research Institute are two examples of Malaysian ENGOs with a specific focus on one environmental issue only.

Nevertheless, it is interesting to note that the location where the Malaysian ENGOs operate could also influence the type of environmental issues that concern them. The ENGOs operating in East Malaysia, Borneo Sabah and Sarawak are concerned about different environmental issues from the ENGOs in Peninsular Malaysia. The Bornean ENGOs are usually more interested in national forests, dams and orangutan²⁴ issues as their environmental problems, which often occur in those particular areas rather than in Peninsular Malaysia. Taking the Sabah Nature Club, for example, this ENGO, established in 1988, is concerned with environmental issues in Sabah, such as the protection and conservation of Danum Valley and Darvel Bay, Sabah. Similarly, the Sarawak Conservation Alliance of Natural Environment has

²⁴ The orangutan is one of Asia's species of great apes that currently only exists in Borneo (Malaysia) and Sumatra (Indonesia). The orangutan population nowadays is critically endangered and therefore needs more preservation and conservation to avoid its extinction.

paid great specific attention to Sarawak's environmental issues like the Baram Dam project, Sarawak. These two ENGOs only focus on environmental issues in East Malaysia, Sabah and Sarawak, and not in Peninsular Malaysia. The explanation on the strategies of Malaysian media and ENGOs in environmental communication will be presented in the next section.

4.7 Strategies of Malaysian Media and ENGOs in Environmental Communication

Similar to Sections 3.3.1 and 3.3.2 in Chapter 3 about the strategies adopted by the Western media and ENGOs in environmental communication, this section aims to provide an overview of the strategies used by Malaysian ENGOs and the media in environmental communication. In brief, like many Western ENGOs, the Malaysian ENGOs also have several strategies that are implemented in environmental communication. Rusli & Cheh (1999), in their research on the three most popular Malaysian ENGOs, namely SAM, MNS, and WWF, found that the most important strategies of these three ENGOs for influencing public policy are conducting research and advocacy. Only SAM and WWF contact with the media as their second and third priority strategies, respectively, while the MNS prefers to present viewpoints and run campaigns. Adnan (2011) also found that advocacy via conferences, grassroots lobbying and collaboration with the media are three most common strategies used by the Malaysian media when facing environmental problems.

On the other hand, it is crucial to note that the Malaysian ENGOs often organise campaigns as a tool for advocating and lobbying about one particular environmental issue. The success of campaigns and lobbying of the Perak state government to protect endangered species such as the clouded leopard and Malayan tiger in the Royal Belum forest by MNS and WWF Malaysia are some of the best-known examples in Malaysian history. Through their campaigns and lobbying activities, these two ENGOs successfully persuaded and convinced the Perak state

government to finally gazette the Belum forest as a reserve area in 2007, securing the forest from human exploitation, particularly logging activities.

Another great example of the campaigning and lobbying strategy among the Malaysian ENGOs is the “Save Penang Hill” campaign in 1990s with the aim of stopping the Penang state government from conducting a hill slope development that could have destroyed Penang hilly area. CAP is one of the ENGOs that successfully drew the public’s attention to and support for this campaign. Another recent example of successful campaigning and lobbying is the MNS’ effort in lobbying about the importance of protecting and conserving the southern part of Kanthan Mountain, Ipoh, as this area contains the most sensitive biodiversity and, more importantly, has become a refuge for plants and animals (Lai, Khaw, & Lye, 2014). Yet another recent instance of a Malaysian ENGO’s campaigning strategy is the *Himpunan Hijau* campaign organised by SAM that aimed to influence the Malaysian government to change their decision to give the Lynas company permission for a nuclear power plant in Kuantan that was likely to be harmful to human health and the environment (Kaur, 2015).

Finally, similar to Western ENGOs, the Malaysian media, undoubtedly, is a great partner for and networks with the Malaysian ENGOs. Various Malaysian ENGOs have established a good relationship with the media and make this a main strategy of environmental communication. The EPSM, for instance, has highlighted the important and positive role of the media as a channel for communicating environmental matters. WWF Malaysia is another example of an ENGO that agrees about the importance of the local media as a platform for distributing its environmental messages. WWF Malaysia conducted its own survey of journalists’ and editors’ perceptions of WWF Malaysia. From this survey, WWF Malaysia found that they needed to simplify their environmental messages before they sent them to the media (Devasahayam, 2010).

Additionally, there is no previous research on the strategies used by the Malaysian media in environmental communication. The only common strategy, similar to the Western media, is to have good collaboration with its news sources. Among the known news sources, the Malaysian government is the most popular source quoted by environmental journalists. In their research on the environmental news represented by the local television channel, Prasad et al. (2009) found that the sources in environmental news stories in Malaysia are mostly authoritative sources: (1) Deputy Prime Ministers, (2) Ministers or Chief Ministers, (3) presidents of local councils, (4) the chief of the police force, the army or fire service, (5) representatives from government agencies or institutions, and (6) high-profile public servants. Similarly, Chibundu (2013), in his study of two Malaysian newspapers (NST and The Star) found that the government was the main source (68.8%) of the news, with 102 news stories in the NST and 83 in The Star supplied by the government in 2007–2009.

Additionally, Mus Chairil (1992) in his classic study on the news sources of four newspapers in Malaysia (*Utusan Malaysia, Berita Harian, NST and The Star*) also discovered that government staffs like the Prime Minister, Ministers and government personnel are the most usable sources for all four newspapers. Other researchers like Hamidah et al. (2012) in their study of four Malaysian newspapers in four main languages in Malaysia also discovered that the government and politicians were the main sources, whereas ENGOs were the least quoted sources for environmental articles in newspapers. Although past studies have shown that ENGOs are not the top sources for the Malaysian media, this study sought to focus on collaboration between the media and ENGOs in environmental communication, particularly the importance of ENGOs as the Malaysian media's environmental news sources. The discussion on the political control over Malaysian media and ENGOs will be offered in the next section.

4.8 Environmental Communication: Political Control over Media and ENGOs in Malaysia

In brief, this section discusses the influence of the political framework of Malaysia on environmental communication activities by the Malaysian media and the ENGOs, which differs from the Western context, especially in the light of Habermas' democracy theory on the importance of free and independent media and ENGOs in society. Generally, political history shows that Malaysia has been through a hard period, especially during the pressures of the colonial era. Moving forward in history, Malaysia, formerly known as the "Federation of Malaya" (renamed Malaysia in 1963), was colonised by several Western countries, beginning with the Portuguese in 1511, followed by the Dutch in 1641. Afterwards, the British occupied and conquered Malaya in 1786, which was later overcome by Japan in 1942. After struggling under a long period of colonisation, Malaysia finally achieved its independence in 1957. It is an undeniable fact that the colonisation, especially by the British, had a huge influence on the political systems of Malaysia.

During the colonial times, the British brought in Chinese and Indians as labourers to serve in the tin mines and rubber plantation industries. However, through the "divide and conquer" policy, the British separated these three ethnics through economic and education activities. The Malays worked in the agricultural sector; the Chinese concentrated on business and trading activities, whereas the Indians worked in the estates. Ironically, even after achieving its independence, the political system of Malaysia is still segregated by deep ethnic divisions. For instance, since independence in 1957 to this day, the *Barisan Nasional*²⁵ (National Front, BN) has spearheaded the political system of Malaysia with a coalition of three main parties, which are the United Malays National Organisation (UMNO) for the Malays, the Malaysian Chinese Association (MCA) for the Chinese and the Malaysian Indian Congress (MIC) for the Indians (Case, 1996a; Lee, 2007). Like "old wine in a new wineskin", UMNO is actually an updated version of *Parti Perikatan* (Alliance Party),

²⁵ BN is the ruling coalition and was formed in 1973.

which was established in 1951 by the people of the Confederated Malay States to achieve independence from the British (Mun & Li, 2011). To this day, since the first general election in 1959 (except for the year 1969), BN has consistently won a two-thirds majority in the Malaysian parliament (Makmor & Ibrahim, 2013). The opposition party is the *Pakatan Rakyat* (People's Pact), which is formed by three parties, namely the People's Justice Party, the Democratic Action Party and the Pan-Malaysian Islamic Party.

No less important to note is that Malaysia has established a constitutional monarchy, where, since independence, the *Yang Di Pertuan Agong* (king) has been the highest power, and the Prime Minister has led the Malaysia's parliamentary government. However, although Malaysia is said to follow the British democratic system and even appears to be an example of a democratic developing country, the hegemony of BN in the ruling political regime of Malaysia has made various scholars like Fionna (2008); Makmor & Ibrahim (2013); Choy (2013); Arakaki (2013); and Fong & Md Sidin (2014) to assert that Malaysia's political system, in a sense, is "semi-democratic", "quasi-democratic", "pseudo-democracy" or "soft authoritarian" rather than truly "democratic". Even worse, Mujibu, Zaliha & Badrul Azmier (2010) viewed Malaysia's democracy as "camouflage" due to its practices, which are unparalleled by democracy theory. The group of Malay elite from UMNO is said to be consistently dominant in ruling and controlling the political institutional, notably the Malaysian cabinet, bureaucracy, military and judiciary (Crouch, 1996; Case, 1996a, 2011b) and, most importantly, the traditional media like the newspapers and television (Leong, 2015). As a consequence, democracy in Malaysia has become fragile and vague in practice. Thus, within the context of environmental communication, the political control over the media and ENGOs can be clearly witnessed through direct control via the ownership system and indirect control via laws or regulations as discussed below.

4.8.1 Political Control via Media Ownership

In general, Malaysia's traditional media, particularly newspapers, are not truly free and independent like the Western media, and are heavily curtailed by the government via the direct ownership system and perhaps a monopoly. As is well documented, media ownership occurs when the government is the majority owner of a Malaysian media company. UMNO, for example, has direct control via ownership over two major newspaper companies: the Straits Times Press (renamed the New Straits Times Press *Berhad* (NSTP) in 1974) and the *Utusan Melayu* Group. In the past, the NSTP was owned by the *Bumiputera* trust agency, *Perbadanan Nasional Berhad* in the early 1970s with an 80% stake. The majority of shares were then relocated to Fleet Holdings (Wang, 2001). Fleet Holdings is a company under the Fleet Group that was established by the government under the UMNO in 1972. This company indicates the intense involvement of the Malaysian government in the corporate sector (Salazar, 2004). As well as owning NSTP, Fleet Holdings also have taken the majority shares of *Utusan Melayu* Group in 1973 (Wang, 2001; Mohd Azizuddin, 2014a).

Although Fleet Holdings only own two newspaper companies (the NSTP and *Utusan Melayu* Group), it has a huge impact on the media industry, especially the newspapers, because there are many publications printed by these companies. Under the NSTP, there are several national daily newspapers, including *Berita Harian*, *Harian Metro*, NST, Malay Mail and Business Times. Another two newspapers belonging to NSTP are published on a weekly basis: *Berita Minggu* and New Sunday Times. In summary, there are eight newspapers published by the NSTP, including Malay and English newspapers. In a similar vein, within the *Utusan Melayu* Group, there are another four major newspapers (*Utusan Malaysia* and *Utusan Melayu* for daily distribution, and *Mingguan Malaysia* and *Utusan Zaman* for weekly distribution), the tabloid *Kosmo*, and magazines such as *Wanita* and *Mangga* (Mustafa, 2014b).

The other two government parties in the BN coalition, namely the MCA and the MIC also own much of the local press (Wang, 2001; Mohd Azizuddin, 2014a). The MCA own *Huaren Holdings Sdn. Bhd.*, with a majority (42.8%) stake of Star Publications, which publishes the top English daily newspaper in Malaysia, *The Star* (Wang, 2001; Mohd Azizuddin, 2014a). MCA also owns the Chinese newspapers, such as *Sin Chew Jit Poh*, *Nanyang Siang Pau*, *China Press* and *Guang Ming Daily* (Kaur, 2011). On the other hand, the MIC takes control by owning the Tamil (Indian) press, such as the publishers of *Tamil Nesan* and *Malaysia Nanban* (Fong & Md Sidin, 2014).

It is assumed that the government not only has direct control over the media via ownership but also indirect control via ownership by its allies. Mustafa (2014b) claims that several private press companies and their owners also have close relationship with the BN, such as Lau Hui Kiang, a timber tycoon who owns the *Chinese Oriental Daily*—a Chinese newspaper published in Sarawak. Similarly, Vincent Tan Chee Yioun, who has been claimed to be a close associate of the former Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad, is the owner of *The Sun* newspaper (Mustafa, 2014b). This suggests that local Malaysian newspapers are not fully free and the news is concealed under thick layers of government control.

The government has persistently justified its media ownership on the grounds of preserving the quality of journalism and ensuring informative, high-quality content and entertainment, but all of these reasons are myths (Thierer, 2005). The former Prime Minister of Malaysia, Tun Dr. Mahathir Mohamad, is known to Malaysian history for his high level of control over the media. According to him, “Free speech has its limits and we have to be responsible when making use of free speech, just as we have to be responsible when exercising any powers we have” (Samy, 2014). Media ownership does not only occur in Malaysia but is seen in most Asian countries, particularly Southeast Asian countries. Taking Malaysia’s close neighbour, Singapore, for example, media ownership can be witnessed in how *Singapore Press Holdings* has been owned by the state since the 1970s. Furthermore, ostensibly, in

more advanced Asian countries such as China, the media is still struggle with the state media ownership where the media is not allowed to report on bad environmental news (Wang, 2005). A recent comparative study of the air pollution coverage in Beijing between Chinese and American newspapers by Duan & Takahashi (2016) discovered that the Chinese state media tends to provide positive coverage on this issue, compared to American newspapers. This has proven that ideological forces influence the coverage of the Chinese media coverage on the environment. Meanwhile, in Japan, the Japanese media has a different experience as it is considered to have more freedom than other media in other Asian countries. This is due to the fact that the Japanese media is not owned by the Japanese government, but, it is owned by a conglomerate (Akhavan-Majid, 1990), similar to the Western media. However, it is noteworthy to state that although the Japanese media is not owned by the government, the government still has some degree of control on the media through the establishment of a reporters club called “Kisha Kurabu”. Kisha Kurabu actually functions as the main sources for government related information for the journalist (Akhavan-Majid, 1990). In this regard, as the Kisha Kurabu was set up by governmental sources, such as the ministers, Japanese media’s coverage of certain environmental information like Intergovernmental Panel on Climate Change (IPCC) is homogenous and certain press releases are considered as more “official” than the others (Asayama & Ishii, 2014). The discussion on the media and NGOs laws and regulations will be offered in the next section.

4.8.2 Laws and Regulations

Besides the ownership system, another method of political control over the media and NGOs in Malaysia is via the implementation of media and NGO-related laws and regulations. The implementation of these laws, particularly the media laws, is pivotal for the Malaysian government in order to maintain and sustain its power. Laws and regulations are weapons for controlling the nations, especially groups of social actors like the media and NGOs, to ensure that they do not act against the government. In fact, this does not only occur in Malaysia but also in most other Southeast Asian

countries. Taking Vietnam, for example, the media, particularly the newspapers in that country, are labelled as a “state-run press” due to the strong state control over the newspapers (Cain, 2014). Within the Malaysian context, there are three main Malaysian media laws that have been widely debated by the scholars, namely the PPPA, the Official Secrets Act (OSA) and the Sedition Act, and two main ENGO-related laws, namely the Societies Act and the Peaceful Assembly Act (PAA), as discussed below.

4.8.2.1 The Printing Presses and Publications Act (PPPA) (1984)

In general, the Printing Presses and Publications Act PPPA (1984) is recognised as the legislation that most affects the media industry in Malaysia (Wang, 2001). The recent amendment of this Act was 2012 stated that newspaper companies do not need to renew their publication permits every year, yet under Section 3(3) of this Act, the government, particularly the Home Affairs Minister, still has power to grant, refuse and suspend a printing press license at any time (Printing Presses and Publications Act, 1984; Mohd Azizuddin, 2014a). Each newspaper company in Malaysia must apply for an operating permit for a period of 12 months and it must be renewed annually. Before 2012, under the same Act, no one was provided with the chance to be heard about their application for the permit or licence. Now, after the new amendment in 2012, under Section 13(B), before any decision about suspension of a license or permit will be made, someone who obtained a license or permit will be provided with the chance to be heard first (Printing Presses and Publications Act, 1984). This means that the involved parties like a press company could challenge the government in court. In history, particularly in 1987, three local newspapers including *The Star*, *Sin Chew Jit Poh* and *Watan* had their licenses suspended; in 2002, some issues of the international news magazines *Newsweek*, *Time* and the *Far Eastern Economic Review* were prevented from being distributed in Malaysia (Wang, 2001; Ramanatha, Lim, & Kaur, 2006; Lee, 2007).

There are similar laws to the PPPA in other Asian countries. In India, they have Press and Registration of Books and Publications Act (1867) that requires all newspaper companies to be registered with the government in order to obtain legal permission to publish. Similarly, Singapore also has its own Newspaper and Printing Presses Act, which was introduced in 1974 and requires media companies to have a printing license. In Myanmar, the media are also controlled by the Printers and Publishers Registration Law (1962), which also requires all media to be registered. All these laws are implemented to control the publications of the nation's media.

4.8.2.2 The Official Secrets Act (OSA) (1972)

The Official Secrets Act (OSA) was law inherited from the British in 1911. It intends to prevent sensitive information flowing to foreigners for the protection of national security (Wong, 2000). An "official secret" document means any document that is secret for public access with the labels of "top secret", "secret", "confidential" or "restricted". All these labels can only be classified by public authorities like the Minister or Chief Minister who has been assigned under Section 2B of this Act. In principle, the media (and ENGOs) are prohibited to publish, report or investigate any document designated as secret as the Minister has decided not to release it to the public (Wang, 2001; Mustafa, 2012a). Anyone who is guilty under this Act will be sentenced to a mandatory one-year jail term (Mustafa, 2007c, p. 216).

Several journalists have been found guilty under this Act, such as the former NST journalist Sabry Sharif, who was a Malaysian journalist who was charged in 1985 for his report that used Royal Malaysian Air Force documents (Hwang, 2003). Under the same law, a foreign media company, namely the Far Eastern Economic Review, was convicted for citing secret Malaysian government documents (Hwang, 2003). Interestingly, not only the media but also several Malaysian NGOs like the Bar Council Malaysia, *ALIRAN*, the Nation Union of Journalists (NUJ), the Federation of Consumers' Associations and Trade Unions are against the implementation of this laws, especially its amendments in 1986 that made jail

mandatory for all offenders (Hooi, 2013). The implementation of the OSA undoubtedly prevents information related to the government being published to the public.

4.8.2.3 The Sedition Act (1948)

The Sedition Act was promulgated by the British in 1948 in order to prevent disagreement by the public with British rule and to suppress the Communist movement in Malaya. Some even believe that this Act existed in 1915 in order to prevent seditious publications in the Straits Settlements (Mohd Safar, 2001). Under this Act, sedition includes speech, printing, publishing, retailing, supplying and reproducing seditious material. Sedition in the context of this Act is a tendency to question the Federal Constitution of Malaysia, especially regarding language, religion, citizenship, races and the privileges of the Malays and the Borneo Sabah and Sarawak people. An action of contempt of the court justice in Malaysia can also be considered as seditious.

It is clearly stated in Section 4(1) under this Act that an offender or seditionist can be anyone who carries out any act that has a seditious tendency. A person who commits an offence risks receiving a fine of up to 5,000 ringgit and/or will be imprisoned for three years or less. There are several past cases relating to this Act: in 2015, Lionel Morais, the managing director of *The Malaysian Insider* (website news), and his editors Amin Shah Iskandar and Zulkifli Sulong were charged under the Sedition Act over their controversial article on *Hudud* (Islamic) law. Indeed, the implementation of the sedition act is quite common in many Southeast Asian countries, especially among the former British colonies. In Singapore, the implementation of its sedition act is almost similar to Malaysia's. In India, the sedition act falls under Section 124-A of the Indian Penal Code that criminalises any act of sedition via words, signs and written or visual representations. Interestingly, one of the most popular Indian nationalists, Mahatma Gandhi, was one of several people who have been charged under this Act throughout Indian history.

4.8.2.4 The Societies Act (1966)

This Act is meant to monitor the “societies”, which refers to any group of seven people that arrange any organisation, whether for a long time or a short time for any reason or objective (Laws of Malaysia, Act 335, 2006). The Malaysian government amended the Societies Act in 1981 by changing the categories of NGOs in Malaysia to political and friendly groups. This amendment hindered a large number of organisations from performing their legitimate role of influencing government policy (Hooi, 2013). Nevertheless, any organisation that has not met the requirements of Section 7 will not get registered, such as the case of the coalition of Malaysian NGOs, which consisted of 39 unregistered NGOs (New Straits Times, 2014). The Civil and Commercial Code of Thailand is quite similar to Malaysia’s Societies Act (1966) and requires all NGOs to be registered as foundations (*mulanatee*) or associations (*samakom*). Similarly, in India, the Societies Registration Act (1860) also requires all NGOs to be registered as associations.

4.8.2.5 Peaceful Assembly Act (2012)

The Peaceful Assembly Act (PAA) (2012) is a new Act that replaced the Internal Security Act (ISA) (1960). In history, the ISA was known as a preventive detention law, which was initially introduced as a temporary instrument to combat the Communist rebellion. The ISA received much criticism and disagreement from many parties in Malaysia since under this Act, the Minister of Home Affairs Malaysia had the power to detain a person for a certain period of time not beyond two years (allowed to be renewed) if he/she thinks that detention is necessary for the sake of public security. Therefore, after more than 50 years of the implementation of the ISA, the Malaysian government finally decided to discontinue the ISA and substitute it with the PAA (2012).

The PAA explains that all citizens have a right to organise or attend an assembly as long as it is in a peaceful manner. Assembly in the context of this Act

refers to an election campaign, strike, lockout or picket assembly. However, under this Act, non-citizens, street protests, children (aged 15 and below) and assembly at prohibited areas are totally forbidden. Nevertheless, Section 9(1) of this Act also explains that all the organisers of an assembly are responsible for informing the officer in charge of the local police district 10 days before the assembly is to be held. Section 9(5) states clearly that anyone who commits offences under this Act will be fined up to 10,000 ringgits. In comparison to the ISA, this PAA act undoubtedly provides more freedom, as Malaysians can gather and assemble without being criminalised as long as it is under “peaceful” condition. The discussion on the implications of media ownership and laws for the media and ENGOs will be displayed in the next section.

4.9 The Implications of Media Ownership, Laws and Regulations for the Media and ENGOs in Malaysia

Generally speaking, there are several implications of media ownership and the implementation of media and NGO-related laws and regulations in Malaysia. First and foremost, these two political controls, especially the media laws, have become a common and unhealthy feature of Malaysian newsroom culture (Mustafa, 2005d), which means that the media cannot play its role in democracy well (Leong, 2015). In particular, it is difficult to play the role of a watchdog that is able to provide checks and balances to the government and therefore investigative journalism in Malaysia is almost impossible (Wang, 2001; Ezhar & Ain Nadzimah, 2015). Given such this complicated and daunting working atmosphere, most media practitioners face mounting pressure to not only operate in support of the government, but it is also expected to construct its reports according to the government’s preferences (Smeltzer & Lepawsky, 2010). Smeltzer (2008) for instance, found that the Malaysian media is doing “pro government reporting” in its reports on biotechnology issues. The media avoid explaining the negative side of biotechnology and tend to promote biotechnology as a desirable form of progress by the Malaysian government.

The media ownership system in Malaysia also has great influence on the direction of the news (Hasrina, Wan Norshira, & Ramli, 2013). Thus, it is not surprising to find that most coverage about the government in newspapers in Malaysia are rather on the positive side (Mohd Azizuddin, 2014a); even worse, the Malaysian media not able to be critical in their reporting (Kenyon, 2007) especially in topics like government policies (Mohd Khairie & Mohd Baharudin, 2014). It has been said the Malaysian media is not allowed to publish something unseemly about government that can tarnish their reputation and cause them loss of credibility (Adibah & Syd Abdul Rahman, 2009). Because of this, the Malaysian media have been labelled as “docile media” (Hasmah, 2007) or a lapdog (Adibah, Mohd Khairie, & Che Su, 2014), and often receive blames and criticism by the Malaysian public, who are dissatisfied with the media’s weak role (Ezhar & Ain Nadzimah, 2015). In fact, the Malaysian media is widely known as one of the strictest in the entire world (Brown, 2005). This can be seen in the Press Freedom Index 2015 where Malaysian media ranked 142th out of 199 countries worldwide (Freedom House, 2015b). The ranking suggests that the Malaysian media fall into the “not free” media category. Clearly, although Western countries such as the US obtained press freedom a long time ago, Asian countries such as Malaysia and Indonesia still struggle with it (Steele, 2011).

Simultaneously, the Malaysian ENGOs that depend on the Malaysian media as a channel for delivering their environmental information (Nur Nasliza Arina & Jamilah, 2013) are still being indirectly controlled, by implication, as the government controls the media. In fact, although the ENGOs are considerably freer from any direct control than the media, as they are independent groups, like every entity operating in Malaysia, ENGOs are also required to have a permit for their publications, cannot access “secret” government documents and are exposed to the risk of seditious accusations. Malaysian ENGOs also work under the Societies Act (1966) and the PPA (2012). In certain conditions, ENGOs may not be registered if they are threatening the government. Within the Chinese context Yang & Alpermann (2014) asserted that an act that requires NGOs to be registered is undeniably

problematic, as the government holds the power to approve or disapprove the registration and, most importantly, NGOs risk being closed down by the government at any time. Sima (2011) added that due to the complex and problematic registration requirements imposed on Chinese NGOs, many of these operate without proper registration. Interestingly, Malaysian ENGOs are not only tied to registration but are also not allowed to simply organise any campaign that assembles Malaysian citizens unless they follow the PAA laws.

In addition, the phenomena of censorship and self-censorship also happen within both social actors. In the Malaysian media culture, it is quite common that most news that is critical of the government will end censored. The term “censorship” generally can be understood as an action of removing material that is considered to be offensive or sensitive (Simons & Strovsky, 2006). In other words, the motivation behind censorship is to prevent certain kinds of media content being disseminated to the public (Chia, Lu, & Mcleod, 2004). Within a news organisation, censorship is the traditional method of regulation and is usually the responsibility of the gatekeeper or the editor. Indeed, the editor will filter, edit and remove any environmental news that is not in the position of supporting the government. The gatekeepers will determine the types of environmental news that can or cannot be published to the public. In fact, self-censorship could also occur where the journalist cuts off any information that he/she thinks to be critical and offensive to the powerful stakeholders of their organisation such as the government and advertisers (Lee & Chan, 2009). As a consequence of censorship or self-censorship, the public will only receive environmental news that is less transparent and that has been altered and filtered by the gatekeepers.

Within Asia, particularly the Southeast Asian context, there are certain countries that are freer in their media industry. The Philippines, for example, has always been known for the media’s freedom of expression compared to other Asian countries. This could be associated with the history of American colonisation in this “Pearl of the Orient Seas”, which introduced an American style of system. Under

Article IV, Section 4 of the Philippine Constitution permits the freedom of the press, speech and expression (Coronel, 2001). Therefore, unlike Malaysia, Singapore, India and other Asian countries, the Filipino media are not required to have licences or permits for publication (Coronel, 2001). They are more independent and are only restricted under the libel, slander and sedition laws. This condition is similar to the fourth most populous country in the region the Republic of Indonesia, which has media freedom since the successful “*Reformasi*” movement in 1998. This “*Reformasi*” movement defeated the authoritarian Indonesia president, Suharto, and made the media freer. The Press Law (1999) was introduced to guarantee media freedom in Indonesia and discontinue the tradition of media licensing (Tapsell, 2014a). However, media freedom in the Asian context always comes with a cost. In the Philippines, for instance, due to the practice of absolute freedom, the media are said to have misused their freedom and always outdo their rivals (Coronel, 2001). Therefore, the main concern of media freedom in Asian countries will come back to question of whether the Asian media ready to have a truly democratic space similar to the Western media or whether we need our version of Habermasian democracy that suits local conditions. The summary of this chapter will be presented in the next section.

4.10 Summary

In summary, this chapter has briefly outlined the current condition of environmental communication by the media and ENGOS in Malaysia. Environmental communication is a rather new field in Malaysia that needs more exploration by new researchers, unlike the Western world, which established its environmental communication in the 1970s or even earlier. Alongside this, the types of environmental issues covered by the Malaysian media and ENGOS in environmental communication are quite similar to those of the Western media and ENGOS. Similarly, the strategies of environmental communication like advocacy, lobbying, campaigning and collaboration by the ENGOS and collaboration with news sources by the media are also in harmony with the strategies used by the Western media and

ENGOS. However, unlike Western countries, where the media and ENGOS are free, the Malaysian media and ENGOS in Malaysia are subjected to massive political influences from the state government, notably via the media ownership and media and NGO-related laws. Therefore, it is legitimate to conclude that the Malaysian media and ENGOS have less freedom due to its “semi-democratic” political system, in contrast to Habermas’ democracy theory that emphasises the free and independent media and ENGOS. Due to this lack of freedom, the watchdog role of the media has become unrealistic and the media always work for the government. Although the media are under greater control, the ENGOS, as registered organisations, are also not separate from government control, particularly via NGO-related laws like the Society Act and PAA. ENGOS rely on the media as their channel for delivering environmental information, which makes them indirectly controlled by the government. Interestingly, this condition does not only happen in Malaysia, but also occurs in several Southeast Asian countries like Singapore. Nonetheless, there are also some problems associated with media freedom in Asia, like the situation of the media in the Philippines and Indonesia, where the privilege of freedom can be misused. Therefore, the question arises as to whether Malaysia is totally ready to be more open and free in its media and publications. Nevertheless, we are able to integrate Malaysian and Western theoretical concepts to construct a new theoretical framework of environmental communication by the media and ENGOS in Malaysia, which is covered by the next chapter.

CHAPTER 5

THE PROPOSED THEORETICAL FRAMEWORK OF THIS STUDY

5.1 Introduction

This chapter offers a brief summary of the proposed theoretical framework of this study. This proposed theoretical framework is developed via an integration between existing Western and Malaysian's concepts, theories and frameworks of the roles, strategies, barriers and representations in environmental communication that have been thoroughly discussed in Chapter 2 to 4. The integration of both perspectives is crucial, as Malaysia has its own unique political, economic and social background that differs from the Western sphere and is essential to be taken into consideration. It is hoped that this theoretical framework can serve as a guideline for the whole course of this study, especially for the research methodology, data analysis and discussion.

5.2 Explanation on the Theoretical Framework of This Study

To begin with, as shown in Figure 5.1 below, the process of environmental communication by the media and ENGOS is a linear process. It starts with the (news) sources, which usually include the government, politicians, scientists, academics, laypeople, ENGOS, victims of environmental problems and international news agencies. These deliver the environmental information (input) to the sender, either the media or the ENGOS. Of course, the environmental information delivered by the (news) sources to the media or ENGOS sometimes can be challenging, as environmental issues can be complex, heavy, abstract and full of technical language (e.g. climate change, global warming, biotechnology etc.).

Next, when the environmental information arrives at the media and ENGOS, these two senders have to play three main roles in environmental communication: environmental legitimacy (creating trust, relationships and credibility with the

public), acting as agents of democracy (watchdog and providing a platform for discussion in the public sphere) and the social construction of reality (framing environmental information received from sources by using appropriate languages and powerful pictures). On the other hand, in order to ensure the success of environmental communication, several strategies can be taken by the ENGOs including advocacy, lobbying, campaigning and collaboration with other stakeholders like the media; for the media, collaboration with news sources, particularly ENGOs, is the main strategy in environmental communication. Collaboration between the media and ENGOs will be one of five levels of collaboration, including communication as the lowest level, followed by the cooperation, coordination, coalition and integration as the highest level of collaboration. The sender (the media and ENGOs) can also face several barriers like a lack of environmental knowledge and experience, and self-censorship, which can hinder the process of environmental communication.

Subsequently, all the environmental information received by the media and ENGOs will go through their channel. Both organisations used different channels for their respective environmental communications. The media use their printed newspapers while the ENGOs use their newsletters as a channel for delivering environmental information to the public. However, there are several barriers faced by the media and ENGOs. As shown in Figure 5.1 below, the media have problems with limited space for environmental news reporting. On the other hand, economic and political control by the Malaysian government is very strong, especially via media ownership and media and NGO-related laws. Therefore, the media and ENGOs have a lack of freedom in communicating environmental information in Malaysia.

Next, all the environmental information of the media and ENGOs will go through the destination or gatekeeper, who is usually the editor and sub-editor who may edit and change the content of environmental articles due to a lack of space in newspapers. However, because of media ownership and the laws in Malaysia, some editors also censor certain environmental information that is sensitive and contrary to the government's preferences.

After the gatekeeper finalise all the environmental information passing through the gate, the environmental information will then be presented in the newspapers and ENGOs' newsletters for the reader's consumption. The representation of environmental information is considered as the final product that has gone through all the process of environmental communication. It is important to note that the type of environmental information presented by the media depends on the journalist's and editor's choices and is also based on the values such as proximity and timeliness. However, the type of environmental information presented in ENGOs' newsletters depends on the organisation's background, particularly the mission or vision of the ENGO. Although some environmental issues are not the primary concern of their organisation, some ENGOs also present these issues in their newsletters if it is a recent environmental issue that has attracted massive public attention and debate.

Next, all the environmental information published in the newspapers and ENGOs' newsletters will go to the receivers, who are the public. However, some receivers lack environmental knowledge and therefore it is hard for them to understand the environmental information delivered by the media and ENGOs. This is a barrier faced by the media and ENGOs when conveying certain complex environmental topics like the climate change issue to the public. Once receivers obtain the environmental information, they are expected to give their opinion and debate the environmental issues in the public sphere. However, as mentioned at the beginning, this study only concerns the representation of environmental information and will not go into the details of public debate about the environment.

In summary, the proposed theoretical framework for the media and ENGOs in Malaysia can be seen in Figure 5.1 below. I have used three different colours to differentiate the information within the theoretical framework: (1) yellow indicates information from both the Western and Malaysian perspectives, (2) red indicates information derived from the Western perspective only, (3) green indicates information that comes from Malaysia only, and (4) blue indicates information that is

excluded in this study. The research design and methodology of this study will be discussed in the next chapter.

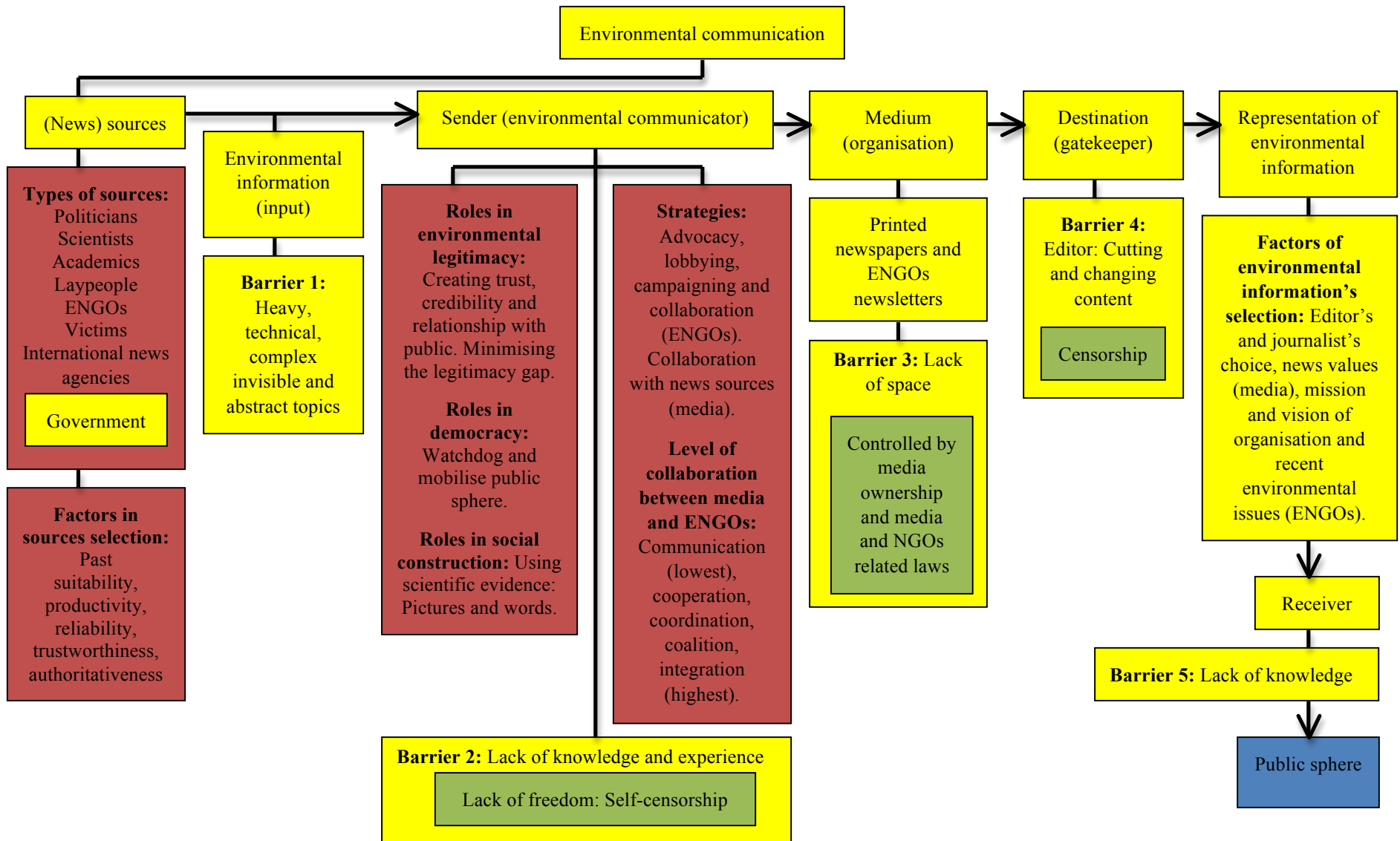


Figure 5.1: Theoretical framework of this study

CHAPTER 6

RESEARCH DESIGN AND METHODOLOGY

6.1 Introduction

To begin with, this chapter seeks to shed light on the research design and the methods adopted in this study. It is important to understand that this study was implemented using a sequential mixed methods approach with semi-structured in-depth interviews as the prime method, followed by a quantitative content analysis of newspapers and ENGOs' newsletters. All the research methods were selected based on the research questions (Wildemuth, 2009) and were associated with the proposed theoretical framework of this study shown at the end of Chapter 5.

In short, this chapter is arranged in the following way: Section 6.2 discusses the research design of this study. Next, Section 6.3 explains the use of qualitative methods, particularly the semi-structured in-depth interviews. Section 6.4 discusses the quantitative content analysis of two selected Malaysian newspapers and two ENGOs' newsletters. The subsequent section (6.5) outlines the limitations of this study and the chapter concludes with a brief summary in Section 6.6.

6.2 Research Design: The Sequential Mixed Methods Approach

The mixed methods approach is not new to the sphere of social science. Its first introduction was in 1959 in Campbell and Fisk's multi-method examination of the validity of personality traits (Creswell, 2009; Schimmack, 2010). Unlike the mono-method, mixed methods, sometimes also referred to as the multiple method, third main method, integrated method or method-centric approach, offer a genuine integration of two complete methods in one particular study. The reason for choosing a mixed method in this study is because of the method's ability to strengthen the credibility of the research findings through triangulation as well as to reduce the potential biases that can occur when using a single method (Bowen, 2009). Triangulation is the process of comparing data from different sources

(Babones, 2015) and it can be done via two techniques, either within methods (group) or between methods (dyadic) (Sands & Roer-Strier, 2006). Within-methods triangulation can be an excellent instrument for cross-checking internal consistency or reliability (Jick, 1979), whereas triangulation between methods is used to complement the weakness of one particular method (Gray, 2009) and to ensure whether an aspect of a phenomenon has been accurately measured (Moran-Ellis et al., 2006).

In many respects, there is broad agreement among the three common types of mixed method research: (1) sequential mixed methods, (2) concurrent mixed methods, and (3) transformative mixed methods (Creswell, 2009, p. 30). For the purposes of this study, only the sequential mixed methods approach has been adopted, as it is able to expand and weave in the findings from qualitative interviews and quantitative analysis (Creswell, 2009), as well as obtaining the overarching findings. Therefore, the semi-structured in-depth interviews were conducted first, followed by quantitative and content analysis of newspapers and ENGOs' newsletters to serve as a cross-check on a selected segment of the interview results. Next, the explanation on the qualitative methods will be offered.

6.3 Qualitative Methods

As mentioned in Section 6.2, qualitative methods were used in the initial stage of this study. Qualitative methods are used to understand the complexity of various social settings, including the people who live in them (Berg, 2001) and how these people make sense of their social world and experience it (Hesse-Biber, 2010; Crowe, Inder, & Porter, 2015; McCusker & Gunaydin, 2015). Importantly, qualitative methods also relate to the interpretivist stance (Babones, 2015), which is more subjective and deep, especially in understanding complex human emotions (Jervis & Drake, 2014). Qualitative data are usually presented in a non-quantifiable or non-statistical format (Jervis & Drake, 2014) and therefore it is usually best to ask questions like 'How?' instead of 'How many?' (McCusker & Gunaydin, 2015). There are various qualitative methods used in social science research, such as ethnography, interviews, focus groups and phenomenology. However, for the purpose of this study, only semi-structured in-depth interviews

were applied to explore the social world of the media and ENGOs, particularly their roles, strategies, barriers and representations in environmental communication. The description of the semi-structured in-depth interview in this study is detailed out in the following sub-sections, 6.3.1 to 6.3.1.6.

6.3.1 Why Semi-structured In-depth Interview?

As noted earlier, semi-structured in-depth interviews are the core method of this study. The Oxford English Dictionary defined the word “interview” (taken from the Middle French word “*entre-voir*”, which means to have a glimpse of and the Latin word “*videre*”, which means to see (Chirban, 1996, p. xi)) as “a meeting of persons... especially for the purpose of conference”. Given this definition, Chirban described the word interview as “the inner views of a person’s life” (p. xi). Thus, it is important to keep in mind that interviews are designed to get more understanding (Bloom & Crabtree, 2006; Fryer et al., 2012), experiences and meanings (Granot, Brashear, & Motta, 2012), perspectives (Roulston, deMarrais, & Lewis, 2003), beliefs and characteristics of the interviewees (Stacey & Vincent, 2011). In fact, the interview procedure is also known to allow the interviewer to feel exactly like the interviewees (Bryman & Cassell, 2006) so that the view of one particular topic not only comes from the researcher only but from several actors (Nielsen & Lyhne, 2016). Most importantly, at the end of the interview, the researcher is able to “retrieve rich and detailed findings on one particular research topic” (Adams & Cox, 2008, p. 21) and, more importantly, the whole picture of human (i.e. the interviewees’) life (Seitz, 2016).

Many types of interview procedure are used in qualitative research including, in-depth interviews, focus group interviews, Delphi group interviews, email interviews and telephone interviews. However, of these, only in-depth interviews were applied in this study. The in-depth interview was chosen in this research due to its ability to obtain the perspective of the interviewees regarding certain research topics (Milena, Dainora, & Alin, 2009), namely environmental communication. Most importantly, as in-depth interviews allowed the interviewees to freely express their thoughts (Kartik, Willis, & Jones, 2016), the researcher was able to obtain deep information and knowledge from the

interviewees that was much deeper than would be possible with other methods like informal interviews, surveys or focus groups (Johnson, 2002; Stylianou, 2008). By using in-depth interviews, the interviewee is always regarded as the expert and the interviewer is the student (Milena, Dainora, & Alin, 2009). Hence, the interviewer must be able to ask the right questions and learn about the research topic from the interviewee(s).

The semi-structured approach was chosen as the format for the in-depth interview questions. The motivation for choosing the semi-structured format was due to the flexibility of this format compared to the unstructured and structured formats. At its most basic, the unstructured interview format is executed without any pre-determined interview questions and can be hard to manage, whereas the structured interview format is very restricted and is not suitable for in-depth interviews (Gill et al., 2008). In contrast, the semi-structured interview format is more flexible because the researcher can use open-ended questions and the questions can be prepared beforehand and adjusted or probed further during the interview, depending on the response of the interviewees (McIntosh & Morse, 2015). Thus, the combination of in-depth interviews and the semi-structured format made me apply semi-structured in-depth interviews as the core method in this study. The sampling strategies for the semi-structured in-depth interviews will be discussed in the next section.

6.3.1.1 Sampling Strategies

For the semi-structured in-depth interviews, the sample was first selected using purposive sampling (also known as non-probability sampling). Purposive sampling is generally understood as a sampling technique that selects the participants of the study using a non-random technique (Robinson, 2014). The notion of purposive sampling is most commonly used in qualitative investigations (Ritchie, Lewis, & Elam, 2003). Bearing in mind that purposive sampling has several types of sample including homogeneous samples, heterogeneous samples, extreme-case or deviant sampling, intensity sampling, typical case sampling and critical case sampling (Ritchie, Lewis, & Elam, 2003, p. 79-80), this study only focused on homogeneous samples. This implies that I only interviewed media

staff (journalists or editors) and ENGO staff who fulfilled at least three criteria: (1) they were experienced in writing environmental articles or stories or communicating the environmental information, (2) they had working experience of not less than one year, and (3) they were permanent or former staff of either organisation.

By referring to these criteria, all the interviewees were selected only from Media A and B and ENGOs A and B. These two media were chosen because of their achievement as the two most widely circulated newspapers in 2012. Daily circulation for Media A was 288,916 copies; Media B recorded 178,211 copies per day (July to December 2012) (Audit Bureau of Circulation Malaysia, 2012). The second reason was because of their use of the national language of Malaysia, Malay (Media B), and the second language, English (Media A). Similarly, the motivation for choosing the two ENGOs A and B was because they were the two most active in communicating environmental issues in Malaysia. Rohani et al. (2010) found that there were 19 groups of ENGOs in Malaysia formed under the Danish International Development Assistance in 2001. However, only three ENGOs (ENGOs A, B and C) put significant effort into their research, education and conservation alongside sustainable promotion of a healthy environment in Malaysia (Rusli & Sheikh, 2005). This research, however, involved only ENGOs A and B.

In addition to purposive sampling, the sample selection in this study also involved the snowball sampling method. In brief, snowball sampling is suitable for hidden populations that are hard to reach (Shafie, 2010) and when the researcher obtains the contact information of interviewees from the informants (Noy, 2008; Emerson, 2015; İbrahimoglu & Yılmaz, 2015). Similarly, for this study, some of the potential ENGO members', journalists' and editors' contact details were retrieved from their colleagues. This is because in Malaysia, it is difficult to reach experienced journalists that specifically focus on the environment, as there is no specific environmental desk in the Malaysian media and most journalists are required to do all types of news coverage (Nik Norma, 2007). Therefore, snowball sampling strategies, which involve rolling on until the

data are saturated, enabled the researcher to select potential journalists or editors recommended by their acquaintances.

Nonetheless, interview data saturation is pertinent and must be discussed within the topic of sampling strategies. Data saturation in interviews is very similar to the question of how many interviews are appropriate for this research. Strauss & Corbin (1998), in their saturation theory, clearly explained that data are saturated if (1) there are no new or significant data appearing in a category, (2) the category already demonstrates a variety of dimensions, and (3) the category's relationship has been validated. From Strauss and Corbin's explanation, it is very clear that interview data saturation occurs when the researcher cannot get new information from the interviewee(s). Data saturation is more commonly reached when each interviewee repeats the same answers as the prior interviewee. Green & Thorogood (2014) explained that the sample size of the interview depends on the aims and the extent to which the interviewees answer all the questions expected by the researcher. In contrast to the quantitative procedure, qualitative research is synonymous with a small sample. Previous scholars like Guest, Bunce & Johnson (2006), in their experiment on data saturation during purposive sampling interviews, found that data saturation happened after they had analysed 12 interviews. Thus, for this research, the data were well saturated after 13 rounds of interviews with the media and 11 rounds of interviews with the ENGOs. The protocol for conducting the semi-structured in-depth interviews will be discussed in the next section.

6.3.1.2 The Protocol for Conducting the Semi-Structured In-depth Interview

In an effort to establish the quality of the interviews, a stepwise interview protocol was set up as a guideline. These interviews were conducted from 1 August to 30 September 2014. All the interview sessions were on an individual (one-to-one) basis, between the researcher and the interviewee. An appointment was made two months prior to the interview via email communication, with an interview schedule (Appendix A) so that it would be convenient and manageable for both parties. On most occasions, the interviews were held at the interviewees' office, in a quiet, convenient room. There were no reimbursements or inducements offered

to the interviewees. I encouraged voluntary participation to avoid bias or other motives for participation, and to ensure that the interview was for the purpose of knowledge sharing and academic contribution.

The medium of communication for the interview was Malay and English. Due to the Malaysian culture of code-switching (also known as *rojak* language), some interviewees tended to code-switch between Malay and English when giving further explanations. The average interview lasted approximately 40–120 minutes, depending on the willingness and ability of the interviewees to discuss the topics. At the end of each interview, I solicited personal contact details for possible follow-up interviews in future. The ethical consideration will be discussed in the next section.

6.3.1.3 Ethical Considerations

Ethically, it was necessary for the researcher to obtain the permission of the media and ENGOs where the interviewees worked. Thus, I wrote an official letter to the Media A and B, and ENGOs A and B to get permission to conduct an interview with their staff. The supporting letter from the principal supervisor is attached as Appendix B. During the interview, I clearly explained the objectives and scope of this research. Permission to audio-record the entire conversation was also obtained from all participants. I also explained to all interviewees that the data gathered would only be used for academic purposes and would be treated as private and confidential. This included retaining the anonymity of the interviewees. Thus all the interviewees were labelled with identification code as displayed in Table 6.1 below. The instrument for the semi-structured in-depth interviews will be discussed in the next section.

Table 6.1: Identification codes for interviewees

Interviewees' Organisations	Interviewees' identification codes
Media A	EJ1, EJ2, EJ3, EJ4, EJ5, EJ6
Media B	EJ7, EJ8, EJ9, EJ10, EJ11, EJ12, EJ13
ENGO A	EN1, EN2, EN3, EN4, EN5, EN6
ENGO B	EN7, EN8, EN9, EN10, EN11

6.3.1.4 The Instrument for the Semi-Structured In-depth Interview

As mentioned in Section 6.3.1, the in-depth interview questions were formulated using a semi-structured format. The interview began with a request for demographic information, including name, gender, educational level, position in the organisation and years of work experience. Demographic information is necessary to indicate the influence of work experience and level of education on the responses. Subsequently, the interview began with the opening question: “Which type of environmental issue is most commonly presented in your newspaper/newsletter and why?” This question not only assisted the interviewees to get acquainted with the topic but was also important for the researcher to obtain overarching information about the environmental topics that are usually presented by the media and ENGOs in Malaysia.

After that, the interview continued with questions related to the roles, strategies, barriers, and representation in environmental communication. It is worth noting that I developed the entire interview questions based on the theoretical framework of this study (see Chapter 5). All the interview questions were also validated by two key experts (i.e. the principal supervisor, Prof. Dr. Harald Heinrichs and the external advisor from Malaysia, Dr. Nik Norma Nik Hasan) at two separate meeting sessions held on 11 June 2014 and 2 July 2014 at the Faculty of Sustainability, Leuphana University of Lüneburg, Germany. However, a few questions were amended after the pilot test, as discussed in the following section (6.3.1.5). All the interview questions for Media A, Media B, ENGO A and ENGO B are listed in Appendix C. The result of pilot semi-structured in-depth interviews will be discussed in the next section.

6.3.1.5 The Pilot Semi-Structured In-depth Interview

By its very nature, a pilot study is a “test run” or “dress rehearsal” for a study (Chenail, 2011, p. 257) or is a small-scale version of a larger study (Almirall et al., 2012) that allows researchers to test their ideas, methods and questions before they embark on the full research (Maxwell, 1997; Nunes et al., 2010). A key principle of a pilot study is that it is a method used to test the feasibility of the

study and is also an opportunity for researchers to adjust and revise their main study (Kim, 2010a) and refine the research questions (Turner, 2010) before embarking on the intended study. These statements are supported by Thabane's et al. (2010) statement as follows:

The famous proverb from the African Ashanti folks mentioned that we cannot know the depth of river by testing using of our own feet, therefore, the main objective of pilot studies to be conducted is to gauge the feasibility to avoid problem on our large study that can drown the whole of our research progress (p. 1).

In addition, a pilot interview is conducted with a group of people that have a similar background and interests to those in the actual study (Turner, 2010). Four interviewees (two from the media and two from the ENGOS) were involved in the pilot interview, which was undertaken from 15 to 30 July 2014 in Penang, Malaysia. The interviews spanned 40–90 minutes and were recorded with permission. The pilot interview received a good response and went smoothly with the help and support of all the interviewees.

The findings of this pilot interview showed that most of the questions could be understood well. However, there were four questions that were unclear to some interviewees. Thus, all these questions were revised, edited and explained in different ways in order to make them clear and precise. These questions were: (1) do you think that the media has a specific strategy for communicating environmental issues? (2) do you see ENGOS as a good partner in environmental communication? (3) do you think ENGOS are dependent on their news sources for communicating environmental issues? (4) who is your most common primary source? Nevertheless, there were three new questions added to the interview questions: (1) how would you describe self-censorship in environmental communication? (2) usually, Malaysian ENGOS face problems with their funding. How would you comment on this? (3) how would you comment on media ownership in Malaysia? It is noteworthy that all these questions were added after completing the pilot interview, as I realised that most of the interviewees discussed these topics, which were related to the research questions.

After completing the pilot interview, I discovered three main items that required further improvement in the actual study. Firstly, in the pilot interview, most of the questions could be understood and answered well by interviewees that had more years of working experience. On the other hand, those with less working experience gave less insightful answers. Taking this into consideration, it was more valuable to focus only on interviewees with at least one year of working experience. Secondly, spontaneous probing, especially on complex questions like strategy and collaboration in environmental communication was also vital in this study. Roulston (2008) stated that the researcher can encourage the interviewees to explain further, either via nods, glances, facial expressions, gestures and words like “hmm” and “uh huh”, or through a question like “Tell me more about that” (p. 682). Roulston added that probing not only encourages the interviewee to explain further but is also one of the best ways to obtain more information. At the same time, I also found that some ice-breaking sessions did not go well and caused some interviewees to feel a little uncomfortable at the beginning. Thus, for the actual study, it was necessary to have better ice-breaking sessions to build rapport with the interviewees so that they could feel more comfortable about answering the questions in a more relaxed manner (DiCicco-Bloom & Crabtree, 2006). The data obtained via the semi-structured in-depth interviews need to be analysed, which is discussed in the next section.

6.3.1.6 Data Analysis of Semi-Structured In-depth Interview

Semi-structured in-depth interview data were subject to analysis using Braun & Clarke’s (2006) thematic analysis method. Thematic analysis is one of the most common methods associated with qualitative research and has the aim of recognising, analysing arranging and reporting the patterns (themes) within the data (Braun & Clarke, 2006). Boyatzis (1998) stated that thematic analysis is the process of analysing the qualitative data by observing facts and the process of analysing people’s or a group of people’s interactions, culture, condition, etc. Boyatzis added that via thematic analysis, researchers can translate the qualitative data to quantitative. Other scholars, such as Attride-Stirling (2001), explained that thematic analysis aims to discover the key themes in the text (p. 387), which is in agreement with recent scholars like Crowe, Inder & Porter, 2015, and Quiroga &

Hamilton-Giachritsis (2016), who asserted that the main objective of thematic analysis is to discover the themes or patterns of the interview data. Within qualitative research, thematic analysis has been acknowledged as being a flexible research tool that essentially allows the researcher to obtain rich and detailed yet complex accounts of the data (Braun & Clarke, 2006). In brief, there are six phases of thematic analysis used for interview data, as shown in Figure 6.1 below.

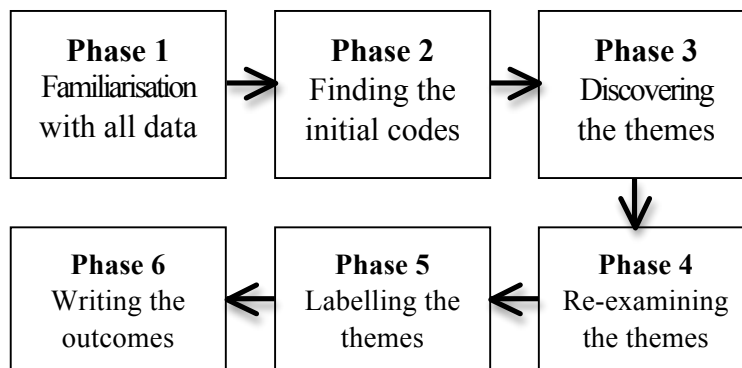


Figure 6.1: Systematic steps for thematic analysis (Braun & Clarke, 2006)

In the first step, the researcher is advised to be conversant, to comprehend and to immerse him/herself in his/her own interview data. Braun & Clarke (2006) strongly emphasise the importance of “immersion” of data through the process of listening to audio-recordings several times, so that the researcher can find the meaning and patterns (themes) in the data. Most importantly, after becoming familiar with the data, the researcher needs to embark on transcription. For transcription, all the audiotapes from the interviews are transcribed verbatim into text, including all non-lexical utterances such as “ah”, “mmm”, etc. All the non-lexical utterances and punctuation must be transcribed correctly so that the researcher can understand the correct meaning of the interview. Most importantly, transcription also involves translation from one language to another (Davidson, 2009). As some of the interviews were conducted in Malay, it was mandatory for the researcher to carefully translate the transcripts from Malay to English, if necessary.

After completing the transcription, in the next phase, the researcher is recommended to start generating the initial codes through a coding process. In short, “a code is a tag or label for assigning units of meaning to the descriptive or

inferential information compiled during a study” (Miles & Huberman, 1994, p. 56). According to these authors, codes can consist of “words, phrases, sentences, or whole paragraphs” (p. 56). Hence, coding is the process of labelling the codes as specific categories of information (Charmaz, 2006) and reducing the complexity of the data into manageable parts (Housley & Smith, 2011). Charmaz added that coding allows the researcher to “distill data, sort them, and give a handle for making comparisons with other segments of data” (p. 3). Braun & Clarke (2006) also stated that coding can be done via a data-driven (deductive) or theory-driven way (inductive), or through both ways. This means the codes can be found from the data or from a pre-existent theory or framework used in this study. For this study, I have used the MAXQDA11 software instead of a manual coding process.

Next, in the third phase, the researcher must explore the potential themes and sub-themes that emerge from the extensive list of codes. A theme can be understood as a pattern that is discovered by the researcher from the transcripts of interviews (Joffe & Yardley, 2004). Braun & Clarke (2006) stated that “a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the dataset” (p. 82). This clearly means that the themes must reflect the research questions of the study. After completing the theme and sub-theme search process, the researcher must refine the themes and sub-themes. The refinement of themes and their respective sub-themes is essential, so that the data are not repetitive or extensive enough to summarise a set of ideas contained in numerous text segments (Attride-Stirling, 2001). Next, in the fifth phase, the researcher must group and name these themes. Finally, in the sixth phase, the researcher can produce his/her report or dissertation. This study also used quantitative methods, which are discussed in the next section.

6.4 Quantitative Methods

Often, quantitative methods are associated with any procedure that uses numbers, statistics and measurement (Westerman & Yanchar, 2011), such as the percentage of patients with certain diseases (McCusker & Gunaydin, 2015). This is obviously

in contrast to qualitative methods, which deal more with non-numeric material such as words, speech, videos, etc. (Syed & Nelson, 2015; McCusker & Gunaydin, 2015). Quantitative methods are in line with the positivism paradigm (Babones, 2015; Syed & Nelson, 2015), which places more emphasis on the objectivity, replicability and generalisability of the findings (Harwell, 2011). The objectivity of quantitative methods makes the data less biased, as the result is not analysed by the researcher but entirely through statistical tests. There are several quantitative methods that have been widely used in social science research such as surveys, experiments and quantitative content analysis. However, this research focused on quantitative content analysis of newspapers and ENGOS' newsletters, as described below.

6.4.1 Quantitative Content Analysis

In brief, it is widely known that content analysis is a popular method used by many media scholars for analysing the media material, especially text or images (Joffe & Yardley, 2004). Through content analysis, the researcher can also discover the intention or other characteristics of the communicator, such as their ideology or propaganda (Devereux, 2003). Most importantly, content analysis also allows the researcher to investigate the trends, patterns and differences of media messages (Krippendorff, 2004). Additionally, as commonly applied in the social science sphere, there are two types of content analysis, which are, quantitative and qualitative content analysis, which have a long-standing history in social science research. Quantitative content analysis can be understood as:

“The systematic and replicable examination of symbols of communication, which have been assigned numeric values according to valid measurement rules and the analysis of relationships involving those values using statistical methods, to describe the communication, draw inferences about its meaning, or infer from the communication to its context, both of production and consumption” (Riffe, Lacy, & Fico, 2005, p. 25).

Unlike qualitative content analysis, which is more focused on the interpretation and explanation of media content, quantitative content analysis relates to statistics using numbers, frequency analyses, etc. Historically, quantitative content analysis of newspapers gained popularity among the researchers in the US in the 1920s (Sjøvaag & Stavelin, 2012). One of the most remarkable quantitative content analyses was published in the late 1940s via Lasswell et al.'s examination of 60 years of editorials in five prestigious world newspapers (French, German, British, Russian and the US) in an effort to investigate the change in the international political system (Krippendorff, 2004; Riffe, Lacy, & Fico, 2005). Since then, quantitative content analysis of newspapers has been widely applied in social science research.

Since this study only focuses on quantitative aspects, particularly the amount of environmental articles, sources and images represented in Malaysian newspapers and ENGOS' newsletters rather than interpreting the media text (semiotics or narrative), it is necessary to note that only quantitative content analysis was chosen and used in this study. A qualitative content analysis involving the analysis of the meaning of text (Devereux, 2003, p. 193) in Malaysian newspapers and ENGOS' newsletters was not included in this study. The sample selection for quantitative content analysis will be discussed in the next section.

6.4.1.1 Sample Selection

The samples selection for the quantitative content analysis was similar to the characteristics of the sample selection for the semi-structured in-depth interviews. This means that only printed newspapers from Media A and B, and newsletters from ENGOS A and B were used in this study. All the samples were searched by the researcher manually without using any archival search engine and were judged by the researcher individually (Djerf-Pierre, 2012) from all sections (page by page) of the newspapers (Rukavina et al., 2012) and ENGOS' newsletters. In addition, the sample of newspapers and ENGOS' newsletters were taken from a three-year period: 2012–2014. The main motivation behind the selection of this timeframe was to fill a gap in the current research. Until recently, there has been

only limited research on the representation of environmental issues in Malaysian newspapers conducted by scholars, as presented in Table 6.2 below.

Table 6.2: Trends of prior studies of the representation of environmental issues in Malaysian newspapers

Scholar(s)	Trends of studies
Mariah, Raihanah, & Md. Salleh (2004)	Environmental issues covered on two selected Malaysian newspapers for 2003.
Nik Norma (2007)	Representation of environmental news in four selected Malaysian newspapers for 1996, 2000 and 2003.
Hamidah et al. (2012)	Environmental reporting in four selected ethnic newspapers (English, Chinese, Tamil) for 2002–2006.
Haroon et al. (2012)	Environmental letters to the editor in four selected Malaysian newspapers for 2006.
Fernandez, Lean & Khor (2012)	Landslide coverage in The Star newspaper for 7–20 December 2008.
Azman et al. (2012)	Sources of news used for the Broga Incinerator project and the Selangor Dam initiative by three selected newspapers from January 2002 to December 2007.
Ihediwa & Ishak (2015)	Environmental crises in two selected Malaysian newspapers for 2007–2009.
Nor Jijidiana et al. (2015)	The portrayal of global climate change in four selected newspapers (<i>Berita Harian</i> , <i>Utusan Malaysia</i> , The Star and NST) between 2008 and 2010.

Table 6.2 clearly shows that the most recent studies of environmental coverage and representation were in the year 2010. Therefore, by studying more recent years (2012 to 2014), this study offers an update of the current environmental issues represented in two selected newspapers in Malaysia. In the context of Malaysia, only limited previous studies have investigated ENGOS' newsletters. Most of the recent studies related to ENGOS focused on the environmental information that is presented via the new media like websites and Facebook. Jauhariatul & Jamilah (2011), for example, studied the dissemination of environmental information by 10 Malaysian ENGOS via Facebook while Aida Nasirah et al. (2014) studied the power of photographs for communicating environmental campaigns on three selected Malaysian ENGOS' websites.

Without doubt, the use of ‘new media’ in environmental communication is very important in today’s society but the importance of traditional media like newsletters should not be overlooked either. Newsletters still play a vital role for the Malaysian ENGOS, especially as a tool for disseminating environmental information and providing updates on their activities to their specific target groups like employees, the public and the media. Most importantly, newsletters play a key role in educating a less literate audience about one particular issue (Harmon, Grim, & Gromis, 2007), namely the environment. Thus by studying the ENGOS’ newsletters in recent years (2012–2014), this study also offers an update of the current environmental issues represented in two selected ENGOS’ newsletters in Malaysia, which is unavailable in previous studies.

The other motivation for selecting the years of 2012–2014 for this study was the fact that notable environmental events occurred within these three years in Malaysia and Asia in general. These included the following: (1) the most serious atmospheric haze in Malaysian history which occurred on 21 June 2013, (2) the earthquake in Aceh, Indonesia on 18 April, 2013, (3) the earthquake in Sumatra, Indonesia on 7 July 2013, (4) Typhoon Nari in Vietnam on 13 October 2013, (5) Tornado Kanto in Japan on 3 September 2013, (6) Cyclone Phailin, India on 14 October 2013, (7) the atmospheric haze in Malaysia on 15 March 2014, and (8) Typhoon Fung-Wong in Manila, Philippines on 14 September 2014. The sources of the sample for quantitative content analysis will be discussed in the next section.

6.4.1.2 Sources of the Sample

The newspaper articles were accessed from the library of Universiti Putra Malaysia, while the ENGOS’ newsletters were accessed from the ENGOS website and the library. The newspapers were only available as printed versions and therefore, I had to obtain permission from the library to scan or take photos of them. The ENGOS’ newsletters were available in both hard and soft copy. However, for the newspapers, 10 copies of the selected sample were unavailable at the Universiti Putra Malaysia (UPM) library: those dated 20 August 2012, 11 February 2013, 9 August 2013 and 26 December 2013 for Newspaper Media A,

and 20 August 2012, 11 February 2013, 11 May 2013, 9 August 2013, 5 October 2013 and 31 October 2013 for Newspaper Media B. For all these missing copies, I have visited the Universiti Kebangsaan Malaysia (UKM) library and obtained permission to use their microfilm newspaper collection. The sampling technique for quantitative content analysis will be discussed in the next section.

6.4.1.3 Sampling Technique

Sampling is the way to obtain a sub-population from a bigger population (Neuendorf, 2002). Through sampling, the entire population can be represented by a subset unit. Thus, for the quantitative content analysis of this study, I decided to use stratified constructed week sampling as a technique for selecting the sample of environmental articles published in Malaysian newspapers.

In brief, stratified sampling is the process of separating the bigger population into smaller groups (Riffe, Lacy, & Fico, 2005). In stratified sampling, “each sampling unit belongs to only one stratum, and the researcher carries out random or systematic sampling for each stratum separately” (Krippendorff, 2004, p. 115). One common type of stratified sampling is stratified constructed week sampling, which is the technique of constructing a week to represent all days of the week as a sample of the study (Riffe, Aust, & Lacy, 1993). For example, constructing one week of one month’s population could involve one Monday, one Tuesday and so forth, until all days of the week are represented as a sample of the month (Luke, Caburnay, & Cohen, 2011). By comparison to random sampling, the stratified constructed week technique is considered to be much better because it is able to demonstrate the impact of cyclic variation and avoid under-sampling and over-sampling phenomena (Riffe, Aust, & Lacy 1993; Riffe, Lacy, & Fico, 2005). Stratified constructed week sampling is extensively applied in newspaper content analysis studies and has also been recognised as one of the most efficient sampling techniques for the study of newspaper content (Riffe, Aust, & Lacy, 1993) due to its ability to reduce sampling error (Neuendorf, 2002).

Ordinarily, in the constructed week sampling technique, nine constructed weeks of a five-year period is preferred over 10 constructed weeks – two from

each year is enough to represent the newspaper (Lacy et al., 2001). However, since this study concentrated only on a three-year period (2012–2014) instead of five, I therefore used the constructed week sampling technique using the yearly basis calendar improvised by Laar (2010) in his research on the coverage of reproductive health issues including family planning, abortion and HIV in the Ghanaian Daily Graphic newspapers from 1 January 2008 to 31 March 2009. This constructed week sampling technique using the yearly calendar was inspired by Riffe, Aust & Lacy’s (1993) stratified constructed week sampling approach and it is more comprehensive and holistic, as “one day is taken from a string of consecutive weeks” (Cohen, 2012, p. 539), as four to five copies were analysed each month. In summary, there were more than 60 copies of newspapers from one publication analysed each year. This was in line with the recommendations of Lacy et al. (2001), and Long, Slater & Lysengen (2006), whereby the constructed week sampling must be able to represent all days (Monday to Sunday) so that it can represent all samples. The constructed week sample using a yearly calendar from 2012 to 2014 can be seen in Figure 6.2 below.

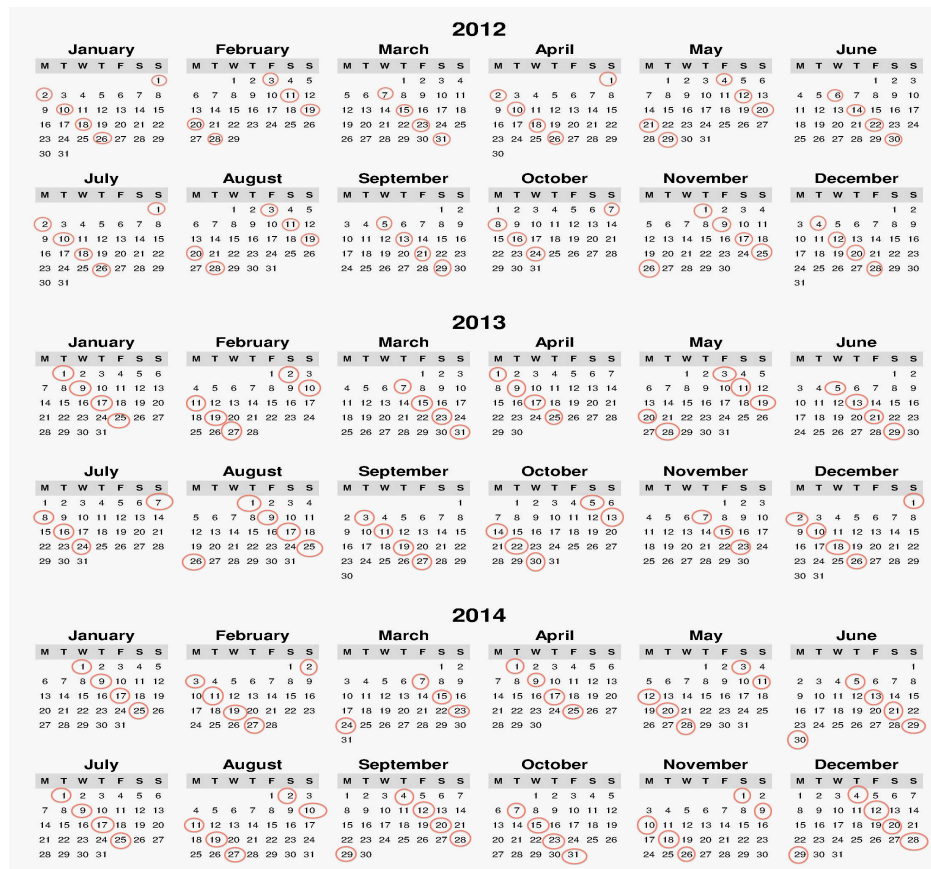


Figure 6.2: Constructed week sample for 2012 to 2014

By looking at Figure 6.2, I started the constructed week sampling from the first day of the year (2012), which fell on a Sunday, then continued to Monday of the following week (circled in red). This pattern was followed throughout the year. From this constructed week sampling using a yearly calendar, eight constructed weeks that consisted of each day were created: eight Mondays, eight Tuesdays, etc. for each newspaper. The same constructed week sampling process was repeated for the 2013 and 2014.

However, it ought to be pointed out that the constructed week sampling technique was only applied to the Malaysian newspapers sample and not to the ENGOs' newsletters. For the ENGOs' newsletters, I have decided to analyse all the environmental articles, as the stratified sampling technique is best for a big sample of textual data within a content analysis study (Luke, Caburnay, & Cohen, 2011). Moreover, the number of environmental articles in the ENGOs' newsletters was rather small compared to the newspapers as they are published on a monthly (ENGO A's newsletter) or quarterly basis (ENGO B's newsletter). The unit of analysis for quantitative content analysis will be discussed in the next section.

6.4.1.4 The Unit of Analysis

In this study, the unit of analysis was the environmental information represented in the newspapers and newsletters. As stated in Chapter 2, the environment in the context of this study can be understood as the components surrounding and touching human life, including air, water, soil and animals. Environmental information can be considered as any information published in Malaysian newspapers and ENGOs' newsletters on topics like water pollution, haze (smog) and oil spills. Some science and sustainability issues that are related to the environment are also included in this study. However, scientific issues that are related to other topics like cancer and economic and social issues like poverty cannot be included as environmental information. The result for the pilot test will be discussed in the next section.

6.4.1.5 The Pilot Test: Inter Coder Reliability

In brief, inter-coder reliability or sometimes known as inter-coder agreement, can be described as a process where independent coders reach the same conclusion after they assess the characteristics of the messages (Lombard, Duch, & Bracken, 2002). In other words, inter-coder reliability proves that the selected coders agree on the coding of text and thus the coding can be considered as reliable and valid to use for the study (Hruschka et al., 2004). In the realm of content analysis, inter-coder reliability is an obligatory component of determining the validity of the data (Sjøvaag & Stavelin, 2012).

It is widely known that for inter-coder reliability tests, the researcher needs two or more coders to categorise the content (Lombard, Duch, & Bracken, 2002; Riffe Lacy & Fico, 2005). Wimmer & Dominick (2011) clearly stated that individuals who are suitable to become coders should be familiar with the background of the study. Thus, for the purpose of this study, it was decided that two coders with background knowledge of environmental communication in Malaysia should be selected. These two coders were given an explanation of and training in their responsibilities and the details of the coding sheet and coding protocol.

For the representative sample in the inter-coder reliability test, Lombard, Duch, & Bracken (2002) suggested that a good rule of thumb is 30 sample units. Other scholars like Kaid & Wadsworth (1989, cited in Riffe, Lacy, & Fico, 2005) claimed that 5–7% of the total population is sufficient for inter-coder reliability tests. Given these explanations, for this study, I decided to randomly select 7–8% of the representative sample from the entire population of newspapers and ENGOs' newsletters. As the entire population of environmental articles in Media A and B's newspapers, and ENGO A and B's newsletters was 2050, all coders were given 160 random representative samples to analyse. Both coders were given three months (January 2015–March 2015) to accomplish the coding using on the coding sheet, after which their agreement level was calculated according to Cohen's kappa formula:

$$K = \frac{\text{Pr}(a) - \text{Pr}(e)}{1 - \text{Pr}(e)}$$

Where Pr(a) is the relative observed agreement between two coders (Berry & Mielke, 1988; De Vries et al., 2008; Shan & Wang, 2014) and Pr(e) is the probability that the agreement is due to chance (De Vries et al., 2008). The criteria used to evaluate the inter-coder reliability are shown in Table 6.3 below. The results of Cohen's kappa test using SPSS software found that the overall reliability between the two coders in this study was Kappa = **0.816**. It is therefore legitimate to conclude that the agreement between both coders is high and almost perfect (Landis & Koch, 1977). The coding categories for quantitative content analysis will be discussed in the next section.

Table 6.3: Inter-coder reliability agreement levels

Kappa result	Strength of agreement
< 0.00	Poor
0.00–0.20	Slight
0.21–0.40	Fair
0.41–0.60	Moderate
0.61–0.80	Substantial
0.81–1.00	Almost perfect

(Adapted from Landis & Koch, 1977, p. 165)

6.4.1.6 The Coding Categories

In general, four coding categories were constructed for the coding scheme including: (1) environmental articles' characteristics, (2) environmental articles' themes, (3) selection of sources for environmental articles and (4) images represented in the environmental articles. It is important to note that the creation of these coding categories occurred via adaptation from previous local and foreign studies (Sjøvaag & Stavelin, 2012) on environmental coverage in the media, and adjustment according to the results of the inter-coder reliability test.

The first coding category covered 10 characteristics of the environmental articles: (1) organisation, (2) day, (3) month, (4) year of publication, (5) language used in the article, (6) genre of the article, (7) placement (page) of the article, (8) length of article, (9) geographical context of the article and (10) author of the

article. Within these 10 environmental article characteristics, the genre classification was adopted from Mariah, Raihanah & Md. Salleh (2004) and Batta, Ashong & Bashir (2013). Next is the category of the main themes of the environmental articles. For the main themes, 28 variables were adopted from other studies conducted on environmental coverage in the media such as Mariah, Raihanah & Md. Salleh (2004) and Nik Norma (2007) in the Malaysian context, along with Kostarella, Theodosiadou & Tsantopoulos (2013) in the foreign context. However, after completing the pilot test, I found new themes of environmental topics that had not been mentioned by prior researchers but had been included in the newspapers and ENGOS' newsletters such as cloud seeding, drought, lightning, urban greening, clogged drains, etc., which can be found on the coding sheet (see Appendix D). Thus I have decided to include these in the main themes.

The third category was the sources of the environmental articles, which were divided into five sub-categories: (1) with or without sources, (2) number of sources, (3) main article sources, (4) secondary article sources, and (5) politician sources quoted on the article. All these sub-categories were developed from previous studies, namely, Mariah, Raihanah & Md. Salleh (2004) and Nik Norma (2007). Finally, the fourth category was image representation in the article. Within this category, there were also five sub-categories: (1) with or without images, (2) number of images, (3) forms of images, (4) types of images and (5) connectivity of the images to the article. Out of these five sub-categories, the fourth sub-category (types of images) was constructed from Difrancesco & Young (2010). The full explanation of all the coding categories is presented in the codebook (see Appendix E). I have used the SPSS 22.0 software to analyse all the quantitative content analysis data instead of a manual analysis. The limitations of the study will be discussed in the next section.

6.5 Limitations of the Study

The first limitation of this study is associated with the interviewees; especially the journalists' and editors' time constraints. The nature of the journalists or editors work is very hectic, especially in doing news coverage. This was similar for some

ENGO practitioners, especially those who have higher positions and are always busy with meetings and projects, making their timetable fluid and not fixed. Although I made appointments, last-minute changes to the schedule were inevitable. In fact, some of the interviewees had very limited time and had to rush during the interview. To overcome this, I took the initiative to warn them via email that the interview session would last at least one hour. If the interviewees were busy during working hours, I presented them with the alternative of meeting according to their availability. Thus some of the interviews were held in the evening after work.

Secondly, as mentioned by another researcher (Nik Norma, 2007), there is a limited number of environmental journalists in Malaysia. In fact, there are no environmental desks in Malaysian media organisations. Most of the journalists who do environmental news work at other desks, like the general desk or the science and technology desk. They are also required to do other types of reporting and not totally focus on writing environmental stories *per se*. Thus, I had only a limited number of interviewees and had to ensure that only journalists experienced in environmental stories from Media A and B participated in this study.

Another limitation emerged from the process of collecting data from environmental news articles in selected newspapers for quantitative content analysis. During data collection, I were unable to obtain six copies of the sample newspapers from Media A and B. Two copies from Media A were unavailable (20 August 2012 and 9 August 2013). For Media B, four copies were unavailable (20 August 2012, 11 February 2013, 9 August 2013 and 26 December 2013). It is worth mentioning that these copies were unavailable, not because they were not stored in the library archives but because the six dates were the public holidays of *Eid al-Fitr* and the Chinese New Year. Therefore, there was no newspaper printed on these days. As such, these six issues were unavailable for analysis in the study. The summary of this chapter will be presented in the next section.

6.6 Summary

This chapter gives an explanation of the research design and methods used for answering the research questions of this study. A sequential mixed method was employed as the research design of this study. Two methods were used to answer the four research questions of this study, including semi-structured in-depth interviews as the core method and quantitative content analysis. Four organisations were involved in this study: Media A, Media B, ENGO A and ENGO B. These four organisations were selected based on their active participation in environmental communication activities in Malaysia. For the semi-structured in-depth interviews, 23 informants from Media A and B and ENGOs A and B were interviewed by the researcher in order to explore their roles, strategies, barriers and representation in environmental communication. For the quantitative content analysis, the newspapers of Media A and B, and the newsletters of ENGOs A and B were analysed to be used as a cross-check of the selected segment of the interview results. The findings and discussion on the roles of the Malaysian media and ENGOs in environmental communication will be discussed in the next chapter.

CHAPTER 7

ROLES OF THE MALAYSIAN MEDIA AND ENGOs IN ENVIRONMENTAL COMMUNICATION IN MALAYSIA

7.1 Introduction

The focus of this chapter is to answer the first research question of this study: *What are the roles of the Malaysian media and ENGOs in environmental communication?* To answer this question, I analysed all the responses gathered from the media and ENGO interviewees via face-to-face interviews and present them as findings and discussions in this chapter. These responses were also combined with the results of a quantitative content analysis of newspapers and ENGOs' newsletters as a cross-check on a selected segment of the data. In general, this chapter is broken into seven parts, commencing with the demographic profile of the interviewees in Section 7.2 and finishing with a short summary in Section 7.7.

7.2 Demographic Profile of the Interviewees

The presentation of demographic profile of all interviewees is important, as some parts of the demographic profile like work experience, educational level and education background (i.e. study major) are relevant factors that can influence the interviewees' views of the roles, strategies and barriers in environmental communication. Motlagh et al. (2013), for instance, found that Malaysian journalists who have more experience can make fair ethical decisions during an ambiguous situation. In addition, the demographic profile of all interviewees will give a better overview to the readers of the background of the participants who took part in this study. Most importantly, presenting the demographic information of all interviewees can also provide a recent update of the profile of the Malaysian media and ENGOs working in environmental communication.

In brief, almost equal numbers of interviewees from both the media and ENGOs, including 11 (46%) interviewees from two ENGOs organisations

(ENGOS A and B) and 13 (54%) interviewees from two media organisations (Media A and B) participated in this study. The majority of interviewees ($N=14$) (58.33%) preferred to use English, the second language of Malaysia; the other 10 (41.67%) interviewees preferred Malay, the national language, as the medium for the interview session. More than half of the interviewees ($N=17$) (70.83%) were female and only seven (29.17%) interviewees were male.

Interestingly, the majority of interviewees ($N=21$) (87.5%) have at least acquired a bachelor degree. Two (8.33%) of the interviewees have a Master's degree; one was from a media organisation and one was from an ENGO. Only one (4.17%) interviewee did not hold any university degree. As expected, the majority of interviewees ($N=7$) (29.17%), particularly journalists, had a background in communication and journalism; whereas three (12.5%) journalists and two (8.33%) ENGO officers came from an environmental background ($N=5$) (20.83%). Conversely, only one interviewee (4.17%), the manager of ENGO B, had a background in sustainability, and (4.17%) journalist and one (4.17%) ENGO officer had a science background ($N=2$) (8.33%). The majority of ENGO officers ($N=5$) (20.83%) came from various backgrounds including education, graphic design, history, psychology, English literature and business administration.

In terms of working experience, the majority ($N=14$) (58.33%) of interviewees have only 1–5 years' work experience, followed by four (16.67%) interviewees with 6–10 years' work experience, three (12.5%) interviewees with 11–15 years' work experience and three (12.5%) interviewees with more than 15 years' work experience. In addition, within the ENGOS, the majority of the interviewees' were officers, including two (8.33%) communication officers, one (4.17%) former communication officer, one (4.17%) e-media officer and three (12.5%) programme officers. Only four (16.67%) managers from the ENGOS participated in this study. On the other hand, for the media organisations, the proportions of journalists and editors were almost equivalent. Seven (29.17%) interviewees were journalists and former journalists, and six (25%) of the interviewees were editors, assistant editors or former editors.

Overall, the results of the demographic information demonstrate that most of the interviewees who participated in this study had almost equivalent educational levels, work experience, gender and positions. Most of the interviewees tended to be people from professional groups and educated elites (Hanitzsch, 2005) who have acquired a higher educational background. This was in line with the findings of prior studies like Motlagh et al. (2013), who found the 169 out of 231 (73%) of Malaysian journalists had at least completed a bachelor degree. Similarly, Wesarat, Mohmad Yazam & Abdul Halim (2013) in their study on an adjacent country's NGOs, Thailand, found that all 16 NGO respondents were university graduates and two had a Master's degree.

However, regarding the study background, most of the media practitioners graduated from communication and journalism backgrounds, whereas the ENGO officers came from various backgrounds. Understandably, there were fewer interviewees who had more than 10 years' work experience, as those who have more experience tend to be people who have senior positions at the managerial level in organisations, like editors for the media and managers for ENGOs. Although Malay is the national language of Malaysia, more than half of the interviewees were more comfortable using English rather than Malay language, as English is the language of their everyday life and duties in the workplace. Past researchers like Samsiah & Aishah (2011) also discovered that English is the language used by their respondents in the workplace, especially when they communicate with other colleagues, interact with public relations staff or work with documents. In fact, most of the interviewees in this study graduated from foreign universities in Australia, the US and the UK, which made them use English more frequent than Malay. A summary of the demographic profiles of all interviewees is detailed in Table 7.1.

Table 7.1: Profile of interviewees

	Media A (N)	Media B (N)	ENGO A (N)	ENGO B (N)	Total (N)
Number of interviewees	6	7	6	5	24
Language used in the interview					
Malay	-	7	-	3	10
English	6	-	6	2	14
Gender					
Male	2	4	-	1	7
Female	4	3	6	4	17
Education level					
High school	-	1	-	-	1
Bachelor degree	6	6	5	4	21
Master degree	-	-	1	1	2
Background of study					
Communication and journalism	4	3	1	-	8
Environment	-	3	-	2	5
Sustainability	-	-	-	1	1
Science	1	-	-	1	2
Electronic	1	-	-	-	1
Art	-	1	-	-	1
Education	-	-	1	-	1
Graphic design	-	-	1	-	1
History	-	-	1	-	1
Psychology	-	-	1	-	1
English literature	-	-	1	-	1
Business administration	-	-	-	1	1
Work experience					
1-5 years	4	2	3	5	14
6-10 years	1	-	3	-	4
11-15 years	-	3	-	-	3
16 years and above	1	2	-	-	3
Position in organisation					
Journalist	4	2	-	-	6
Former journalist	1	-	-	-	1
(Chief) editor	1	2	-	-	3
Assistant editor	-	2	-	-	2
Former editor	-	1	-	-	1
Manager	-	-	3	1	4
Communication officer	-	-	2	-	2
Former communication officer	-	-	1	-	1
E-media officer	-	-	-	1	1
Programme officer	-	-	-	3	3

7.3 Analysing the Interview Data

In brief, as mentioned in Chapter 6 earlier, the interview was subjected to thematic analysis. I also embraced the notion of a 'positivist' approach to analysing the interview data. Unlike the interpretivist view, that is more subjective, the positivist approach involves the quantification of qualitative data in order to enrich the validity of the data (Miles & Huberman, 1994). Thus, in some respects, most of the interview data will be presented alongside the identification number of the interviewees who agreed with one particular perspective.

In addition, it is important to note that there were numerous themes and sub-themes that emerged from the data analysis. Hence, only selected themes and sub-themes that have high frequencies, were mentioned by all interviewees and, most importantly, were relevant to the research questions and theoretical framework (Ryan, 2006) of this study will be selected and thoroughly discussed in Chapters 7, 8, 9 and 10. Indeed, it is the core duty of the researcher to select and present the most important elements instead of inserting too much data for the readers (Ryan, 2006). In order to validate the findings and strengthen it (Nathan, Rotem, & Ritchie, 2002), a cross-check between the findings of the interview and a quantitative content analysis of newspapers and ENGOs' newsletters was also conducted on a selected segment of the data.

In presenting the interview findings, I have also included selected verbatim quotations from interviewees in order to share the interviewees' real views, perspectives and experiences with the readers (Fossey et al., 2002) and, most importantly, strengthen the readers' understanding of the themes or sub-themes discussed (Corden & Sainsbury, 2006). The verbatim quotations also serve as key evidence, enhancing the credibility and authenticity of the research findings and discussions (Fossey et al., 2002). The findings and discussion of the roles of Malaysian media and ENGOs in environmental legitimacy will be explained in the next section.

7.4 Findings: The Roles of Malaysian Media and ENGOS in Environmental Legitimacy

This section presents the perspectives of the Malaysian media and ENGOS about their roles in environmental legitimacy. Four major themes appeared under this section including: (a) environmental communication creates credibility about operating within society's expectations, (b) environmental communication creates trust between ENGOS or the media and society, (c) environmental communication creates a relationship between the media/ENGOS and society, and (d) illegitimacy. All four themes were in consistent with the organisational legitimacy theory, which was discussed in Section 3.2.1 in Chapter 3 of this study.

(a) Environmental communication creates credibility about operating within the society's expectations

In brief, working on environmental issues creates credibility to the media and ENGOS. Society undoubtedly gives huge respect to the media and ENGOS when they work on green issues and even label them as 'good', 'responsible' or 'green' organisations, as confirmed by one of the interviewees from Media A:

“...I think, yeah, it makes you look like a green newspaper... It makes you [look] like you care about consumer issues...” (ID EJ5).

On a similar note, for the Malaysian ENGOS, their environmental communication works can create credibility within society and, more importantly, the society expects them to voice an opinion if any environmental issue occurs in Malaysia, as stated by one of the interviews from ENGO A.

“...Especially when it comes to a lot more sensitive issues like Lynas... So they expect ENGOS to be vocal and they are upset if ENGOS do not say anything about it...” (ID EN5).

One of the main reasons why environmental communication can create credibility and legitimacy for the ENGOS or media in the eyes of society is because the

environmental issue itself is an issue that is closely associated with Malaysian society. For example, it is very easy to communicate and draw society's attention to water crisis issues (ID EN3) or highway issues, as they are related to daily life and affects them (ID EN5). One of the media interviewees stressed:

“...Because we [are] close to the environment, we live in the environment, that is why we – the journalists, media – try to deliver something that is related to them...” (ID EJ10).

(b) Environmental communication creates trust between ENGOs or media with society

Interestingly, 10 out of 11 ENGOs and 5 out of 13 media interviewees were optimistic that environmental communication can create trust between them and Malaysian society. In short, ENGOs work on environmental issues not for their own sake but also for society (ID EN11). Therefore, to ensure society maintains trust and confidence in them, Malaysian ENGOs usually **keep all work as transparent** as possible, especially as to how their money from donations has been used or channelled.

“...Partly to get them informed of what we do, and we... Tell them, ‘OK, this is where your money has been channelled to’, the transparency... We need to tell the stories to people so people know where their money, you know, goes to, what we have done with the money, you know, donation... That is important...” (ID EN1).

In addition, to maintain trust, ENGOs not only need to be transparent as to how the money has been spent but also as to how the environmental work has been conducted and has progressed. Malaysian society must always be updated on current environmental work or projects via reports or newsletters.

“...We have to give them reports of conservation means, like how many turtle eggs, how many nests we have been able to save from poachers and then to put them safe in the hatchery, and as much

transparency as possible so that we will continue to be deserving of people's trust..." (ID EN4).

Apart from transparency, the ENGOs' work that occasionally **engages with society on the ground via massive environmental programmes and campaigns** also makes society support and trust the ENGOs more. One of the ENGO interviewees stated:

"...Because especially in places like Terengganu where our presence is a lot more visible, because we have done so many [things] like community engagement work, and then we [are] always doing road shows like schools; we have community-based organisations that we actually established and support..." (ID EN5).

Interestingly, not only the ENGOs but also the media also realised that the ENGOs' way of working is more aimed at community engagement and through that, they establish a good relationship with and earn trust from the public, as expressed by one of the media interviewees:

"...Maybe ENGOs have their own planning, they like to [have] close contact with people, go to society, and they do not need promotion from media..." (ID EJ9).

On the other hand, there is no doubt that communication is a bridge to connect with society (ID EJ8, EN2) and instead of having one-way communication, it would be better to establish two-way communication between the media or ENGOs and society (ID EJ11, EN2). In fact, **communicating environmental messages** that are often associated with the facts, responsibility and real issues that are close to human life makes it easy to earn trust from society. This is clarified by one of the interviewees from Media A:

"...I think because we report real issues, which I say, you know, there is nothing political, nothing fun..." (ID EJ1).

For Malaysian ENGOs, it is easy to gain public trust, as they work under a **strong and well-known brand**. ENGO A is one of the most popular international ENGOs that has been in Malaysia since 1972, while ENGO B is the oldest ENGOs in Malaysia which was established before Malaysia's independence in 1940. In fact, both ENGOs are the two most active and have many environmental-related programmes and projects, as stated by interviewees from ENGO A and one from ENGO B below:

“...I think we are lucky to be part of a very establish global organisation, so, I think, people really trust the brand...” (ID EN4).

“...Because we have formed, we have been here since 1940s, even before all the other NGOs...” (ID EN8).

Additionally, society's trust of the ENGOs can be gauged through the **continuous support provided by loyal followers, members and volunteers**. Although the two ENGOs had different organisational structures, with ENGO A calling their supporters as “followers” while ENGO B named them “members”, both followers and members continuously show their support for the ENGOs' work and events. Two ENGO interviewees, the manager and the communication officer from ENGO A, expressed this view:

“...They trust us; if not, they [would] not be supporting us up till now; we have over like fifty thousand [55,000] supporters thus far...” (ID EN2).

“...Even they do not donate money, they do support our work and I think that shows there is trust...” (ID EN3).

Unlike Malaysian ENGOs, who gauged trust through the support that they obtained from their members, followers or volunteers, most media interviewees said that Malaysian society's trust of the media's environmental communication work could be seen via **readers' feedback and comments**. One of the editors from Media A noted:

“...I think a lot of readers... From the feedback that I get, a lot of readers believe a lot of stuff...” (ID EJ2).

(c) Environmental communication creates a relationship between ENGOs or the media and society

In short, out of 13 media and 11 ENGO interviewees, 8 and 4 of them, respectively, agreed that environmental communication also creates a relationship between them and Malaysian society. By communicating about environmental issues, the media and ENGOs not only save the environment but they also indirectly catch the audience’s attention. It makes **society think that these two social actors work for them and are on their side**, as expressed by one of the media interviewees:

“...I mean when someone, exposing or talking about things, you know, like, Isabelle Lai’s piece about the Cameron Highland stuff, like, you know, it maybe will make the public feel like the media is on your side, and, like, whatever they are going through, they find it kind of difficult to get you to pay attention to their problem; it makes their... It does create a sense of, you know, you are on [the] same side... Helping each other...” (ID EJ6).

In addition, some of the interviewees revealed that **Malaysian society also appreciates the media and ENGOs’ environmental communication work**. Some of the readers even personally contacted the media to express their appreciation. For the ENGOs, society also shows their gratitude through their warm and friendly interactions at environmental events.

“...I won’t say that they’re hostile toward us... What I have seen so far in Peninsular is that they appreciate the work we are doing...” (ID EN5).

Society sometimes goes beyond appreciation: some **journalists are even famous in Malaysian society and have celebrity-like status**. The public recognises their work and effort and talks about it.

“...I guess your name is out there; you are associated with environmental reporting so the stakeholders will, you know, like all the ENGOS, the politicians and everything...” (ID EJ3).

In fact, unlike the ENGOS, who have limited distribution of their newsletters to only their members and followers, the media have more privileges, as they write environmental stories in newspapers that are open to all readers. Newspapers are also published on a daily basis, whereas newsletters are only published on quarterly basis, and most of the environmental issues in the newspapers are associated with human life. Thus, this kind of **environmental write-up can create a relationship** between the media and the readers.

“...Especially the report that is close to them, they will appreciate it, so this kind of report make you close [to] the public...” (ID EJ8).

On the other hand, both the media and ENGOS agreed that **programmes involving society not only create trust but, more importantly, create a strong relationship**. In comparison to the media, ENGOS have more environmental programmes, as this is part of their strategy, such as organising a campaign with local society or a workshop at a school. The relationship develops because the ENGOS spend their time with the public and they get close to each other, as described by one of the ENGO interviewees, who is the education programme officer and editor for ENGO B:

“...Sometimes, like myself, when we go to the school, we, like, build a relationship with that school in person... And then they always wait for the next programme...” (ID EN9).

Both the Malaysian ENGOS and the media agree that environmental communication creates a relationship with Malaysian society and this can be

measured through the **support of the public, especially in consistently contacting the media or ENGOs if any environmental problem occurs**. In fact, some of the public even contact the media first then the authority if something urgent happens such as a landslide.

“...They all call... Sometimes public tell us, ‘Miss, can we talk to the editor?’ ‘Yes, you can but why?’... ‘Here, there is soil movement,’ for example. ‘The tree and soil here did not fall down before but now it is falling down’... Sometimes *Pihak Berkuasa Tempatan* is also angry with media because when the landslide occurred, the media came first...” (ID EJ11).

(d) Illegitimacy

Although not many ENGOs (1 out of 11) and media (2 out of 13) interviewees spoke about illegitimacy, I believe that this is worth highlighting as illegitimacy (the situation when the ENGOs’ or media’s actions in environmental communication are seen as undesirable by Malaysian society) is crucial to be discussed, as the ENGOs and the media should be aware of and so they can fix it in the future. One main reason why environmental communication may not create legitimacy is because the **environment is not the issue that is the top priority of Malaysians**.

“...I think it is hard because, again, a lot of people do not really care about environmental issues...” (ID EJ5).

“...I think society’s expectation is less; our society thinks it is not their responsibility...” (ID EN5).

7.4.1 Discussion: The Roles of Malaysian Media and ENGOs in Environmental Legitimacy

Generally, in line with the theoretical debate on the roles of the media and ENGOs in environmental legitimacy presented in Section 3.2.1, this section will

discuss the media and ENGO interviewees' interpretations of the roles of the Malaysian media and ENGOs in environmental legitimacy in detail. At the macro-level, legitimacy can be chiefly understood as when any action of an organisation is seen as right, proper and desirable within society's norm and beliefs (Suchman, 1995; Bansal & Clelland, 2004; Vergne, 2011). In essence, legitimacy can be gained or lost based on how society views the organisation's behaviour as to whether it is appropriate or inappropriate (Panwar, Hansen, & Kozak, 2014). Interestingly, this study shows that environmental communication by the Malaysian media and ENGOs has a positive impact on their organisational legitimacy, particularly in building credibility, trust and relationships with Malaysian society.

In terms of credibility, both the media and ENGO interviewees confirmed that Malaysian society perceived their organisation as being a good and proper organisation, which is in line with the organisational legitimacy theory. This is because the environmental information itself concerns the quality of life (Zauwiyah, Salleh, & Junaini, 2003) and it is undoubtedly an issue that is close to Malaysia's heart. Hence, communicating environmental issues indirectly conveys social approbation and credit to the media and ENGOs and marks them as a 'responsible' organisation. Taken as a whole, the findings of this study were consistent with previous research like that of Nik Nazli & Maliah (2004), who discovered that a few construction and industrial companies in Malaysia gained a positive image as an 'environmentally responsible company' via their annual reports on the environment. More recently, Maliah, Norhayati & Fatima (2014) also found several large environmentally sensitive companies have paid much attention to disclosing better environmental information in their annual reports in order to obtain credibility as an environmentally responsible company.

Ultimately, according to communication perspectives, credibility means that the receiver (the public) believes the sender (Metzger & Flanagin, 2013; Kim, 2015b), the media and ENGOs in this study. Given this understanding, it is appropriate to say that credibility has a positive correlation with trust. Within the context of this study, when Malaysian society perceives the media and ENGOs as credible organisations, this will make them trust the environmental information

delivered by both organisations, which is in line with the claim made by Zhang, Zhou & Shen (2014) that the public will only rely on information from the media that they perceived to be credible. Trust between the ENGOs and society has developed via two aspects: their way of working, which always puts transparency as a priority, and regular community engagement with stakeholders. Hughes (2014) stated that transparency, responsibility, legitimacy and accountability have been emphasised by NGOs with the aims of advancing their performance obtaining a good public image. As they have the goal of 'working and serving the society' (Lee, Johnson, & Prakash, 2012) and because they receive funds from various stakeholders like individuals, members, foundations, the government, services and contracts (Dupuy, Ron, & Prakash, 2015), ENGOs are expected to demonstrate transparency in every operations, especially on their funding so that the donors know how the money has been spent (Amagoh, 2015). Höhn (2012), who studied Namibian NGOs, stressed that transparency and accountability are crucial for NGOs and they must complete an audit and present a clear report of their accounts so that the donors can view them as 'accountable' and trustworthy.

Furthermore, in line with the findings of this study about the positive impact of ENGOs' community engagement activities on legitimacy, Lee, Johnson & Prakash (2012) also confirmed that the trust given by society to NGOs could be built via face-to-face involvement in a wide range of activities organised by the NGOs. In addition, similar to the case of obtaining credibility, by communicating environmental issues, the ENGOs, together with the media, agreed that they get trust from the public simply because the environment is an issue that affects everyone. Admittedly, for ENGOs who work under a very well-known and strong brand like ENGO A (an international ENGO) and ENGO B (the oldest local ENGO) are considered to be in a fortunate position because the general public and the members, followers, supporters and donors already know the brand. Additionally, these ENGOs obtain trust when society looks at the encouraging progress made by these two ENGOs over a long time. This is supported by Thrall, Stecula & Sweet (2014), who mentioned that well-known NGOs have a great advantage, as they do not have to struggle to build their brand and get recognition from society as much as the lesser-known groups who need to work hard in these areas. Although none of the media interviewees from this study cited their

organisation as one of the factors that could create trust and credibility between them and public, Appelman & Sundar (2016) stressed that the public's judgement of one issue published in a newspaper, for example, may be based on the identity of the media organisation and the reporter or editor who wrote the story.

In addition, the findings of this study also revealed that the roles of the media and ENGOs in environmental communication can also build a relationship with the public. One of the significant reasons highlighted by the interviewees is that their work in environmental communication plays a critical part in solving the society's environmental problem, including small issues like drain clogging in a residential area. The effort in saving the environment and solving the problem on behalf of society makes people perceive the media and ENGOs as being part of society and working on their side. Interestingly, the relationship developed between the media and the public not only makes the media a priority contact when environmental events occur (like landslides or floods) but some journalists also become famous and respected people within society. For example, one of the most well-known former journalists, Hilary Chew, from Media A was recognised by some interviewees from Media A as one of the most popular journalists in Media A. This is quite similar to Dong's (2013) research on the topic of legitimacy and journalism in China, which claimed that one of the most popular environmentalists, Liu Futang, became famous after winning the 'Citizen Journalist of the Year' award and had more than 10,000 followers on his *Weibo* social media account. Due to his renowned personality, his followers and environmental activists in China, for example, fought for his release from jail in July 2012 (Dong, 2013).

However, illegitimacy or the situation when the ENGO's and media's actions in environmental communication are seen as undesirable by Malaysian society was also discussed by a minority of the media and ENGO interviewees but is worth attention. From this position, illegitimacy occasionally occurred if there was a legitimacy gap. Summerhays & De Villiers (2012), for example, found that oil spill events have created a legitimacy gap for British Petroleum Company and this company increased the amount of their environmental annual reports in order to explain their responsibilities towards the oil spill event. However, from the

findings of this study, it was evident that illegitimacy in either the ENGOs or the media did not happen because of any gap that threatened the legitimacy (e.g. dishonest management of funds by the ENGOs or inappropriate environmental reporting by the media). Some of interviewees reported that illegitimacy occurred because of the environmental issue itself, as this is not an issue that is a priority for Malaysians and most Malaysians take it for granted. For this reason, Malaysians are more interested in consumerism issues like subsidies, the goods and services tax, the price of consumer products, utility tariffs and housing, all of which are the issues most debated by Malaysians in 2013 (Borneo Post Online, 2013). Nevertheless a study conducted by Prasad et al. (2012) on Malaysian young people's interest in news topics found that about 80% of respondents were more interested in watching entertainment news, followed by about 70% who preferred world news but only 61.7% chose the environment as their preference. Thus being legitimate within Malaysian society while discussing the environmental issues that are less favoured by the majority is not easy for the Malaysian media and ENGOs.

Overall, this section has discussed the roles of the Malaysian media and ENGOs in environmental legitimacy in detail. It has been proven that environmental communication can assist the media and ENGOs to legitimise themselves within society. Legitimacy in the context of this study means that it creates credibility for media and ENGOs, and build trust and relationship with society. Although at this moment, no illegitimacy gap has occurred, the media and ENGOs must always be careful in their actions and ensure that this will not happen in the future. Needless to say, as the two most predominant social actors in Malaysia, the media and ENGOs must always operate in appropriate ways so that they can always be seen as responsible and desirable organisations. The findings and discussion of roles of Malaysian media and ENGOs in democracy will be showed in the next section.

7.5 Findings: The Roles of Malaysian Media and ENGOs in Democracy

This section will review the Malaysian media and ENGOs' perspectives of their roles as environmental communicators in a democratic political system. In short,

three major themes were recognised under this section including: (a) types of roles played by the media and ENGOs in Malaysian democratic society, (b) ENGOs and the media should be free, and (c) current state of freedom of environmental communication in Malaysia. It is intriguing to note that the first two themes were in consistent with Jürgen Habermas' theory of democracy that was discussed in Section 3.2.2 in Chapter 3 of this study earlier but the third theme emerged via analysis of the interview data.

(a) Types of roles of media and ENGOs in democratic Malaysian society

Based on the explanation of ENGO and media interviewees, the roles of both social actors as environmental communicators in democratic society can be split into two main roles, which are roles as a watchdog and roles in creating a public sphere. In terms of the watchdog role (the elitist democratic model), most of the media (4 out of 13) and ENGO (3 out of 11) interviewees supposed they were responsible for **providing checks and balances to the government** in informing about any of the government's weakness in development and enforcement so that they can improve in future. For example:

“...To keep the authorities in check and balance in a way... The media is the fourth estate...” (ID EJ4).

“...Just to make the government know that people are not keeping quiet, you know; if you [government] do something wrong, we will question and people are looking what you are doing...” (ID EN7).

It is worth noting that the media have more **freedom to play their role as a watchdog via columns**. Unlike news article or features, which are restricted to the house style, most of the media interviewees said that the column section in the newspapers gives them more freedom to write their personal opinion or express their feeling on certain environmental issues, as stated by one of the media interviewees from Media A:

“...It is a little bit different with columns because columns are generally our own opinion; even [in] the features, we do not really write our own opinion... Yeah, the only kind of article where we will write our own opinions is columns...” (ID EJ3).

Nevertheless, to play the watchdog role with more impact, journalists also can hide their identity inside the column by using nicknames or pen names, as confirmed by one of the interviewees from Media B:

“...I have one column called ‘*Sulur Bidai*’... I hide behind that name... I inform my colleagues to not tell anyone that the journalist who writes this *Sulur Bidai* is working here... Because when people know, they will take it easy, the government will take it easy: ‘it is OK, we know this person, so we do not mind, and we do not have to take action’... But when they do not know who is writing it, they will wonder...” (ID EJ12).

On the other side, in line with the deliberative model regarding as the power of citizens’ voice in governance, some of the media (3 out 13) and ENGO (1 out of 11) interviewees believed that the roles of environmental communication within the democratic system in Malaysia also involves the **roles of creating and mobilising the public sphere** regarding any of the environmental issues presented by them via newspapers and newsletters. For example, one interviewee from Media A expressed:

“...So it is a very important thing, like, you know, people... You generate discussion from the things you write... So the discussion is there... You can tell sometimes from the comments they write on your articles, you know the discussion is there...” (ID EJ3).

Similarly, one of the interviewees from ENGO A also agreed that they hold public forums for certain issues that are related to their vision and mission.

“...Yeah, we do hold public forums in some issues – not education *per se* – but they have had forums on water issues in Penang, in Ulu Muda...” (ID EN2).

Additionally, some of the interviewees (2 out of 13 media interviewees; 3 out of 11 ENGO interviewees) believe that they also play a vital **role in becoming a platform for expressing the public’s opinions** or complaints on any environmental issues towards the government. Thus, it is the responsibility of the media and ENGOs to speak out on behalf of the public.

“...Because [the] public does not have a direct medium to the government for anything like for the development or improvement, or whatsoever, so we [the media] become their mediator to deliver what they want to...” (ID EJ10).

“...ENGO is, I believe, is a platform for a collective voice... We are a platform where everyone can, you know raise, put their voice in... If there [are] any issues, they need a platform to raise their concern and things like that, so the people’s voice that reaches the government is through ENGOs...” (ID EN8).

Similarly, the majority of media interviewees (5 out of 13) and ENGO interviewees (5 out of 11) explained that they played a crucial **role in exposing and protesting against any projects that could harm the beauty of the environment**. The media protest against such projects through their environmental write-ups (features or news articles in the newspapers); the ENGOs protest against the projects via petitions.

“...This is what I [have] done... We gave three pages to show our support towards it... We are not against this project; we protest because it has been built close to a national park... We protest because it has been built 40 metres from... The river, which is the gap for the national park...” (ID EJ11).

Unlike the media, ENGOs use petitions as a tool to protest against any projects that are harmful to the environment such as the new highway development projects in Klang Valley, as stressed by one of interviewees from ENGO B:

“...Like now, they are sending the petition, [we] do not want them to build that South Klang Valley Expressway (SKVE)...” (ID EN10).

On the other hand, within democratic Malaysian society, the ENGOs and media confirmed that they are two of the **most powerful stakeholders that can contribute towards change and improvement of the environment in the nation**. For the media, environmental write-ups in the newspaper are a powerful tool for getting quick feedback and reactions from the stakeholders, particularly the government. One of the assistant editors from Media B expressed:

“...So I made a provocation in this column to receive feedback from them... It is effective: I have received a lot of letters from the Fishery Department, Marine Park, Forestry...” (ID EJ12).

The effect goes beyond obtaining feedback: the power of media’s environmental reporting also makes certain issues become the state’s agenda, as confirmed by one of the media interviewee:

“...I mean, the things would never become the state’s agenda unless it is being brought up by the media... It became an issue once the media reported it...” (ID EJ1).

More importantly, environmental communication from the Malaysian media and ENGOs can trigger stakeholders like the government, corporate organisations or even society itself to take action in solving environmental problems.

“...Like the issues of Botak Hill, this Relau Hill; the media’s role made the forest [violation stop]... We [ran] that issue for only one week I think, then after that, the projects have been stopped on the spot...” (ID EJ7).

Interestingly, some interviewees from the media and ENGOs also said that they have the power to influence change and improvement in national environmental laws and policy. One of the interviewees from ENGO A stressed:

“...I think it was the Wildlife Act, if I am not mistaken... I cannot remember what specifically the Act was called, but it was passed in the Parliament... OK, I am not sure, what year [it was]; probably 3–4 years ago... So, we have had policy changes and we would suggest improvements on policies and we make suggestions on the Malaysian plan, the Eleventh Malaysian Plan, Tenth Malaysia Plan, so, and see whether we can fit in any aspects of environmental conservation in that plan...” (ID EN2).

(b) ENGOs and the media should be free

On analysis, the majority of interviewees stressed that the media and ENGOs should be free from any restrictions in communicating environmental information (ID EJ4, EJ5, EJ6, EJ7, EJ9, EJ11, EJ13, EN11). For the media, it is crucial for them to be free to pick out environmental stories for public edification (ID EJ1) and, most importantly, the media should not fear or favour any external factors (ID EJ4). For ENGOs, it is vital to have freedom of speech so that they can protest against any harmful projects (ID EN11). The main of reason why the media and ENGOs should have freedom in environmental communication is because both social actors serving as a medium and platform for other stakeholders, particularly Malaysian society, to obtain environmental information, voices their opinions and reach the government (ID EJ3, EJ7, EJ10, EJ12, EN1, EN2, EN8, EN10). One of the journalists and one of the ENGO interviewees shared similar perspectives of the importance of freedom in environmental communication:

“...The reporter is the middle person for the public to reach the government... If everything has been blocked, how can we create awareness? It is actually important...” (ID EJ10).

“...[An] ENGO is, I believe, is a platform and then this is what we are doing, and also we are providing a venue so it [can] help... If there is no [free public] communication, I think we do not have anything; there is no point having a platform there... because I think that is what ENGOs are for...” (ID EN8).

According to the media and ENGO interviewees, as a medium, they must always be free from any control and must not be affiliated to any party in order **to ensure the accuracy and transparency of environmental information**.

“...It is important so that it is not the party who sets the agenda; it is not the party which sets what is right, what is wrong...” (ID EJ1).

On the other hand, freedom is important for both the media and ENGOs so that they **can fairly write about and communicate any environmental issues** to the stakeholders. Fairness in environmental writing was described by both groups of interviewees as the ability to give a balanced view in any environmental write-up without bias towards any side or party (ID EJ3, EJ4, EJ6, EJ7, EJ8, EJ9, EJ12 EN2, EN3, EN4, EN5, EN7, EN8), not hiding any environmental information from public knowledge (ID EJ4, EJ12) and, most importantly, not influencing readers to believe a certain perspective (ID EJ3, EJ5, EJ7). From all the descriptions, only having a balanced view was described by both the media and ENGOs as one of the vital elements in the fairness of environmental writing.

“...Obviously, when you want to actually show it, it [has] got to be more holistic; it cannot be one-sided...” (ID EN2).

At the same time, in order to ensure fairness in environmental writing, it is important for the media and ENGOs to keep environmental issues away from politics, and be more neutral and not aligned to any organisation, as indicated by one of the media interviewees:

“...Yeah, I think honestly, in a Malaysian context, [it] should be less partisan when it comes to environmental issues... That means if you

are covering for *BN*-controlled media or *Pakatan*-controlled or *Pakatan*-friendly media, when it comes to environmental issues, you should not see... I mean, like, if, for example, when the state government is *Pakatan* and you are the *BN* media, you have to hit them up... Yeah, just report, as long as it [is] wrong, if it is affect[ing] the environment, it should be reported... OK, of course, when you talk about the environment, there is no political – I would not say it is politically motivated...” (ID EJ1).

(c) Current state of freedom of environmental communication in Malaysia

In brief, the **freedom to obtain environmental information** is one of the crucial elements in environmental communication, especially for the media (ID EJ2, EJ6). At the moment, it is hard for the media to get environmental information for their reporting, particularly from the government, as described by one editor from Media A and one chief editor from Media B:

“...Of course, it is important to have freedom of information but [there is] definitely no such thing here in Malaysia... [It is] up to them, because we do not have the freedom of information, and [it] is not like in US – you have that – and I think [it] is a lot in European countries as well...” (ID EJ2).

“...It is hard; that is why we rarely refer to the government documents...” (ID EJ7).

In contrast to the media, one of the interviewees from ENGO B holds a different point of view, explaining that ENGOs have no problem obtaining any scientific information they need:

“...Scientific information and all that; yes, we have the freedom...” (ID EN7).

As a side note, one of the interviewees from ENGO B stated that they are free to play their role in the organisation and there is no limitation or restriction that exists (ID EN10). However, in the discussion of whether ENGOs can play their roles as they wish, one of the interviewees from ENGO A confirmed that **expectations of their duties from the organisation** caused them to not be totally free in playing their roles (ID EN5). In ENGOs, once someone has been assigned to work in a certain position (e.g. a communicator or public relations officer), their job scope is usually too narrow and they are expected to only work within certain particular duties only. Thus, the roles of environmental communicators seem to be restricted to only writing press releases or preparing reports. One of the ENGO interviewees mentioned that the organisation should not limit the roles of environmental communicators and that everyone in an organisation is also a communicator.

“...Communication is not only up to communicators, even though that is an official role of the staff... My position was marine communications, so I was a PMC Communication Officer but when you say communication is not only limited to the communicator to do the work... So a lot of people would say, you know, that is not the role of communicator but then again, what limits you from doing your work as a communicator because, like I said, communication is very wide... How do you want your communicators to function? Is it just for press releases, or just to do normal secretarial work, or just to edit reports? Then if you do not change that mindset within the organisation...” (ID EN5).

Additionally, unlike the case of politics or business issues (ID EJ5), the majority of the media (9 out of 13) and ENGO interviewees (10 out of 11) declared that they have freedom to write about and communicating environmental issues in Malaysia. There is almost no censorship in writing environmental stories (ID EJ2, EJ3). One of the media interviewees (the editor from Media A) and one of the ENGO interviewees (the manager from ENGO B) described the freedom to write any environmental story without any control in Malaysia:

“...We also have a lot of freedom to do any stories basically, so, like, if you talk about garbage incineration or into any water, I have not received any censorship control or orders from my boss... So, usually, journalists, we have quite a free rein to write about the issues...” (ID EJ2).

“...In environmental communication, I think in terms of Malaysia, we are quite OK; we can convey the message... I think we do not feel [much that] no one can stop us from telling that [or saying] “You cannot tell this and tell that” (ID EN8).

However, some media and ENGO interviewees in this study also revealed that the **freedom to write about and communicating environmental information** is determined by the style of writing and communication used by the media and ENGOs regarding environmental issues, particularly on how creatively the communicators (ID EN5) can frame the words (ID EN1) in a positive way (ID EN3) and, most importantly, without touching the sensitive issues (ID EJ8). In the debate on the style of writing used for communicating environmental information, most of the interviewees stressed the importance of writing or communicating in a positive way without blaming anyone but tending more towards giving advice so that the stakeholders can take action to solve environmental problems.

“...We are not highlighting [that] Company A’s fault is like this and this... No, we highlight more [the] impact of what they have done... We write the article not to condemn...” (ID EJ9).

Surprisingly, the ENGOs also use the same method when writing about and communicating environmental issues, which is not to focus on blaming other stakeholders but more on giving useful suggestions to solve environmental problems, as clearly confirmed by one of the interviewees from ENGO B:

“...For example, for the Lynas issue, we do not say that we do not agree with you... You government, you should not be doing this; you [are] supposed to be listening to people... No, we go towards what the

Lynas project will actually do to the environment... We focus on the environment part, to say that this way will actually create more harm to the environment and is not good for health and all that... We do not attack [the people directly], but we create awareness of what will be affected in the environment...” (ID EN7).

Additionally, there are some media and ENGO interviewees who confirmed that the **freedom of environmental communication in Malaysia has certain limitations** (ID EJ1, EJ2, EJ7, EJ8, EJ9, EJ10, EN2, EN3). There are still restrictions, especially on the media when writing about any environmental issues that are associated with the government, politicians, owners of organisations or people who have ‘big names’ in the nation, as indicated by one of the journalists from Media A:

“...Yeah, I mean, I guess like Lynas is a perfect example... Right, I was like, you know what, about having restriction... I mean, I have heard stories of, like, you know, someone wants to cover some issues... Connected to a politician; they get told to back off or whatever, so I guess it [depends] on the circumstances...” (ID EJ6).

In fact, the ENGO interviewees also realised that the Malaysian media are bound by restrictions in when reporting environmental issues that are linked to their sponsors or owners. One of the interviewees from ENGO A pointed out:

“...So sometimes, the reporters cannot report that kind of thing, because the paper is sponsored by the government, you know... So, like, they cannot report what they are supposed to report, because the government does not want them to report, and they cannot because the paper is owned by the third party, so you cannot...” (ID EN5).

7.5.1 Discussion: The Roles of Malaysian Media and ENGOs in Democracy

In brief, in line with the theoretical debate on the roles of the media and ENGOs as environmental communicators within a democratic society in Section 3.2.2 in

Chapter 3, this section sought to determine the Malaysian media and ENGOS' perspectives on their pivotal roles in democratic Malaysian society. As already noted, the empirical findings of this study found two common types of roles played by Malaysian ENGOS and media as environmental communicators in a democratic society, including the elitist model (watchdogs) and the deliberative model (mobilising the public sphere). This is not very different from much of the world's democratic media and ENGO system, particularly in the Western hemisphere, which has always been considered a forerunner in democratic practices. Ideally, some of the interviewees from this study, both from the media and the ENGOS, realised their roles as watchdogs predominantly consisted of providing checks and balances to the government on environmental matters that concern the masses. As watchdogs, both the media and ENGOS are the 'eyes and ears' of society that occasionally act on behalf of them in ensuring the integrity of the government (Ibelema, 2012).

For the media, the columns in the newspaper is a privilege for playing their watchdog role, as through these, some of the journalists can freely write their opinions or express their emotions without the need to expose their identity. Although none of the ENGO interviewees specifically mentioned about medium they used when playing the watchdog role, I consider that both ENGOS have used various channels of communication, including their official newsletters, websites, social media accounts and even through the newspapers. Quite interestingly, one of ENGO interviewees, who is the manager of ENGO B, specified that the government should be aware of their existence as an 'observer' who will always be there to highlight and expose any of their wrongdoings and weaknesses in environmental issues. As watchdogs, the media and ENGOS should also be able to give useful suggestions to the government so that they take corrective action (Romano, 2005). By all accounts, the findings are quite similar to those of prior studies such as Hanitzsch (2005), who discovered that journalists in Indonesia for example see themselves as watchdogs or adversaries and not as lapdogs. This is, however, somewhat inconsistent with the findings of Ezhar & Ain Nadzimah (2015), who found Malaysian journalists are less supportive of the watchdog roles due to the laws and regulations that constrain press freedom in Malaysia.

Additionally, in line with the central tenet of democracy that emphasises the role of the people or ‘demos’ in governing public affairs (Hanberger, 2006), the empirical research of this study also revealed that most of the media and ENGO interviewees underscored their roles in deliberative models, where the media and ENGOs engage and work together with the public (Carcasson & Sprain, 2010). Firstly, the interviewees suggested that the media and ENGOs play a cohesive role in mobilising the public sphere on environmental issues among society. Currently, both the media and ENGO interviewees confirmed that Malaysians discuss the environmental issues raised by them, like the water issue in Ulu Muda, Kedah.

Indeed, the success of the Malaysian media and ENGOs in mobilising the public discourse on the environment is in line with Jürgen Habermas’ emphasis on the need for freedom in society to express and voice opinions freely without any fear, as discussed thoroughly in Section 3.2.2 in Chapter 3. Not only in Malaysia but also in many other Asian countries, the media and ENGOs have put in great effort to mobilise the green public sphere. In the world’s most populous country, Chinese ENGOs have played a significant role in supporting the green public sphere in the nation (Sima, 2011). Yang & Calhoun (2007) also found that Chinese media and ENGOs have successfully created a green public sphere for stopping the development of dams on the Nu River. Through their efforts in public campaigns, etc., many Chinese people have engaged in the discussion and expressed their opinions about the Nu River on Tianyaclub.com, such as one angry comment saying that ‘Population and economic growth are the natural enemies of environmental protection!’ As is evident, the involvement of the public in discussion is nothing new and is not a myth in Asian countries like China and Malaysia.

From another aspect, as emphasised by Habermas, ‘There can be no public sphere without a public’ (Saeed, 2009). The media and ENGOs also serve as a platform or venue for public discourse so people can express their conflicting opinions freely. Apparently, Malaysians depend on the media and ENGOs as their channel to speak on their behalf about environmental matters, especially to the government. Although none of the media interviewees mentioned the medium

specifically used for the public sphere, I strongly believe that the existence of 'letters to the editors' in newspapers, for example, provides a unique opportunity for the public to express their opinion and discuss newsworthy topics (Young, 2011) such as the environment. Within the context of democracy, the motive of the reader in sending a letter to the editor arises from a desire to contribute to a discussion by sharing an opinion, whether this is expressing protest, outrage, criticism or anything else (Pounds, 2006). In the context of Malaysia, prior research conducted by Haroon et al. (2012) on letters to the editors in six selected Malaysian newspapers in 2006 found that most letters are complaints about the water supply in the nation, particularly addressed to the Malaysian government and the Ministry. This shows that through the letters to the editors, the public can state their problems or opinions about the inefficiency of the government in managing the water supply and demand further corrective action from the government. Although ENGOS do not have a specific space like letters to the editor where the public can write their opinions, the ENGOS' way of work always engages with society through various environmental programmes, which provide another venue or opportunity for the public to speak their opinion about any environmental issues during the events.

In addition, within the deliberative model, this study discovered that both the media and ENGOS play a role in protesting against any projects that are likely to harm the environment. One should clearly remember that protests by the Malaysian media and ENGOS is not protesting in a dramatic or extreme way like having a public rally or assembly; both social actors seem to prefer a 'soft' form of protest. The Malaysian media usually protest through their environmental write-ups in newspapers, whereas the Malaysian ENGOS prefer to protest via petitions. One of the recent environmental projects that have been widely discussed by both groups of interviewees is the sturgeon fish project in Kuala Tahan, Pahang, where both the media and ENGOS disagreed with and protested against this project. Sturgeon fish are an imported exotic species that can cause harm to the local fish population in the river, especially as this project was located near Malaysia National Park. A quick check through Media A and B's online newspapers via a search with the keyword 'Sturgeon project', for example, found 4 and 18 related articles on Media A and B's newspapers, respectively, about this

issue. This shows that this issue itself has been consistently discussed by both media to ensure that the government understands the negative impact of this project and, most importantly, reconsiders developing it.

On the other hand, although none of the ENGO interviewees mentioned that writing to the media was one of methods used to protest against the sturgeon fish project, I found that the president of ENGO B, for instance, was keen to reach the media by writing a letter that was published in Media A's newspaper with the title '[ENGO B] against caviar project'. Similarly, the executive director or CEO of ENGO A also wrote a letter to Media A's newspaper that was published with the title 'Govt should reconsider Sturgeon project'. This shows that both ENGOs have used the newspapers for protesting against environmentally harmful project, which is in line with the emphasis of Hannigan (2006) on the importance of getting media attention for constructing environmental messages. Hannigan also noted that many environmental issues fail to become public concerns through the media not deeming it to be newsworthy.

Nonetheless, some of the ENGO interviewees confirmed that signing a petition has become one of the crucial tools used in protesting against any environmentally harmful project. One of the most popular was the petition to save the rhinoceros and Temengor rainforest circulated by ENGO B. In the petition to save the Temengor rainforest, ENGO B aimed to get at least 100,000 signatures as a mark of support towards their goals. A positive conclusion was achieved with the Temengor rainforest being declared by the government to be one of the forest reserves in Peninsular Malaysia.

Additionally, both the Malaysian media and ENGOs perceive themselves to be powerful groups in Malaysia. For the media, whenever they write some environmental information in the newspapers, they will usually get prompt feedback or responses from the stakeholders. In fact, some environmental issues publicised by the media can have a huge influence on the state agenda. In other words, if a particular environmental issue is picked up by the media, that particular issue will get attention from the government. This is in line with Dispensa & Brulle's (2003) statement about the power of the media where the

environmental issues become sacrosanct and part of the 'political issues' via media coverage. In fact, the power of the media and ENGOs can also trigger action from the government and other stakeholders in solving any matter. One of the ENGO interviewees also mentioned that the government even takes their voice into account and gazetted certain forests like Belum Forest as a reserve area as a result.

Apart from that, as environmental policy has always been considered a product of negotiation between the government and ENGOs (Lane & Morrison, 2006), some ENGO interviewees in this study confirmed that they have been called by the Malaysian government to contribute as an expert and act as a reference for environmental law and policy development. More precisely, the ENGOs' opinion was taken into consideration, in particular, for improving the current environmental laws and policies. For instance, ENGO B's discovery of new flora in a remote forest area taught the Malaysian policy makers to conserve the richness of Malaysian flora. ENGO A has been called on by the government to conduct research that will later be used as a basis for environmental policy (Rusli & Cheh, 1999). In the same vein, other Asian ENGOs have played a crucial role in the development of environmental laws and policies within their own nations. For instance, in Indonesia, particularly in the West Kutai district in East Kalimantan, NGOs such as SHK-Kaltim and LBBPJ have collaborated with the local government and other stakeholders to work on the draft forestry ordinance (Okamoto, 2001). By all accounts, it is legitimate to assert that the democratic system has provided an encouraging space for the media and ENGOs to play their roles as environmental communicators.

Furthermore, the importance of freedom is greatly valued in a true democracy. Within the context of this study, I found that both ENGO and media interviewees stressed the significance of being free in playing their roles as environmental communicators in Malaysia. For the media, it is vital to be free to choose any environmental issue to communicate; for the ENGOs, it is vital to have free speech, particularly when voicing their opinion about any projects that they do not agree with. Both the media and ENGO interviewees realised that the freedom of environmental communication is crucial, as they are the medium of

environmental information and also provide a platform where Malaysian society can voice their opinion about environmental issues.

It is worth noting that as a platform, the freedom of the media and ENGOs is crucial to ensure the transparency of the environmental information without any bias or favour towards any parties. In fact, only by having freedom can the media and ENGOs write about and communicate the environmental information to the public fairly. Fairness has been defined by both groups of interviewees as the ability of environmental communicators to provide a balanced view of any of environmental issue without bias towards any party or individual, not hiding any environmental information from the public and, most importantly, not influencing readers to believe in certain views only. According to Entman, balance aims for neutrality (1989, p. 30); ethically, the media are expected to be able to present both sides' views (Dearing, 1995; Mohd Azizuddin, 2005b). For example, Boykoff & Boykoff (2004) found that the US prestige press had balanced reporting by presenting both sides' views regarding global warming.

Without doubt, the issue of balance in writing and reporting is one of the common journalistic norms that are associated with the media. However, the finding of this study also suggests that not only the media but also the ENGOs see the importance of having balanced views in environmental communication. It is crucial for the ENGOs, to include all views, either the government's or the opposition's, as long as it is for the sake of the environment. At the very least, in order to maintain fairness in environmental communication, some media and ENGO interviewees even suggest that the environment should be separate from the political motives, in contrast to some past researchers like Dispensa & Brulle's (2003), who claimed that the environment is part of politics. For the media and ENGO interviewees, environmental communication should be purely focused on the environment itself and not be used as a tool to provoke or attack the other side. As mentioned by one media interviewee, there are still situations where the so-called government media deliberately put more attention on certain environmental issues that occur in the opposition's area to paint the opposition in a bad light and vice versa, which is unhealthy for environmental reporting. Abbott (2011), who studied political bias by the Malaysian print media in election issues, also found

that both newspapers (Media B and *Berita Harian*) have displayed a strong bias towards the government and was critical towards the opposition. In a true democracy, this should not happen and should not be acceptable, as the media or ENGOs cannot be biased and must be fair towards all parties, no matter which background they come from. The media should be able to give equal weight to all arguments in all of their environmental news reporting (Sellers & Jones, 1973).

In addition, in terms of freedom, the findings of this study also discovered four interesting themes about the current level of freedom of environmental communication by the media and ENGOs in Malaysia including freedom of environmental information, freedom in writing about and communicating environmental information, freedom in playing the role as environmental communicators and current limitations on freedom. Some of the ENGOs interviewees confirmed that there is no problem in getting environmental information. However, some of the media interviewees were concerned about the freedom of environmental information, particularly the limited freedom to access certain environmental information from the government. Currently, the OSA, as discussed in Section 4.8.2.2, for example, has given the Malaysian government power to take legal action towards journalists and editors who publish any 'secret' or 'restricted' information. This is one of the challenges to having freedom of environmental information, especially getting information related to controversial projects (Mustafa, 2012a). This is in total contradiction to Article 19 of the Universal Declaration of Human Rights (1948), which explains the importance of freedom of expression, including the right 'to seek, receive and impart information and ideas through any media and regardless of frontiers' (UNESCO, 2015).

Although the freedom of environmental information is essential in the pursuit of democracy, even today, no freedom of environmental information laws have been implemented in Malaysia. In European countries such as in Germany, for instance, the freedom of environmental information is clearly ensured under Article 5 of the Basic Law of the Federal Republic of Germany (Jouanjan, 2009). In other non-Asian countries, including the West, there are specific freedom of environmental information laws that have been implemented for a long time, like

the Freedom of Information Act (1966) in the US, the Freedom of Information Act (1970) in Norway, the Official Information Act (1982) in New Zealand, the Freedom of Information Act (1982) in Australia, the Government Information (Public Access) Act (1991) in the Netherlands, and many more. In Asian countries, certain countries that have their own freedom of environmental information acts and laws: South Korea has the Act on Disclosure of Information by Public Agencies (1998), Pakistan has the Freedom of Information Ordinance (2002), the Philippines have Article III, Section 7 of the 1987 Constitution, Thailand has the Official Information Act (1997), Turkey has the Law of Right to Information (2004), Japan has the Act on Access to Information Held by Administrative Organs (2001) and India has the Right to Information Act (2005). In 2005, there were 66 countries that had their own freedom of environmental information laws guaranteeing right of citizens to access government information (Ackerman & Sandoval-Ballesteros, 2006). Although Part II of the Federal Constitution under Article 10(1) authorised 'Freedom of Speech, Assembly and Association', it is still crucial for Malaysia to implement its own freedom of information laws so that the Malaysian media can be free to access environmental information without any restrictions.

In contrast to the problem of the freedom of environmental information, the Malaysian media and ENGOs indicated that they have freedom to write about and communicate the environmental issues in Malaysia. This is because environment issues are more factual and less controversial than other political or business issues. Most importantly, both the media and ENGOs agreed that freedom in writing and communicating is there as long as they are aware of the style of writing about or communicating environmental issues, which must be in a positive way and not touching sensitive issues. Both media and ENGOs also confirmed that it is crucial to write or communicate environmental issues in the form of giving advice or suggestions instead of blaming the stakeholders. In other words, this is more about writing and communicating the solution, where the environmental communicator does not point the finger of blame but gives advice on how to fix environmental problems.

With all these explanations, it is legitimate to state that the freedom to write about and communicate environmental issues by the media and ENGOs in Malaysia is still conditional. Of course, without following the conditions like writing it in positive ways will shake the freedom. These conditions can be a strength for both environmental communicators when being more critical towards the government, as stated by one of the editors from Media A: '[There is] no point to write it critically and vociferously if it will not get published in the newspaper'. Therefore, if we look at prior research, most researchers like Mustafa (2012a) found that three Malaysian media (Media A, Media B and NST) only used positive headlines for their environmental articles, particularly those on the Lynas power plant issues. This is, of course, related to other factors like media ownership and laws which made the Malaysian media work under 'cue journalism', which always takes cues from the government before they can communicate an issue to the public (Mustafa, 2006e).

On the other hand, for the Malaysian ENGOs, the expectation of their duties as environmental communicators is one of the issues related to the freedom in playing their role. Most notably, for some organisations like ENGO A, the job scope is too narrow. As environmental communicators, they cannot do more than writing press releases or writing reports. One of ENGO A's interviewees, who was the former communication officer, stressed that this should not happen, as the environmental communicator's work should not be limited to certain cliché duties and they should have an opportunity to do other work, as well lobbying the policy makers. As communication is the core duty, everyone in the ENGOs, including the scientists and researchers, is expected to be well equipped with the basic communication skills. However, prior scholars, Lazaro-Doltra & Garcia-Montoya (1997), have pointed out the importance of having clear job descriptions in an organisation to avoid imposing extra jobs on the staff, to tighten commitment to the production process among staff and to produce an experienced and well-trained staff. Thus having a clear job description (e.g. environmental communicator, researcher or scientist) in the ENGOs is deemed necessary so that each person knows his/her own duties and not having an excessive workload that can affect their overall working quality.

Finally, the findings of this study also suggest that there are still clear limitations on the freedom of environmental communication in Malaysia. For the media, not every environmental topic can be freely talked or written about in public. The environmental issues that are associated with the government, politicians or 'big names' in Malaysia are not exposed. As claimed before, the media can only write on environmental issues in a positive way but not in a critical way. One journalist gave the example of the Lynas power plant project, where the media cannot touch too much on it, as it is related to the government. Consequently, Malaysia's media ranked 142th out of 199 countries worldwide for the Press Freedom Index 2015 and fell into the 'not free' category (Freedom House, 2015b). Surprisingly, the ENGO interviewees in this study were also aware that the Malaysian media have a problem when reporting environmental stories that are related to the government. Under such limitations, it is right to classify the media in Malaysia as 'partly free', like the media in other countries like Namibia, South Africa and South Korea (Votmer & Wasserman, 2014). Any limitations are contrary to the principles and traditions of democracy as suggested by Habermas, where the press should operate free from any control, particularly from the state government or economic stakeholders. We must understand that the press is the representative of society; so denying press freedom by controlling the press controls the freedom of all society (Mohd Azizuddin, 2005b).

To recapitulate, most of interviewees in the media and the ENGOs are quite homogeneous in their views on their roles as environmental communicators in the democratic Malaysian society, particularly as watchdogs and a platform for public discourse on environmental issues. As the natures of the media's and ENGOs' work are a little bit different, it is not surprising that the media interviewees revealed that they preferred to use environmental write-ups like news articles or features, but the ENGOs prefer using petitions for getting public support to protest against any projects that can be harmful to the environment. At the end of the day, the objective of both social actors is to stop projects that are harmful to nature; most of the time, they succeed. This indicates that these two social actors are powerful groups that can make a positive change, especially in influencing the government. For example, the Malaysian ENGOs always get an opportunity to be involved in drafting environmental policy. Although some of

the media and ENGOs expressed that they enjoy freedom in environmental communication, some of them also said there is no freedom in certain areas such as accessing environmental information from the government, and in writing about and communicating environmental information related to the government. Of course, this is not a new issue and has been debated by many scholars for a long time. This is why instead of calling Malaysia a democratic country, some scholars like Fionna (2008); Choy (2013); Arakaki (2013); and Fong & Md Sidin (2014) have called it a “semi-democratic”, “quasi-democratic”, “pseudo-democracy” or “soft authoritarian” nation to indicate the existence of authoritarian practices in Malaysia, which was discussed in detail in Section 4.8 in Chapter 4. On the other hand, it is also understandable that as a multi-ethnic country, the Malaysian government is concerned that freedom of expression could facilitate political instability and inter-racial problems, which would affect the progress of economic development (Mohd Azizuddin, 2005b). The findings and discussion of roles of Malaysian media and ENGOs in social construction of reality will be presented in the next section.

7.6 Findings: The Roles of Malaysian Media and ENGOs in Social Constructions of Reality

This section will highlight the views of Malaysian media and ENGOs in their roles concerning social constructions of reality. The analysis discovered two underlying major themes: (a) the importance of constructing the public mind and (b) tools for constructing the public mind. These two themes were in line with Hannigan’s social construction of reality theory that was discussed in Section 3.2.3 in Chapter 3 of this study. The details of each theme are presented below.

(a) The importance of constructing the public mind

In brief, a large majority of media interviewees (9 out of 13) and some ENGO interviewees (4 out of 11) spoke about their essential role in constructing the reality of environmental problems in the public mind. It is the job of the media and ENGOs to inform the public about environmental matters that they hardly see

or hear about in their everyday lives, as described by one of the ENGO interviewees:

“...It is important for you to actually paint the real picture of the pressing issues when it comes to species conservation or sustainability... Let us say, for example, we would not know how many tigers are in the forest if you do not go into the forest...” (ID EN2).

On the other hand, one of the media interviewees stressed that the objective of constructing environmental matters in the public’s mind is to ensure that particular environmental matters do not fade away from their awareness.

“...I think it is very important... Because usually what I notice from my three years working, when we report on an issue, it stays there for a week or two and then after, that it fades away, you know; it fades away from people’s mind... It fades away from the politicians... Yes, then after a while, it dies down... Although the issue is not yet settled...” (ID EJ1).

Interestingly, only ENGO interviewees (ID EN2, EN6, EN8) realised that the **scientific authority or evidence** like recent research data or reports were crucial for constructing the public mind about environmental matters. Without evidence, the public would take environmental matters for granted and even worse, they may not believe the messages delivered by the environmental communicators.

“...When you want to construct reality, it has got to be backed up with scientific data...” (ID EN2).

“...For us, seafood is the main issue, because our fisheries are dwindling, and we have reports and data to support them... It is not a myth that we are getting less and less fish, because the fishermen themselves tell us they are going further and further out to catch fish,

and whatever fish they catch [are] smaller in size and less in volume, so all that is not a myth...” (ID EN6).

Alongside scientific data, some ENGO interviewees and some media interviewees also agreed that pictures are key evidence in environmental communication. With pictures as evidence, the public believes and is less doubtful about the credibility of environmental stories, as noted by one of the interviewees from Media B:

“...It is like a proof... People want to see the image, what is the proof of your claim, no matter where...” (ID EJ9).

(b) Tools for constructing the public mind

There are several tools that can be used by both the media and ENGOs for constructing the public mind about environmental issues. All of the ENGO interviewees (11 out of 11) and most of the media interviewees (9 out of 13) revealed that **pictures** were a very important tool for constructing the public mind about environmental issues. The importance of using pictures was described by most of the interviewees, such as EJ5, who claimed that “...it is actually very important to get pictures...” This was supported by EN8 from ENGO B, who noted that “Without a picture, it is very bad.”

Most of the media and ENGO interviewees spoke about the power of pictures in environmental communication. Pictures are considered to be more **powerful than words** (ID EJ5, EN7, EN9), as they connect more quickly with the reader (ID EN3) and one picture is worth a thousand words (ID EJ1, EJ3, EJ8, EJ10). By seeing the pictures, readers quickly understand the environmental stories (ID EN5). Apart from that, pictures also serve as a complement to the environmental stories in the newspapers and ENGOs’ newsletters. For journalists who write long feature stories, pictures are influential as support for the environmental stories (ID EJ9), as words have their own limitations like requiring more time to read and understand words, whereas pictures require only a glance (ID EN3, EN9). Besides, without pictures, people may lose interest in reading long stories, as explained by one of the interviewees from ENGO B:

“...Like the beautiful forest and hazy city: we want to write it long but people may [be too] lazy to read it...” (ID EN9).

On the other hand, some of the media and ENGO interviewees also explained the pivotal **role of pictures in visualising the reality of environmental matters in the readers’ mind**. In other words, with the pictures, readers can easily visualise the reality of environmental matters (ID EJ8) because sometimes “...we talk about the destroyed thing like this and this. Sometimes, readers cannot visualise it, so they have to look at the image...” (ID EJ9) and “...You know, you just simply take a picture of black water. Even if you describe it – if you say it is black, it is dark, it is pitch black – it is not the same as seeing a picture of black water...” (ID EJ1). In addition, for the ENGOs who work on environmental issues that are less related to everyday life such as the issues of wildlife or deforestation, pictures are very beneficial for the readers’ visualisation.

“...So a lot of people would not have had the chance to see like wildlife for themselves because, I mean, we all live in urban centres...” (ID EN4).

On the other hand, by seeing the reality of certain environmental issues in the pictures, the public can realise how serious environmental matters really are.

“...We write [about] issues deforestation and things like that; put [in] the images of deforestation, animals dying and things like that, so that invokes people’s perception [that] all these are really happening...” (ID EN6).

The use of pictures is pivotal, as it can **invoke certain emotions in the readers** (ID EJ3, EJ5, EJ7, EN8, EN11). For example, one of the media interviewees mentioned:

“...Like, you know, pictures of, you know, trees being cut down, animals dead, you know; of course, most people would feel angry, seeing those images...” (ID EJ3).

Similarly, one of the ENGO interviewees also agreed with the media regarding the power of pictures in invoking feelings in the readers:

“...By seeing an image of all the land clearing, what is our feeling? For sure, we would be shocked and wonder how this could happen...” (ID EN11).

Moreover, both the media and ENGO interviewees also confirmed that pictures are able to **create environmental awareness** among the public. One of the interviewees from Media A noted:

“...You have to see... Open burning, logging; unless you see all the burned area and how there [are] no trees, [only then will people] care...” (ID EJ5).

Most importantly, by seeing real pictures of certain environmental matters, people are **motivated to take action and solve environmental problems** through conservation projects for future generations.

“...So if they see a powerful images of wildlife in forest or of turtle eggs or hatchlings, this might, you know, motivate them to be more supportive of conservation efforts...” (ID EN4).

Beside pictures, some of the media interviewees spoke about the **vital use of information graphics** like boxes, graphs, diagrams, charts, etc. for explaining the technical terms in the environmental messages (ID EJ1, EJ2, EJ11). These information graphics are very helpful for giving a quick understanding to the readers, as expressed by two of the interviewees from Media A and B:

“...If there are technical terms, in my experience, we usually do it a blurb or a box to explain the term... Something like: geoseismic, some movement...” (ID EJ1).

“...Like the term *‘licik’*... We do not have to explain it in our story; [the] reader [will] understand it if they refer to the provided info...” (ID EJ7).

In contrast, three media interviewees (ID EJ2, EJ6, EJ11) and five ENGO interviewees (ID EN2, EN4, EN5, EN6, EN7) mentioned that the use of **appropriate language** is pivotal in constructing the public mind about environmental issues. Both media and ENGO interviewees emphasised the importance of using standard Malay (the national language) or English in communicating environmental messages. The standard, according to the media interviewees, is the language that has been approved by professional institutes like the Institute of Language and Literature Malaysia (ID EJ12), language that is commonly used in newspapers (ID EJ12, EJ13), which is usually in the mid-level (ID EJ2). Besides standard language, a large majority of the media interviewees (11 out of 13) and ENGO interviewees (9 out of 11) spoke about the importance of using ‘simple’ language in communicating environmental issues to the public. Simple according to both media and ENGO interviewees is communicating the environmental messages by using ordinary terms (ID EJ10, EN1) and trying to avoid technical language (ID EJ1, EJ11, EN1, EN5), scientific terms or data (ID EJ3, EJ13, EN6), and bombastic words (ID EJ4, EJ7, EN7). The ultimate aim of using standard and simple language is to ensure that people from all backgrounds can understand the environmental messages, as noted by a media and an ENGO interviewee:

“...Actually, all journalism has to be simple... Everyone has to understand it... There is no point to think [about] bombastic words and all that...” (ID EJ4).

“...Yeah, of course, because we know when someone comes up to you and talks to you about something, obviously, you want something simple to understand right, to digest... [It’s] the same with environmental stuff; we need to somehow show the issue in a simple way...” (ID EN5).

Furthermore, a slight majority of media and ENGO interviewees explained the importance of using certain **strong words** in communicating the environmental messages to the public such as the word ‘destroy’ (ID EJ11, EJ12), ‘dangerous’ (ID EJ12), ‘as little as’ (ID EN1), ‘collapse’ and ‘disappear’ (ID EN5). These kinds of words are very vital, as they impact the readers and, most importantly, make them realise the current reality of the seriousness of environmental matters in Malaysia. One media and one ENGO interviewee explained:

“...Because we [the media] want to give impact to the readers, if we write stories without an emphasis, the readers will think this is just ordinary news, so with emphasis like ‘dangerous, can be destroyed’, [in] your area, [this] will give impact...” (ID EJ12).

“...So we have to use, like, for fisheries, more than 92% of our fish stock are gone, so you cannot take that lightly... You have to use certain words like ‘our fish stock [will] collapse in another 30 years if we do not do anything,’ or ‘Malaysians will soon have no more fish to eat,’ or ‘Fish will disappear’... You know, those kind of things...” (ID EN5).

In addition, three media interviewees (ID EJ3, EJ6, EJ11) stated that the use of **certain words in newspapers can arouse emotions and feelings among the readers**. One interviewee from Media A clarified:

“...There [are] certain words that [create] certain feelings... [a] word like ‘savage’... You know that is a word which has a lot of feelings [in it], so you know those kind of words can help, can hint at a general feeling you want the readers to feel...” (ID EJ3).

In contrast to the media who prefer to use information graphics, some of the ENGO interviewees spoke about the importance of **video** in environmental communication. This is due to the ENGOs’ work, which that mainly includes engaging with the community via environmental education events. Thus the use of

short videos (a duration of 90 seconds) (ID EN5), for example, is very crucial and helpful during events, as noted by one of the ENGO interviewees:

“...So most of our programmes and our environmental education programme is on that part, which is we want them to have [that] feeling for nature... We will show a lot of videos...” (ID EN8).

Besides using videos, the analysis also noticed that some of the interviewees from ENGO A revealed the pivotal use of **music and entertainment** in environmental communication. Music and entertainment has always been part of Malaysian society’s life (ID EN5, EJ11) and celebrities who work in this line like singers can be good spokespeople for the ENGOs when approaching the community (ID EN5, EN6). Most importantly, they also help by giving free publicity by promoting the ENGOs’ events through their social media accounts (ID EN5). Realising the importance of music and entertainment to Malaysian society, ENGO A took the opportunity to come out with the first song about turtle conservation in Malaysia which was sung by a popular Malaysian singer, Asmidar:

“...During my time, I actually came out with the song for turtles, the first turtle conservation song in the country... Asmidar sang for it... Because music is something that everyone relates to... You can search online: ‘*Senyum Penyu, Senyum Kita*’ [title of the song]...” (ID EN5).

Nevertheless, some of the media and ENGO interviewees in this study also described the importance of **being concise in environmental communication**, particularly when writing environmental messages in newspapers or ENGOs’ newsletters or even press releases. Concise, as defined by some of the interviewees, is using the fewest words (ID EJ1), not being too long (ID EJ6) and, most importantly, only writing necessary things (ID EN5). Realising the importance of being concise, some media interviewees prefer to use graphics rather than words:

“...This one, 1 to 10 we made (graphic), so that it [is] precise for the reader to read... This one, the info about caviar sturgeon and all that...”

We put it so that [they would] not only read the words; it would [be] tiring and people would fade... At the end of the day, they would read the title only...” (ID EJ11).

Similarly, video is also shorter and concise; therefore some ENGOs prefer to use it as their environmental communication tool.

“...So, basically we need to start, you know; we have been trying to communicate all these, but I guess people are selective in the information, especially now everyone’s attention span is, like, so short; I mean, if you look at online PSA, people are doing shorter and shorter PSA because people do not want to watch anything for more than one minute, for instance, or more than 30 seconds because everyone’s attention span is so short...” (ID EN5).

To sum up, whether it is via pictures, information graphics or videos, the **ultimate aim is to attract the stakeholders’ attention towards the environmental information** delivered by the media and ENGOs. Malaysian people are deemed to be a bit lazy in reading (ID EJ11, EJ12, EN8, EN9); therefore, by using images, for example, could fascinate them so they start reading environmental articles (ID EJ1, EJ6, EJ12), and it avoids people being stressed (ID EJ11) and bored (ID EN5) by reading. One great example given by one of the ENGO interviewees is how images have been used on T-shirts for the tapir campaign, which was successful in grabbing public attention, as shown in the following excerpts:

“...For example, we just launched our Giordano, ‘We Love Tapir’ campaign T-shirt... Yeah, so one of the store managers actually put up a real Tapir picture at the stand and people start to ask what this is... So that already created [an] opportunity for them to explain, ‘OK this is a tapir and tapirs are endangered; they look like the pandas but they are, they are precious to Malaysia because they are the Malayan tapirs,’ you know...” (ID EN7).

7.6.1 Cross-check between Qualitative Interviews and a Quantitative Content Analysis of Newspapers and ENGOs' Newsletters

As noted in the findings of the interviews above, a large majority of the media and ENGO interviewees stressed the importance of using pictures as a crucial tool for constructing the public mind about environmental information. One interviewee from Media A (ID EJ5), for example, stressed that: "...it is very important to get pictures..." whereas an interviewee from ENGO B (ID EN8) noted that: "Without obtaining a picture, it is very bad" Thus I will present the results of a quantitative content analysis of Media A and B's newspapers ($N=1734$) and ENGO A and B's newsletters ($N=316$), particularly on the use of pictures in these two channels to cross-check and validate the claims made by the interviewees.

7.6.1.1 The use of pictures in newspapers and ENGOs newsletters

Figure 7.1 indicates that all four social actors including Media A and B, and ENGOs A and B have a high use of pictures in environmental articles in their newspapers and newsletters, which is consistent with the findings from the interview, where a large majority of interviewees stressed the pivotal usage of pictures as their main tool in constructing the public mind about environmental information. Although Media A seems to have the higher number of pictures in newspapers (727 pictures) compared to Media B (444 pictures), the overall the availability of Media B's pictures (75.13%) is higher than that of Media A (63.6%). In other words, 36.4% of the environmental articles in Media A's newspapers have no pictures at all compared to 24.87% in Media B's newspapers.

Contrariwise, ENGOs A and B have fewer picture appearances in their newsletters than in newspapers. This is because the environmental articles in both ENGOs' newsletters are low in number compared to newspapers, as newsletters do not function as a regular updater of news. However, unlike the media, both ENGOs A and B seem to have an equivalent level of picture use in the environmental articles in their newsletters, with 144 out of 150 (96%) for ENGO A and 129 out of 166 (77.71%) for ENGO B. By all accounts, it is legitimate to

conclude that both Malaysian ENGOS use a larger proportion of pictures in their newsletters than newspapers (i.e. most articles are accompanied by a picture).

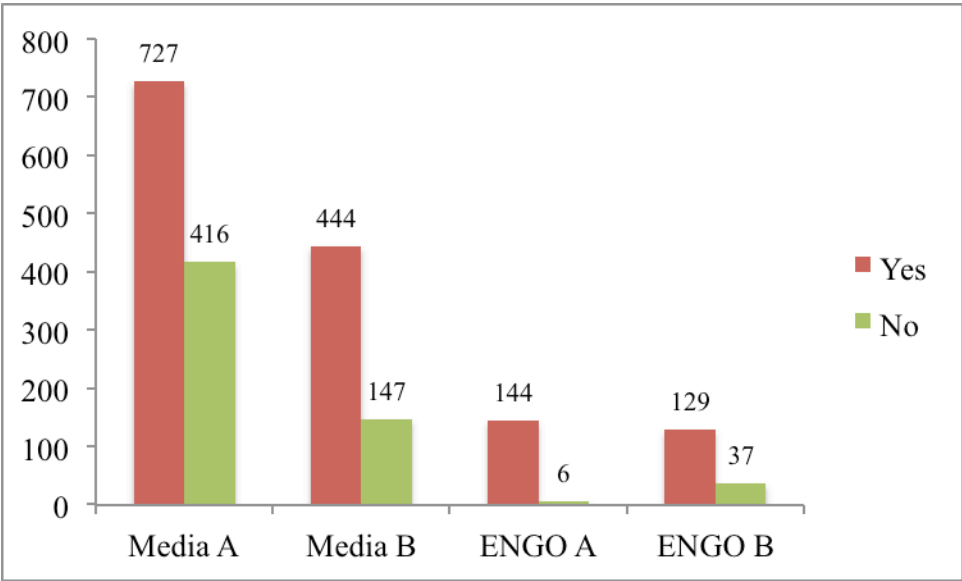


Figure 7.1: The availability of pictures in newspapers and newsletters

Yes = the article was accompanied by a picture; No = no picture accompanied the article

In addition, another way to observe the importance of pictures in environmental communication is through an analysis of how many pictures are used in one environmental article published by newspapers and ENGOS' newsletters. The results show that both the media and ENGOS prefer to use only one picture per article. In other words, Media A, Media B, ENGO A and ENGO B commonly use one picture per environmental article in their newspapers and newsletters, as described in Figure 7.2.

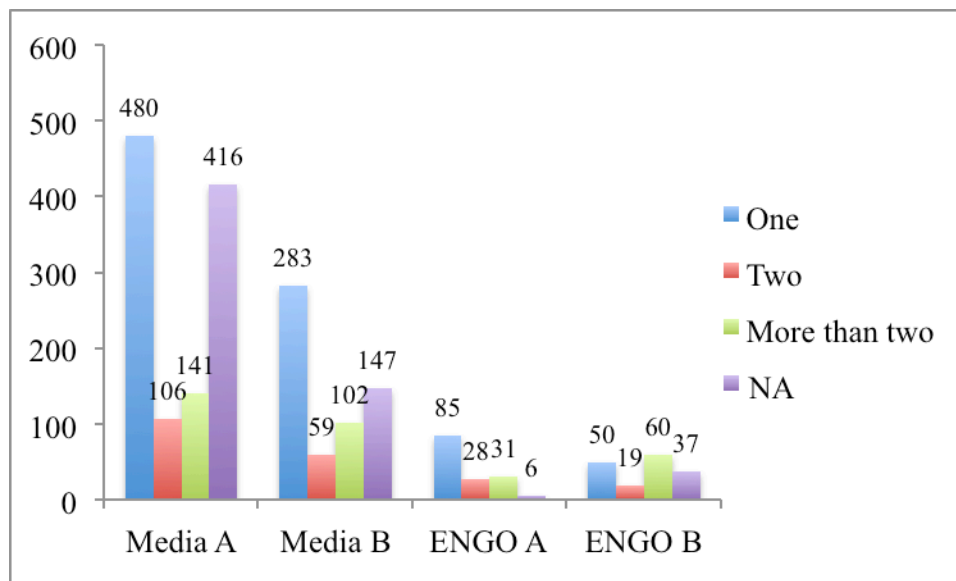


Figure 7.2: The number of pictures per environmental article

Furthermore, some of the media interviewees mentioned the importance of information graphics like diagrams, tables or sketches in environmental communication, especially when communicating technical terms. EJ1 from Media A, for example, stated: “If there are technical terms, in my experience, we usually do it a blurb or a box to explain the term; something like: geoseismic, some movement.” Thus, I will therefore present the results of the analysis of newspapers and ENGOs’ newsletters regarding the types of pictures used in newspapers and ENGOs’ newsletters. This is done to verify whether information graphics have been used by the media and ENGOs or not.

As seen in Figure 7.3 below, there is a very low usage of information graphics in Malaysian media newspapers and ENGOs’ newsletters, as all four social actors prefer to use conventional pictures rather than other tools like information graphics. In fact, from a total of 1734 samples, there were no diagrams or tables present in Media A and Media B’s newspapers. Similarly, no diagrams or tables can be found in ENGO A’s newsletters. Interestingly, though none of the ENGO interviewees spoke about the prominence of information graphics in environmental communication, the analysis of their newsletters found that ENGO B has the highest use of sketches or cartoons (8.43%) in their environmental articles compared to ENGO A and the two media.

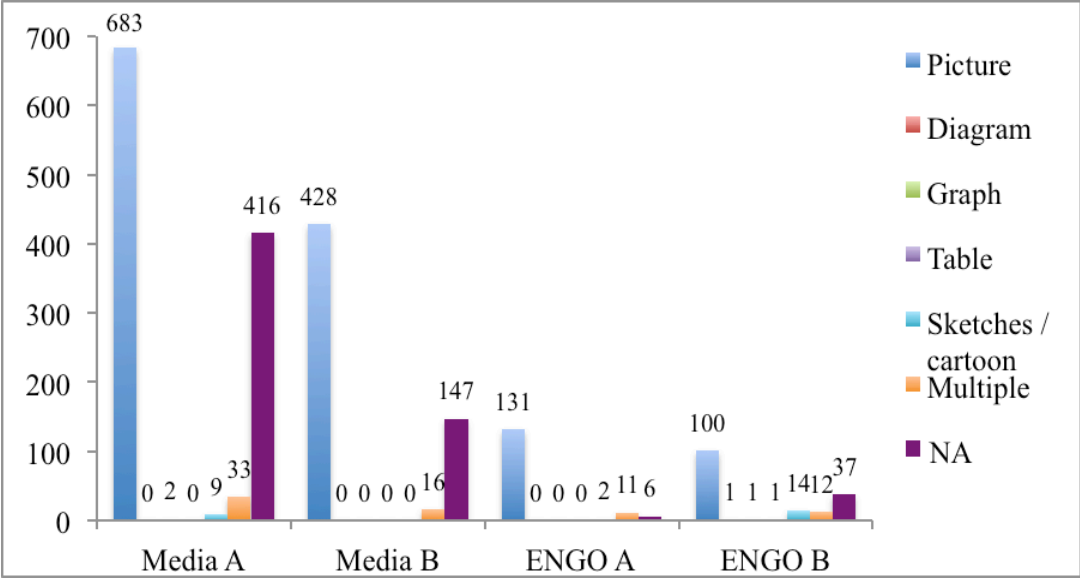


Figure 7.3: Forms of pictures on the environmental article

In addition, during the interview, some ENGO and media interviewees mentioned the power of images in portraying the reality of environmental matters to the public. Some of them gave examples of types of images like black water (ID EJ1) or animals dying (ID EN6) they had used in an effort to help the public visualise the urgency of environmental problems, and raise environmental awareness and mobilise public action. Thus, I attempted to discover they types of images usually portrayed in newspapers and ENGOs’ newsletters to support such claims.

As shown Figure 7.4, there is a significant difference between the types of images used by the media and ENGOs in environmental communication. For Media A, the most common type of images they used in their environmental articles are images of nature (27.2%); Media B and ENGO A were more likely to use human images (28.76% and 60%). ENGO B is quite different, as the most common type of image used were multiple images, which is a combination of a few images like humans and nature (24.09%). This is perhaps because the environmental topics considered by all of them are slightly different. As mentioned earlier by the ENGOs and media interviewees in the interview, the ENGOs specifically focus on environmental issues that are related to their mission or championed issues, whereas the media occasionally focuses on current environmental issues that occur in the nation and the world. Interestingly, images of industries, technologies and buildings are very rarely used by either the media

or ENGOs. In fact, none of these images can be found in ENGO A newsletters, and only one image of technology and buildings was used in ENGO B's newsletters. This could be because environmental issues that are associated with industries, technologies and buildings are less frequent than human and nature-related issues.

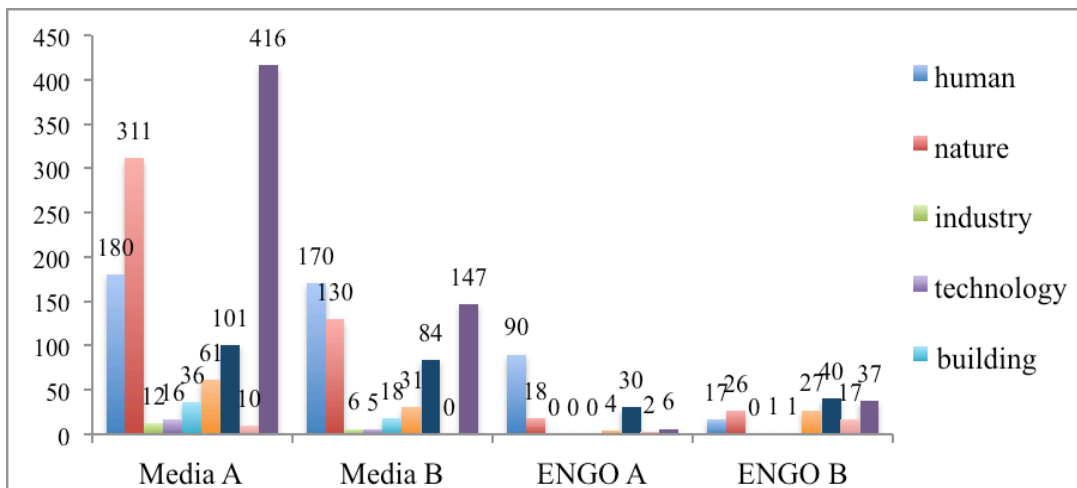


Figure 7.4: Types of images used on the environmental article

Moreover, some the media and ENGO interviewees, like EJ9, mentioned about the role of pictures in supporting explanations using words in environmental articles. Through pictures, the public can get a clear vision and understanding of the environmental issues delivered by the media and ENGOs. Thus the connection of pictures to environmental articles is also a crucial component, particularly the task of choosing an appropriate picture that is related to the environmental story. In other words, the media and ENGOs should not incorporate pictures that are not related to environmental stories, as this would make readers more confused and disconnected.

The analysis shows that a large majority of environmental articles in Media A and Media B's newspapers and ENGO A and ENGO B's newsletters use pictures that are related to the stories they want to deliver to the respective reader. As seen in Figure 7.5, only a small percentage of environmental articles by Media A and Media B (94 (8.22%) and 71 (12.01%) respectively) did not use pictures that were related to environmental stories. Similarly, only 21 (14%) and 14

(8.43%) environmental articles in ENGO A and ENGO B's newsletters, respectively, were not linked to the environmental stories.

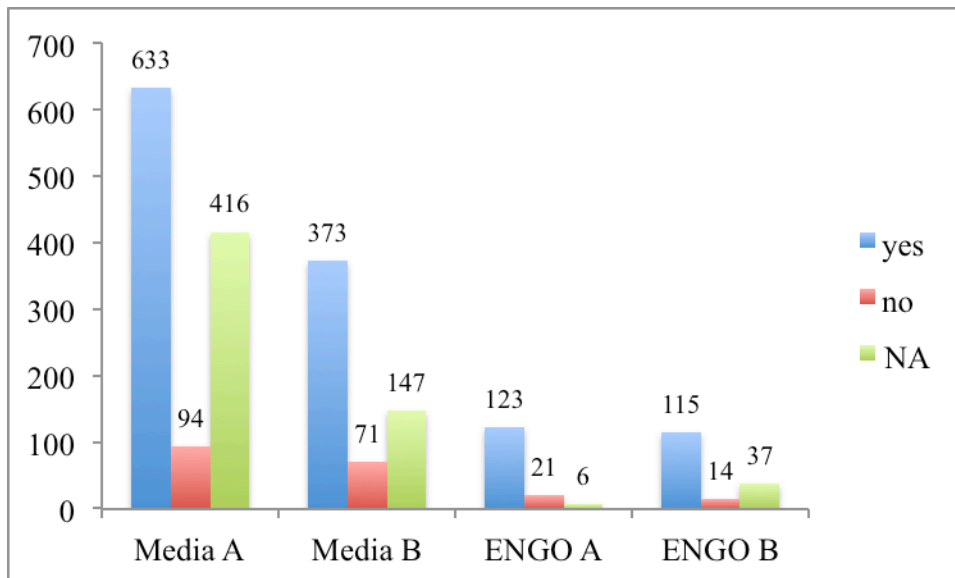


Figure 7.5: Connectivity of images to the text

7.6.1.2 Statistical Result of the Chi-Square Test

In short, the main purpose of a chi-square test is to measure the “differences or association of categorical variables” (Franke, Ho & Christie, 2012, p. 484), I have therefore conducted a chi-square test to evaluate the differences in the use of pictures among Media A, Media B, ENGO A and ENGO B. This chi-square test also aims to strengthen the result of the descriptive analysis in Section 7.6.1.1. The results of the chi-square test suggests that there are significant differences among Media A, Media B, ENGO A and ENGO B's availability, number, form, type of images and the connectivity of the pictures to the text in environmental articles published in newspapers and newsletters ($P < 0.05$). This is in line with the results of the descriptive analysis above where all the variables related to the use of pictures are different, especially between the media and ENGOs. Taking the types of images used in environmental articles, for example, Media A mostly had images of nature (27.2%), Media B and ENGO A mostly had human images (28.76% and 60%), and ENGO B used multiple images, which are a combination of several images like humans with nature (24.09%). This clearly showed that all four organisations used different types of images in their environmental articles

because of the different types of environmental issues represented in their newspapers and newsletters. The chi-square test results are shown in Table 7.2 below. The discussion of the roles of the Malaysian media and ENGOS in social constructions of reality will be displayed in the next section.

Table 7.2: Chi-square test results

Components	Value	df	Asymp. Sig. (2-sided)
(a) Differences in the availability of picture used in environmental articles between all four organisations	83.160	3	.000
(b) Differences in the number of picture used in environmental articles between all four organisations	139.324	9	.000
(c) Differences in the form of pictures used in environmental articles between all four organisations	201.436	18	.000
(d) Differences in the types of image used in environmental articles between all four organisations	406.666	24	.000
(e) Differences in the connectivity of pictures to the text in environmental articles between all four organisations	86.605	6	.000

*Significance at $P < 0.05$

7.6.2 Discussion: The Roles of Malaysian Media and ENGOS in Social Constructions of Reality

Concisely, in harmony with the theoretical debate of the vital roles of media and ENGOS in social constructions of reality in Section 3.2.3 in Chapter 3, where Hannigan (2006) claimed that the reality of environmental problems is socially constructed ‘by a cast of social actors, including scientists, industrialists, politicians, civil servants, journalists, and environmental activists’ (p. 63), this

section therefore aims to display the views of Malaysian media and ENGOs on their roles in constructing the public mind about environmental matters. As a whole, the results of this study showed that both the media and ENGO interviewees perceived themselves to be important actors in the role of constructing the public mind on the reality of environmental matters occurring locally or internationally. One ENGO interviewee from this study confirmed that it is necessary for them to paint the real picture of pressing environmental issues such as ‘How many tigers are left now?’ so that the public knows, understands and keep these issues in their awareness.

However, only some ENGO interviewees discussed the significance of scientific authority or ‘evidence’ in constructing the public mind about the reality of environmental matters. Without a doubt, scientific evidence, like pictures, is vital for validating the statements made by the communicator (Hannigan, 2006). In other words, only by seeing scientific evidence can the public have more trust in and be convinced of the credibility of the statement or claims made by the ENGOs or media. Some ENGO interviewees gave the example of certain minor environmental issues like dwindling fish supplies, which are probably too “trivial” for the public to consider and have always been accused of being fabricated myths. It is therefore necessary to deploy scientific evidence like data from research to support the claims. This was consistent with findings of past researchers like Gritten & Saastamoinen (2010), who found that Indonesian ENGOs used their scientific research to support their claims of illegal logging.

Moreover, some media interviewees shared similar opinions to the ENGO interviewees as to the importance of pictures as scientific authority, which is in line with the emphasis of prior scholars like Hall (1997), Hannigan (2006), Cox (2013b), and Aida Nasirah et al. (2014), particularly on the power of pictures in constructing public acceptance, as discussed in Section 3.2.3 in Chapter 3. In addition, although pictures and words convey meanings about a situation, pictures have always been considered to be a more powerful or effective communication tool (Corrigall-Brown, 2012). Past scholars like Hittleman (1985), for example, affirmed that ‘visual displays are considered easier to read than prose because they do not entail any words’ (p. 36), which is in line with the statement by one of

the ENGO interviewees who agreed that pictures are more powerful than words as they go faster to the readers' minds. On the other hand, Confucius's famous proverb 'A picture speaks a thousand words,' which has been in circulation since 500 B.C. (Aida Nasirah et al., 2014), was often quoted by some of the media interviewees in this study to signify the powerful value of pictures in environmental communication.

Furthermore, some media and ENGO interviewees in this study also suggested that pictures are able to assist visualisation of the reality of environmental matters by the readers. This is consistent with past researchers like O'Neill & Smith (2014), who stated that 'images create a contingent global reality' (p. 80). According to these authors, the use of the colour red in images for example can not only indicate heat but also apocalypse and danger. Speaking about visualisations of reality, Smith & Joffe (2009), in their study on the role of visual images used to represent climate change issues in the British press, found that the portrayal of pictures like glaciers melting or the struggle of polar bears alerted the readers that climate change is 'real' and no longer just a potential issue. Jenner (2012) also agreed that pictures speak the truth to readers and therefore photographs of dead birds covered in oil or of seeping toxic sludge have a huge influence on readers compared to words. One of the media interviewees gave a similar example to Jenner and O'Neill & Smith as to how pictures of black polluted water in newspapers can convince the readers of the seriousness of river pollution.

Likewise, as claimed by Mittermeier (2005), pictures are used not only to show the reality of the destruction of environment but also to display the beauty of the wild to the public. As we may be aware, the public has a limited chance to see rare animals in their everyday life. Thus some ENGO interviewees were of the opinion that pictures also give readers the opportunity to see of tigers in a forest, for instance. In fact, pictures can help to communicate not only uncommon but also complex issues like climate change (O'Neill et. al., 2013). More importantly, some interviewees also agreed that pictures could create awareness and mobilise public action to protect and conserve nature. This was consistent with past studies such as Aida Nasirah et al. (2014), who found that Malaysian ENGOs (including

ENGO A and, ENGO B plus others) used pictures in their official websites for environmental campaigns, as these were able to create awareness of the environment and inspire the public to take further action to save the environment for future generations. In a similar vein, Höijer (2010), in a study of climate reporting in the media also found that ‘heart-breaking’ pictures of polar bears were indirectly sending a message of hope and fear, and urging global action.

Additionally, I integrated the results of the interview analysis and the quantitative content analysis of newspapers and ENGOs’ newsletters to discover the importance of pictures in constructing the public mind about environmental matters. From this, I discovered that both Media A and B and ENGOs A and B use many pictures in their newspapers and newsletters (more than 60%), which was consistent with the claims made by the majority of the interviewees about the use of pictures in environmental communication. Most of the newspaper and newsletter articles only contain one picture, except for ENGO B’s articles. This could be due to the limited space in newspapers and newsletters, as explained by past researchers like Statham (2010), who found that the availability of space in newspapers was the main concern of media practitioners compared to other problems like deadline pressures, access to information, etc. The results of the chi-square test also supported the results of the descriptive analysis, namely there is a significant difference in the use of pictures ($P < 0.05$) among all four organisations. For instance, regarding the availability of pictures, Media A and B have 727 and 444 pictures, respectively, but ENGO A and B only have 144 and 129, respectively, mostly because the number of environmental articles by the ENGOs was very low compared to those released by the media.

Furthermore, it is also fairly surprising to note that only the media interviewees spoke about the use of information graphics as an essential tool in environmental communication and none of the ENGO interviewees from ENGOs A and B mentioned this. However, the outcome from the quantitative content analysis showed that the use of information graphics in Media A and B’s newspapers is very low compared to conventional pictures. Interestingly, although none of the ENGO interviewees spoke about the usage of information graphics in newsletters, the results of the quantitative analysis showed that ENGO B had the

highest use of sketches and cartoons in their environmental articles, even more than Media A and B and ENGO A. In brief, an information graphic is a combination of three main elements including text, illustrations and pictures (Jones, 2015). Unlike conventional pictures, information graphics are usually used to deliver difficult and technical issues concisely to an audience (Holsanova, Holmberg, & Holmqvist, 2005; Smiciklas, 2012). One media interviewee from this study also agreed that information graphics like blurb boxes were used in the newspapers, particularly for explaining a technical term like geoseismic. Visual images help complex and difficult environmental issues become more interesting and easier to memorise (Curtis, 2011). Not many of us realise that information graphics also have a function that cannot be fulfilled by pictures (Holsanova, Holmberg, & Holmqvist, 2005). Diagrams, for example, can help to explain a process step-by-step or the relationship between two objects or events (Hittleman, 1985). They are also very helpful for giving readers a quick understanding, which cannot be done by photographs or words. Given the advantages of information graphics, it is crucial for the media and ENGOs to increase the use of information graphics in newspapers and newsletters in the future, especially when they intend to elaborate on technical terms such as renewable energy, climate change, global warming, etc.

In contrast, although pictures offer various advantages, pictures alone cannot tell the whole story (DiFrancesco & Young, 2010). People learn things differently, as some learn from experience, some via verbal communication, some through listening and some from visual images (Curtis, 2011). Thus, it is reasonable to argue that language also plays a vital role in environmental communication, particularly as a tool for educating the public about the environment. In this study, a large majority of the media and ENGO interviewees emphasised the importance of using ‘simple language’ for communicating environmental messages to the public. “Simple” means using ordinary terms, and avoiding technical, scientific and bombastic terms. Thus instead of using “anthropogenic”, for instance, the communicator can change this to “human-caused”. This is where a communicator must not only be able to use simple or plain language but also be able to change jargon to simpler words (Somerville & Hassol, 2011).

Alongside simple language, this study also found that some media interviewees also emphasised the use of the standard English or Malay language that is commonly used in newspapers. The ultimate aim of using simple and standard language is to ensure that the audience understands the environmental messages delivered. One of the media interviewees stated that: “Everyone has to understand it; there is no point to think [about] bombastic words and all that...” The word ‘no point’ used by the interviewee clearly indicates the importance of not using any bombast but using simple language in environmental communication.

In addition, one fascinating sub-theme of the importance of language is the use of certain words in environmental communication. Several media and ENGO interviewees gave examples of words like ‘destroy’, ‘dangerous’, ‘as little as’, ‘collapse’ and ‘disappear’, which certainly help to portray the current condition of the environment to readers. This finding is comparable to other research findings like Nerlich, Koteyko & Brownas (2010), who found words like ‘warm’ and ‘alarmism’ were used to match the ‘taste’, ‘meaning’, and ‘concern’ of the public. While other researchers like Hansen (2010b) also agreed that the choice of words is crucial in environmental communication, particularly in constructing the reality of environmental problems. Hansen gave an example of how the term ‘greenhouse effect’ can easily connect to everyone’s experience of feeling humid and hot and Rossiter (2004) discovered that Greenpeace was used words like ‘beautiful’, ‘pristine’ and ‘crystal clear’ to describe the beauty of nature, particularly the habitat of salmon, in their magazine.

Interestingly, unlike media interviewees, some ENGO interviewees in this study talked about the use of videos as an important tool in environmental communication. This is perhaps because of Malaysian ENGOs’ way of environmental communication is not only based on newsletter publication but also via community engagement. For ENGOs A and B, which provide numerous environmental education programmes to the public, the use of short videos is imperative in order to make the public grasp and understand the environmental message delivered by both ENGOs. The result of this study provided further support for past studies like Baytar & Ashdown (2013), who also suggested that

videos are essential tools in environmental education. From their findings, Baytar & Ashdown found that 76 or 81.93% of their respondents agreed that the use of videos made them understand the message of the importance of sustainability in the textile and clothing area. In fact, after watching the video, some of their respondents affirmed that they would be more careful in selecting clothes that are more environmentally friendly when they wish to purchase clothing in the future. Thus it is legitimate to conclude that videos are a pivotal tool in environmental communication. Clearly, printed newspapers cannot use video by definition, but this tool must be adopted by new media (e.g. online news sites).

Furthermore, as discussed earlier, Malaysian society tends to favour entertainment over the environment (Prasad et al., 2012). Recognising this fact, some of the ENGO interviewees revealed that music and entertainment could be another useful tool to communicate environmental issues to the public. Interestingly, only some interviewees from ENGO A mentioned this and none of the ENGO B or media interviewees talked about the use of music and entertainment in environmental communication. According to one of the ENGO A interviewees, the involvement of famous local celebrities like singers is crucial, as these celebrities act as spokespeople promoting the environmental events organised by ENGOs through their social media for free. The appearance of celebrities is important for changing public behaviour towards a more sustainable or green lifestyle (Smith & Joffe, 2009). Apart from celebrities, songs and music are also crucial in environmental communication. Ramsey (2002) noted that if a picture is worth a thousand words, then a song be might worth a thousand pictures. Ramsey added that music could make environmental messages more interesting and attractive.

Realising the power of singers and songs, ENGO A came out with the first turtle conservation song in Malaysian featuring traditional instruments that was sung by a famous local singer, Asmidar, with the aim of bringing the message of the importance of turtle conservation closer to all Malaysians (ENGO A's website, 2013a). None of the interviewees from the media or ENGOs discussed other celebrities, except for this singer's role in environmental communication. Celebrities can include actors, politicians, athletes or sports figures, business

people and public intellectual figures who can play a vital role in supporting the environment (Boykoff & Goodman, 2009). Other past studies like O'Neill et al. (2013), for instance, found that in internet polls, people vote for celebrities like the American politician Al Gore and British businessman Richard Branson to act as agents who can help to shape the cultural politics of climate change, which is consistent with the findings of this study.

In addition, this study also found that both pictures and words can arouse emotions in the audience. According to Webster & Hadwin (2014), an emotion is a reaction towards environmental stimuli and is more impactful than a mood. From the findings of this study, only the media interviewees talked about the power of certain words like 'savage' for evoking the readers' emotions after they read environmental articles in newspapers. Without doubt, through environmental write-ups, a writer is able to create certain emotions, particularly appreciation of the environment (Jacobson, McDuff, & Monroe, 2007). For the ENGO interviewees, pictures are also powerful, as these awaken emotions in the audience. This is supported by one of media interviewees, who gave an example of how a picture of deforestation can make readers feel unhappy and indignant about it. In the past, researchers like DiFrancesco & Young (2010) also agreed that pictures are powerful, as they can trigger emotions in the audience and there are various types of emotional responses triggered environmental art like pictures including happiness, anger, surprise, pride and catharsis (Curtis, Reid, & Ballard, 2012). Rögner & Wormer (2015) contended that environmental stories are like medical stories, as they have the potential to evoke 'fear and hope' in the audience.

Furthermore, in the effort of constructing the reality of environmental matters for the public, some media and ENGO interviewees also stressed the importance of being concise in environmental communication. Concise, as described by both the media and ENGO interviewees in this study, is writing with few words, which is being not too long-winded and covering necessary points only. In a similar point of view, Denton (1986) also suggested that conciseness is an essential component, especially in writing a report. One of the ways of being concise is not including irrelevant information. Considering the importance of

being concise, some of the media and ENGO interviewees preferred to use pictures, videos or information graphics instead of words.

As a whole, this study found various tools that could be used by the media and ENGOs for constructing public perceptions regarding environmental matters. Some tools were only used by the media, like information graphics, but some were only used by the ENGOs, such as videos and music and entertainment. Nonetheless, no matter which tool is used, the ultimate aim is always to entice the audience to be interested in environmental messages. For example, recognising the sluggish reading habits and attitudes among certain groups of Malaysians, some media and ENGOs have stated that images are the best tools for grabbing their attention, as these readers do not like long passages that are usually boring. If the content of newspaper articles is too difficult or boring, the readers disengage and lack of interest to continue reading (Koh, 2004). Next, a summary of this chapter will be reviewed.

7.7 Summary

In brief, this chapter has explored the first research question of this study: *What are the roles of Malaysian media and ENGOs in environmental communication?* There are four main discussions in this chapter including an explanation of the demographic profile of all interviewees, the roles of the media and ENGOs in environmental legitimacy, the roles of the media and ENGOs in democracy and the roles of the media and ENGOs in social constructions of reality. Overall, it is intriguing to note that there are many similarities between the roles of Malaysian media and ENGOs in environmental communication, except in certain particular items. For example, the way environmental work is done by media and ENGOs is slightly different, as ENGOs pay more attention to community engagement, while the media rarely deliver environmental messages in a face-to-face manner. In other words, the Malaysian media are more dependent on newspaper publications to communicate environmental messages.

In addition, regarding the roles in democracy, the media seem to have more restrictions than the ENGOs, particularly in the freedom to access

environmental information. The media also prefers to protest against projects that harm the environment through their news articles, while the ENGOS prefer to use petitions. The tools used by the media and ENGOS to construct the reality of environmental matters in the mind of the public are also dissimilar. Although both the media and ENGOS emphasised the vital use of words and images, some of the media interviewees also preferred to use information graphics while some of the ENGO interviewees preferred to use videos and music for environmental communication. I was able to validate the claims made by both the media and ENGO interviewees about the use of pictures in social constructions of reality through a cross-check between the interview data and a quantitative content analysis of newspapers and ENGOS' newsletters. This cross-check proved that the media and ENGOS do not simply make claims about the importance pictures in environmental communication, as it can be seen that there is a high usage of pictures in newspapers and newsletters.

Furthermore, based on all findings regarding of the roles of media and ENGOS in environmental communication, it is safe to conclude that the results regarding the political aspect of environmental communication, particularly the freedom in playing roles in environmental communication, were the most emphasised by both media and ENGOS interviewees of this study. The majority of media and ENGOS interviewees of this study recognised the vitality of freedom in environmental communication, particularly the freedom of retrieving the environmental information for writing the environmental articles to the public. In many cases, the existence of certain laws such as OSA was said to restrict the media from retrieving certain environmental information, especially ones associated with the government. In this regard, some of the interviewees of this study emphasised on implementing Malaysia's own Freedom of Information Laws as a tool to protect media's right in obtaining environmental information similar to many other countries around the globe. On the other hand, both media and ENGOS also agreed that the current freedom in environmental communication in Malaysia is still with condition, which they are free as long as they are not touching the sensitive environmental issues that associated with the government and big names.

Moreover, this study also offers some interesting and surprising findings regarding the roles of Malaysian media and ENGOs in environmental communication that worth to be highlighted. First, it is quite surprising to discover that despite Malaysian media and ENGOs has different background of organisations specifically the media is profit-making while ENGOs are non-profit organisations, they share several similar roles in environmental communication. These roles include acting as watchdogs, mobilising the public sphere and many more. This is obviously in contrast to the concept of social theory, where individuals usually act according to the institution or social system they belong to. Thus, it is safe to say that environmental communication links these two different organisations together to obtain the same goal, which is delivering environmental information and creating environmental awareness among the society. Additionally, even though a majority of media and ENGOs interviewees mentioned the problems regarding the laws for Malaysian media and ENGOs, it is surprising to find that there are a few media and ENGOs interviewees from this study who revealed that the implementation of these laws are actually good. This is because these laws are perceived as a tool to monitor the media and ENGOs from any wrongdoings and most importantly to maintain the harmony of the multi-ethnic society in Malaysia by preventing inter-racial problems. This is somehow in contrast to Habermas' idea on democratic media and NGOs. Perhaps it is vital for Malaysia to have our own version of a semi-democracy theory that suits the local context.

Additionally, from an examination of all the results of this study, I was able to unearth the link between the roles in social constructions of reality and legitimacy. In brief, both roles emphasise the importance of 'trust' in environmental communication. For example, in constructing the public mind, many of the media and ENGO interviewees said that they needed scientific evidence like data and pictures to ensure that the public trusts their claims. From a theory of legitimacy perspective, the media and ENGOs are able to earn trust and credibility from the audience if they are transparent in their environmental communication. Thus, it is right to conclude that 'trust' is one of the crucial elements in environmental communication. Interestingly, past researchers have also discovered the link between both theories. Dong (2013), for example, stated

that the legitimate power of journalism takes place when the journalist has the power to portray reality through various tools like text, photos and videos.

Furthermore, based on the results of this study, I also concluded that the theories of social constructions for reality, legitimacy and democracy are similar to the components of soil, water and air in the ecosystem, where these three components interrelate. For instance, it would be hard for the media and the ENGOs to communicate and write about environmental issues in a transparent way if they did not have freedom to access environmental information. As transparency is the core element in legitimacy, by not writing and communicating environmental issues in a transparent manner, this would affect the legitimacy of both social actors. In other words, the public will not see the media and ENGOs as proper and trustworthy organisations anymore. Consequently, this would also affect the social construction of reality, as the public would start losing trust in the claims made by the media and ENGOs. All in all, a summary of the findings and the discussion of the roles of Malaysian ENGOs and media in environmental communication is presented in Figure 7.6 below. In Figure 7.6, I have used three different colours: (1) green indicating ENGOs only, (2) red for media only, and (3) white for both ENGOs and media. This is to indicate that there is a slight difference in the themes and sub-themes between the roles of the Malaysian media and ENGOs in environmental communication. The findings and discussion on the strategies used by the Malaysian media and ENGOs in environmental communication will be discussed in the next chapter.

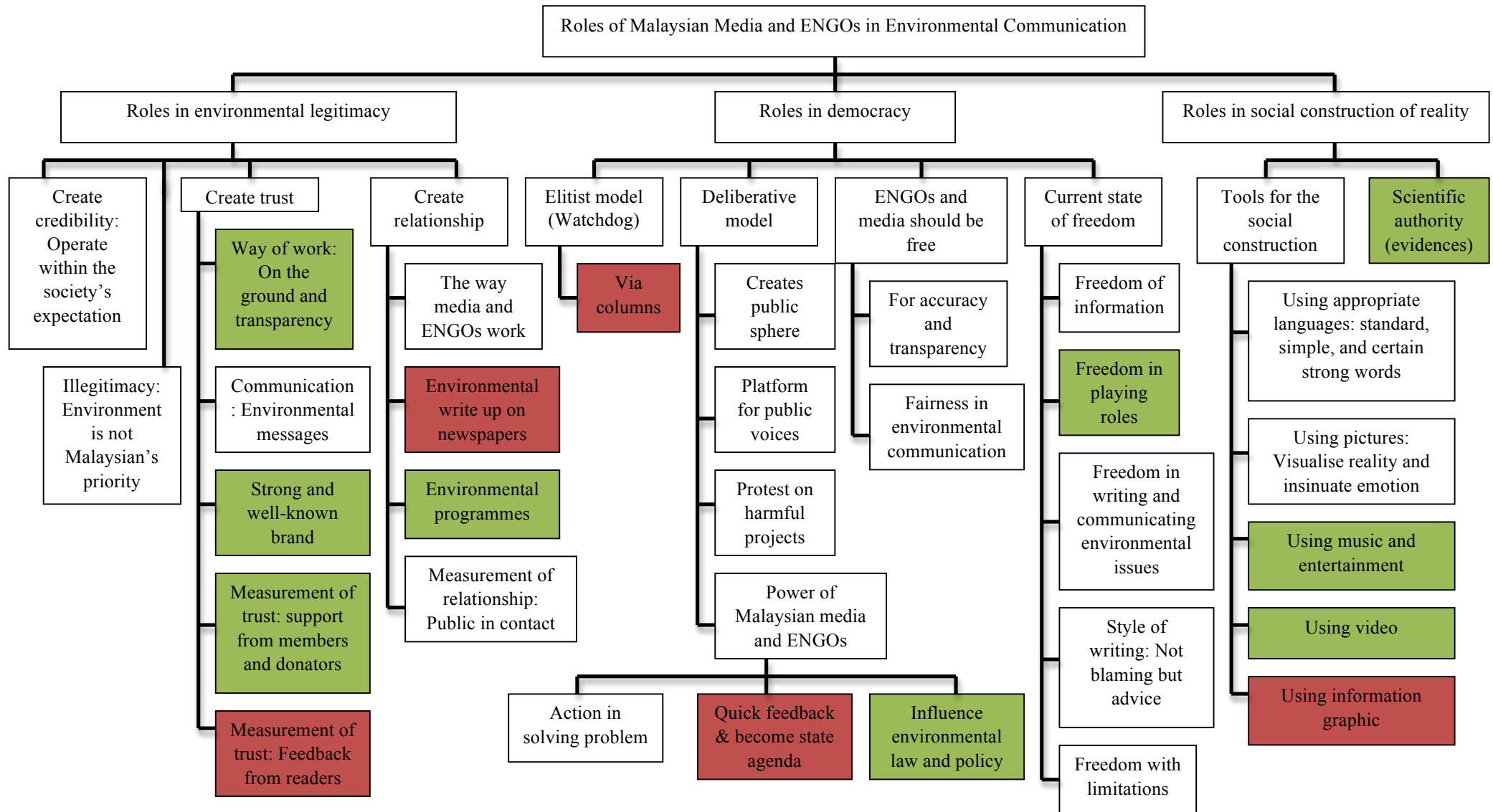


Figure 7.6: Summary of all themes and sub-themes of roles of Malaysian media and ENGOS in environmental communication

CHAPTER 8

STRATEGIES USED BY THE MALAYSIAN MEDIA AND ENGOs IN ENVIRONMENTAL COMMUNICATION IN MALAYSIA

8.1 Introduction

The primary aspiration of this chapter is to answer the second research question of this study: *What are the strategies adopted by Malaysian media and ENGOs in environmental communication?* As chapter 7, the results of the interviews were analysed and presented together with selected quotations from the interviewees' responses. These responses were also incorporated with the results of a quantitative content analysis of newspapers and ENGOs' newsletters as a cross-check on a selected part of the data. This chapter is arranged into five sections, which start with a description of the findings regarding the strategies used by the Malaysian media and the ENGOs in environmental communication in Section 8.2 and concluding with a short summary in Section 8.6.

8.2 Findings: Strategies in Environmental Communication

This section highlights the perspectives of Malaysian media and ENGOs interviewees regarding the strategies used in environmental communication. There are four major themes identified in this section: (a) advocacy, (b) lobbying, (c) campaigning, and (d) collaboration. All these themes are in harmony with the theoretical debate about the strategies used by ENGOs and media in environmental communication that was discussed in Section 3.3.1 in Chapter 3.

(a) Advocacy

Only 3 out of 11 ENGO interviewees spoke about advocacy as one of the strategies used in environmental communication and none of media interviewees said they used advocacy strategy. Advocacy was described by the ENGOs as a talking session with the government (ID EN5) or giving an advice to the

government about policies and laws (ID EN8). In other words, for the ENGOs, advocacy is more related to policies and is usually associated with lobbying the government to implement certain new environmental laws or policies. One of the ENGO interviewees gave a typical example of the importance of advocating the government about the move to gazette unprotected areas from human destruction:

“...So there [are] two main things: one is we look at areas that are not yet protected; for example Ulu Muda in Kedah is a huge pristine forest that is not protected, so [for] the last few years, our work is trying to advocate, to get the government to gazette it as a National Park or State Park so that you know they cannot do anymore logging; they cannot basically cannot touch that piece of [the] environment...” (ID EN3).

However, it is vital to note that advocacy is not an easy task for the ENGOs, as it can take longer to accomplish, especially when combined with the lobbying strategy, as explained by an ENGO interviewee:

“...Advocacy work also comes with lobbying, because then you have to go the state exco; you have to present, you know, your case and then talk to this and talk to that, so it takes a long time... It has to be a very long process...” (ID EN5).

(b) Lobbying

In addition to advocacy, lobbying is another strategy that is only used by the Malaysian ENGOs and none of media interviewees mentioned this strategy. Some ENGO interviewees (EN3, EN5 and EN6) said that they had conducted policy lobbying. There were two distinctive opinions regarding the lobbying strategies among ENGOs, where some ENGO interviewees in this study like EN2, EN3 and EN8 said lobbying was a common strategy, whereas some other ENGO interviewees labelled lobbying as uncommon (ID EN6, EN7, EN10), still weak (ID EN5) and unsuccessful (ID EN8). Only a few interviewees from ENGO A spoke about **common lobbying for environmental laws and policy strategies** in

Malaysia. According to one of the ENGO interviewees, they will try to get involved and give their suggestions and advice to the government when there is a new law or policy that the government wants to implement, as stated here:

“...Whenever there is federal or state policy making, we try and get ourselves invited, put in our opinions in...” (ID EN3).

In accordance, ENGO A even has their own specific team that is responsible for handling such lobbying to ensure that lobbying is possible in their organisation.

“...For our turtles, for instance, when it comes to lobbying, we have one specific team that we want stronger laws for protection of turtles, which means federal laws...” (ID EN5).

In contrast, the result of the analysis also discovered a few significant reasons why lobbying is an **uncommon, weak and unsuccessful strategy** for the ENGOs. Firstly, the ENGOs still lack expertise, as there are just a few lobbyists to do the lobbying, as described by one of the interviewees from ENGO B, as follows:

“...We have tried to hire a lobbyist before [but we] just could not because there is nobody who fits the build, to hire; yeah, there are no lobbyists, really, in Sabah, even less; I do not know about here in Peninsular...” (ID EN8).

Another reason lobbying is not an easy task for the ENGOs is that they have to go through a lot of bureaucratic processes that are usually very time-consuming. One of the interviewees said:

“...It is hard to get to that level or even to talk to the *Sultan*, for instance, on certain issues, which we tried to do for a marine turtle because we tried to change the law at the moment about the consumption of turtle eggs... The person who can actually make a difference is the *Sultan* of Terengganu but how do you engage with the *Sultan*? They have all these protocols...” (ID EN6).

On the other hand, lobbying is usually done by the senior management; hence, it is a little difficult to do for a ground officer who has limited contacts and power:

“...So, I mean, it’s not easy to get certain things passed, especially to get this issue in parliament, unless it is really urgent or it is exposed in [the] media... Then you need to know the right people, so at my level, it is hard because I do not have access to those people... So it is not my role, it’s basically the CEO’s role...” (ID EN5).

Furthermore, the less aggressive ENGOs’ orientation also contributed to the reason why lobbying is still lacking among Malaysian ENGOs.

“...Because that is not our style... Yeah, we are more towards engaging with people; we do not create attention for ourselves...” (ID EN7).

(c) Campaigning

Of 11 ENGO interviewees, seven expressed the importance of campaigning as one of the strategies used in environmental communication. From the ENGOs’ perspective, each campaign has different a target audience, including the public, policy makers, decision makers and politicians (ID EN 6). Therefore, campaigns by the ENGOs usually have three objectives. The first is to raise awareness and to educate all stakeholders on the pivotal role of environmental protection and conservation (ID EN2, EN7). Secondly, some campaigns are more focused on fundraising, which, obviously, aims to obtain funds from the stakeholders (ID EN7); thirdly, the ultimate aim of a campaign is to acquire support, predominantly from the public, as they are the pressure group (ID EN5), for instance, through a petition (ID EN5, EN8). It is also important to note that some ENGOs’ campaigns have been going on for a long period of time, like the ‘Save Temengor Forest’ campaign, which has been conducted by ENGO B since 2008 until today (ID EN7).

Additionally, the majority of ENGO interviewees (5 out of 11) viewed **campaigning as a common strategy** and they conduct campaigns regularly, as

they have specific teams that are responsible for conducting the environmental campaigns. For ENGO A, the terrestrial team and the species team (ID EN6) are the ones who take care of the campaigns, whereas for ENGO B, the communication team usually sees to the campaigning tasks for their organisation (ID EN9). On the other hand, as expected, most of the environmental campaigns organised by both ENGOs were associated with their organisation's mission and championed issues. In line with their focus on wildlife and marine issues, ENGO A, for instance, organised a fundraising campaign to save the Malayan tiger from extinction, which was called '*Tabung Selamatkan Harimau Malaya Kita*' 2014 (ID EN1) and the Sustainable Seafood Festival (ID EN5), which aimed to change the public's perception of responsible seafood consumption. In the same vein, parallel with its aims to conserve the natural heritage in Malaysia, ENGO B regularly organise their own environmental campaigns like the Save Our Seafood campaign to educate the public about seafood consumption (ID EN10), the Save Water Tower Selangor campaign to save water catchment forests and their flora and fauna from highway developments (ID EN9), and the Save Temengor campaign to save and conserve the Temengor Forest to protect its pristine environment (ID EN7).

In contrast to the opinion about campaigning as common strategy among ENGOs, an interviewee from ENGO A revealed that **campaigning is rather a new strategy** for their organisation and has only been implemented since 2014, as clearly stated as follows:

“...Yeah, the campaign part is very new because actually even in [ENGO A's] network, campaigning is very new for us... Well, it's a tool that we have not used before, so we [are] just launching into it, you know? So it's [a] very new role for me...” (ID EN6).

In the discussion about the campaigning strategy, some ENGO interviewees also emphasised the importance of being creative in campaigning, like including a fun element so that the campaign is not dull for the audiences (ID EN1, EN7). One of ENGO interviewees explained:

“...And that is why our campaigns, our events also – we try to cater to what people like, put in the fun elements in; not a boring environment event...” (ID EN7).

Moreover, although the campaigning strategy is occasionally associated with ENGOs, a very small number of interviewees (2 out of 13) from Media A noted the campaigning strategy undertaken by their organisation. EJ3, for example, explained how Media A had arranged an internal green campaign within the organisation, while EJ4 described campaigns like ‘Green Day’, which was organised for society. In the meantime, even though none of the interviewees from Media B highlighted campaigning strategies, one of them agreed with one of the interviewees from Media A about the vital role of the media in supporting the ENGOs’ campaigns, particularly by providing a free and wide publicity for the ENGOs’ campaigns:

“...When we support, we would give a large publicity [to] that ENGO’s project... Whether it is during or after the programme... Usually ENGOs will come to us and ask for promotion... So we will give them two full pages with colour for free... If they want to buy, it would be expensive; one page is around thousand ringgit... So, in order to support them, we give it free spaces with colour and information that they want to deliver to the society... Not for profit making...” (ID EJ11).

(d) Collaboration

Four of the 11 ENGO interviewees and 4 of the 13 media interviewees indicated that collaboration is another crucial strategy in environmental communication. Two interviewees from ENGO A and two interviewees from ENGO B agreed on the importance of collaboration. This because environment issues are issues that involve every stakeholder and it is not possible for them to handle it alone, as described below:

“...An environmental issue is not that [kind of] issue... It involves everyone... Taking a forest, people are using it for economic purposes; logging is controlled by the Forestry Department... This comes under the ministry... The logging product is used by the public, so all these issues, the nature of the issue is like that, I think everywhere is like that...” (ID EN8).

The interviewees from both the ENGOs and the media agreed that they had **collaborated with various stakeholders in environmental communication**. Within the ENGOs, EN4 claimed that they attempt to use as many channels as possible by collaborating with a variety of stakeholders. In other words, they engage with all levels of stakeholders, starting from the community, schools, universities, businesses, government agencies and others (ID EN5, EN8). On the same note, EJ9 from Media B expressed that they also collaborate with a lot of agencies. In fact, for the media, collaboration with the community is utterly crucial, as they are the people who live close to the environment (ID EJ11). In terms of the types of stakeholders, more than half of the ENGO interviewees (6 out of 11) emphasised the pivotal role of **collaboration with corporations**. The ENGOs often partnered with corporations (ID EN10). Interestingly, EJ6 from Media A also agreed with EN10 that ENGOs collaborated more often with corporations than with other stakeholders. One of the strong reasons why ENGOs favoured collaboration with corporations is that these corporations are able to provide the ENGOs with a certain amount of funds to organise environmental events or programmes through their corporate social responsibility (CSR). One of the interviewees from ENGO B pointed out:

“...Usually, ENGOs do not have funding to stand [on] our own; therefore we need these [corporations] to support us... For the corporate, they must have CSR as their annual activity and they would find the ENGOs... Like *Petronas*²⁶, they want to contribute something for water conservation; they want to contribute for the water catchment for the school, so we are the mediator who finds the

²⁶ *Petronas* is an abbreviation of *Petroleum Nasional Berhad*, which is the Malaysian oil and gas company owned by the Malaysian government.

school... So, it is like their CSR project, and that school would think that ENGO B and *Petronas* [have given] something to them, although it actually just comes from *Petronas*...” (ID EN10).

However, only 2 out of 13 media interviewees spoke about the importance of collaboration with corporations. In comparison to the ENGOs, it is legitimate to say that the Malaysian media have a quite low level of collaboration with the corporations. As revealed by the interview data, the media often collaborate with corporations, but usually only when these corporations provide sponsored trips for them cover environmental stories that are related to their programmes, as described by one media interviewee as follows:

“...Honda, for example; they brought us to Sabah to see the rhinos at Lahad Datu, I think; they sponsored that programme, so they brought us...” (ID EJ12).

In addition to corporations, some ENGOs (5 out of 11) indicated that they had **collaborated with the Malaysian government** for certain environmental projects. ENGO B, for instance, has a close collaboration with the Ministry of Education Malaysia for their School Nature Club programme and had collaborated extensively with the Ministry of Tourism Malaysia for their Bird Checklist project (ID EN7). Meanwhile, according one of the interviewees from ENGO A, collaboration with government agencies is good, as it provides free publicity for them, as the government agencies will put all the related information on their websites and social media pages without any charge:

“...Our ‘World Sea Turtle Day’ this year: we partner[ed] with the Ministry of Tourism and Culture (MOTEC); they even put up our banner on their website... And on their Facebook, they actually advertised our event because we invited them for the event, so they will doing regular feeds about our event...” (ID EN5).

In contrast, only 1 out of 13 media interviewees spoke about collaboration with the government. EJ11 from Media B discussed their sporadic collaboration with the government through a programme organised by the government:

“...Like, in Malaysia, we have a writing workshop organised by the Ministry...” (ID EJ11).

Furthermore, only three interviewees from ENGO A and one interviewee from ENGO B described **collaborations with local Malaysian universities** and none of the media interviewees spoke about collaboration with universities. ENGO A has collaborated with different public universities (ID EN2, EN4); for instance, in the past, they collaborated with Universiti Malaya, Universiti Sains Malaysia and Universiti Putra Malaysia (ID EN4). From the perspective of ENGO B, EN8 explained that universities are part of the ENGOs and collaboration with universities are crucial, as they are one of the biggest sources of environmental information:

“...In terms of environmental NGOs – research and things like that – the university is already part of us... Universities must be willing to work with us... It depends for the universities now, whether they want to work with us or not; in [ENGO B], I think we work closely with all the universities... Yeah, sources, all the universities...” (ID EN8).

On the other hand, for both ENGOs, **collaboration with (other) ENGOs** is also one of the important strategies used in environmental communication. Almost half of the ENGO interviewees (5 out of 11) revealed that they had collaborated with other NGOs like the collaboration between ENGO A and the Global Environment Centre, *Yayasan Anak Warisan Alam* and Sabah Environmental Educators’ Network (ID EN2). In fact, ENGOs also collaborate with other ENGOs by signing up as members, like ENGO A, who became a member of the Forest Stewardship Council (ID EN4) and ENGO B, who became a member of the Malaysian Environmental NGOs (MENGO) group (ID EN7). Collaborations with other ENGOs usually occurred when the other ENGOs organised training to improve communication skills or a campaign:

“...Let’s say [ENGO A] organised Environmental Interpretive Training; we would go to them... It is crucial, for our skill... It is really helpful...” (ID EN11).

“...We have a collaboration with other NGOs for the ‘Save Water Tower²⁷’ campaign... To save the Selangor forest...” (ID EN9).

Interestingly, most media interviewees (10 out of 13) stressed that collaboration with ENGOs is crucial in environmental communication, as the ENGOs are their source of environmental information. One interviewee from Media B noted:

“...Yes, because they [ENGOs] are one of our sources... They contribute the environmental information to us...” (ID EJ9).

In fact, some new information on certain environmental issues was beyond the media’s knowledge, like the issue of sturgeon fish, until they were informed by the ENGOs:

“...Like the sturgeon issue: I [did] not know about it and the ENGOs informed me about it... Their professor [texted] me on Facebook... We were friends on Facebook... He said: ‘This is the new issue; do you want to check about it?’ So, from there, I investigated it...” (ID EJ11).

Additionally, more than half of the ENGO interviewees (6 out of 11) described that **collaboration between ENGOs and the media** is utterly vital in environmental communication. In highlighting the importance of collaboration with the media, ENGO A, for instance, held an exclusive day with the media in Sabah with the aim of providing an update on their yearly programmes to all media outlets. From there, the media obtained a list of programmes and it was easy for them to select which of ENGO A’s environmental events they were interested in covering in their newspapers.

“...For Sabah media, when I first joined – the first 5 years – we had events where we got to invite the media to come and participate, and then we would have a day with the media where we had some funding from the various projects... Then we will say, let’s invite the media for

²⁷ Save Water Tower is one of the popular campaigns organised by ENGO B, with the aim of saving the water catchment forest from destruction caused by the highway development.

half a day... Give them a brief about what our strategy is this year, so we just try to introduce them to a sample of all our work, get them interested, and then see they want to cover any of this... And they will know, like, OK this year, this is our focus, we are doing orangutans... maybe changing the way fishermen are fishing, you know; no destructive fishing, stuff like that..." (ID EN6).

On the other hand, based on the perspective of the media, it is surprising that only 1 out of 13 media interviewees spoke about the pivotal role of collaboration with other media outlets. According to EJ11 from Media B, collaboration with other media outlets is conducted more for sharing information on the environmental coverage. Hence, the findings of this analysis showed that the level of collaboration between media organisations is still low. This is supported by another interviewee from Media B, EJ9, who revealed that the media prefer to work independently rather than working in a team with other media outlets:

"...In Malaysia, we still lack a scientific community, no unification... Like *Berita Harian*:²⁸ they do it themselves; we do it ourselves... They work based on their own company..." (ID EJ9).

8.2.1 Discussion: Strategies in Environmental Communication

In brief, consistent with the theoretical debate on strategies of Malaysian ENGOs and media in environmental communication in Chapter 3, this section aims to discuss the views of Malaysian ENGOs and media regarding their strategies used in environmental communication. In recent years, the term 'strategy' has increasingly become common parlance in the academic sphere, particularly among communication and business researchers. In this respect, past researchers like Brown & Iverson (2004) defined a strategy as the process of analysing the environmental conditions and developing a system for the organisation's accomplishments. To put it simply, a strategy is the "scope or direction of an

²⁸ *Berita Harian* is one of the mainstream Malay newspapers that has operated since July 1957 in Malaysia.

organisation” (Johnson, Scholes, & Whittington, 2009, p. 3), which indicates what or how environmental messages will be communicated to society. All organisations, whether private for profit, non-profit or in the public governmental sector, need a strategy to become efficient (Moore, 2000). However, different organisations would different strategies and their strategy can comprise of just one or multiple strategies at once, depending on their status and principles (Smith & Connelly, 1999). With this strategy, the organisation will be able to see the ‘product’ or the ‘outcomes’ that they aim to achieve (Christensen & Donovan, 1998).

Drawing upon the data from the interviews with 11 ENGO and 13 media interviewees, this study recognises several different strategies used by the Malaysian ENGOs and the media in environmental communication. On the surface, it is apparent that the Malaysian ENGOs use two more strategies than the media: advocacy and lobbying. On the other hand, both the media and ENGOs share the strategies of campaigning and collaborating with other stakeholders. Theoretically, this could be due to the differences in the organisations’ backgrounds and the nature of their work. As discussed in Chapter 7, the media’s environmental communication activities are mostly based on publications in newspapers, whereas the ENGOs are not solely dependent on their newsletter or magazines, but also use active participation and engagement with stakeholders, especially government agencies. As a matter of fact, the extensive networking between the Malaysian ENGOs and the government has eased their advocacy and lobbying strategies and made them feasible. However, it is also interesting to note that although both the media and ENGOs have totally different backgrounds – the media is more for profit making organisation while ENGOs are more non-profit organisations (no ownership stake) (Amagoh, 2015) –both of them still share a lot of strategies and roles in environmental communication, which is in contrast to the idea of social theory that actors usually act according to their own institutions.

In addition, the ENGO interviewees in this study also explained that their advocacy strategy is related to acts like talking and advising the government about environmental policies, which is in line with the research findings of Anderson (2000), who found that 17 out of 23 of NGO respondents in his study

revealed that advocacy is associated with policies, particularly for influencing the decision makers. Furthermore, in her study on NGOs and advocacy, Reid (2000) noted that policy advocacy is a common activity among NGOs, which is allied to the agenda of influencing policy makers. Focusing on Asian territories, Kumar (2012) gave the example of how Indian NGOs like *Myrada* have effectively given meaningful advice on a watershed policy based on the data obtained from their field experiences. Consistent with Kumar's findings, Hauger, Daniels & Saalman (2014) revealed that Greenpeace East Asia has successfully played a policy advisory role and, most importantly, influenced the policies of the Ministry of Water Resources, China. All these past studies' findings are consistent with the result of this study; mainly that policy advocacy is one of the vital strategies for the ENGOS.

Despite the fact that advocacy is a common strategy adopted by the Malaysian ENGOS, the process is still a bit challenging as it is very time-consuming. As mentioned by EN5 from ENGO A, policy advocacy takes a long time and the ENGOS have to talk to numerous people in the government until they can reach their goal. Prior research by Nathan, Rotem & Ritchie (2002) also agreed with EN5 assertion that the time required for policy advocacy can be a major constraint on NGOs' capacity. In fact, the process of policy advocacy is also complicated. The ENGOS have to go through at least three common steps in policy advocacy, which include preparing the proposal, influencing through negotiations and continuously checking on the implementation of the policy (Szarka, 2013). This obviously shows that advocacy is not an easy strategy and it needs more effort, especially in terms of the time allocated to keep in contact with government officials (policy makers). Sometimes, it could take a year or more to get a single environmental policy or law implemented. As shown through the National Ecotourism Plan in 1996, ENGO A, for example had to work hard to influence the Ministry of Culture, Arts and Tourism Malaysia to implement this policy to conserve the natural and cultural heritage of the country; it was adopted by the Malaysian government a year later in 1997 (Fennell, Buckley, & Weaver, 2001). However, all the challenges of the policy advocacy strategy stressed by the ENGO interviewees of this study are not related to problems with restrictions imposed by the Malaysian government. In other words, this shows that Malaysian

ENGOS are freed to conduct the policy advocacy strategy, and this is in line with the discussion of the roles in in Chapter 7, where some of the ENGOS agreed that they have freedom in environmental communication.

On the other hand, based on the results of the analysis, lobbying is another strategy that is only carried out by the Malaysian ENGOS, as none of the media interviewees spoke about the lobbying strategy. Lobbying is often defined as the act of influencing the legislative framework and decisions (Biliouri, 1999; Nownes, 2006; Gullberg, 2008; Berg, 2009; Bergan, 2009; Boin & Marchesetti, 2010; Adelle & Anderson, 2013; Vavtar, 2014; Yackee, 2015; Khatib, 2016). Some of the ENGO interviewees from this study also agreed that lobbying is a crucial strategy used to influence Malaysian's environmental policy and is related to the policy advocacy strategy. Nicholson-Crotty (2011) also agreed with the ENGO interviewees that lobbying is part of NGOs' policy advocacy strategy.

Additionally, it is crucial to note that although Western ENGOS' lobbying strategies can occur via direct (internal) and grassroots (external) lobbying (Vernick & MPH, 1999; Junk 2016), this study discovered that the Malaysian ENGOS only embarked on direct lobbying, which is influencing environmental policy through consultations with the policy makers. None of the interviewees from either ENGO mentioned grassroots lobbying (influencing policy by empowering ordinary citizens) (Nownes, 2006). Strikingly, this is not only in contrast with the Western ENGOS but is also inconsistent with the findings of a Malaysian study by Rusli & Cheh in 1999 who found the ENGO A and ENGO B 'sometimes' used grassroots lobbying. There are two possible reasons for this. First, the ENGOS may have changed their strategy after more than 15 years; secondly, Malaysian ENGOS may have needed to fill a gap and not put so much effort into grassroots lobbying. Hence, the ENGO should include grassroots lobbying instead of only focusing on direct lobbying. It is important to note that the outcomes of past studies like Bergan (2009) demonstrated that the deployment of grassroots lobbying is effective, as the public is able to take actions, such as contacting the legislators and speaking up through various media like the internet and telephone. In fact, we are lucky nowadays to have numerous communication media, particularly social media, which provides us with a great potential to

minimise the gap between government officials and society. For instance, in Malaysia, society and government officials like the Prime Minister and the Ministers have been actively using social media sites like Facebook and Twitter. The Prime Minister of Malaysia has been one of the most well-known figures on Facebook and Twitter and has a massive number of followers (Gomez, 2014). Through this account, the public is more empowered and changing environmental policies would be easier, as the public can directly communicate with government officials like the Prime Minister through social media.

In the meantime, as a scientific-based organisation, ENGO A has their own specific team for handling policy lobbying. EN5 from ENGO A provided an example of how their team is working hard to urge the government to enforce stronger turtle laws in Malaysia. ENGO A has been lobbying the Malacca and Terengganu federal governments to implement a tougher law protecting turtles and stopping the trade and consumption of some turtle parts (ENGO A's website, 2015b). Obviously, it is a privilege to have a dedicated team working to focus on one strategy like lobbying, especially when the strategy itself needs more time and effort to be accomplished (Jacobs, 2015).

In spite of the lobbying success stories, other ENGO interviewees provided a different view, labelling lobbying as an 'uncommon, weak and unsuccessful' strategy. The main reason for the lack of support for lobbying is that ENGOs like ENGOs A and B still lack expert lobbyists who can handle the lobbying strategy. In short, a lobbyist is acknowledged as someone who is responsible for doing the lobbying on behalf of the interested party (Nownes, 2006), acting as a go-between who is engaged with the policy makers and influences them (Jacobs, 2015) and spending a huge amount of time not only in lobbying but also in monitoring government policies as well as interacting and communicating with them (Nownes, 2006; Nicholson-Crotty, 2011). Thus not everyone can be a lobbyist, as the ENGOs need someone who is dedicated and familiar with the subject to represent the organisation in lobbying; unfortunately, Malaysian ENGOs do not have expert lobbyists. In addition, another obstacle, as stated by the ENGO interviewees, is that lobbying is difficult to do in Malaysia, as they face bureaucratic processes that are usually time-consuming, similar to the

problem of policy advocacy. For instance, an interviewee from ENGO A stated that it was very difficult to engage with the King (*Sultan*) for turtle egg protection laws as many protocols need to be followed.

In addition, it is also difficult for the ordinary staff members of the ENGOs to do lobbying, as they have limited power and contact. Thus, one interviewee suggested that their senior managements (for instance, the CEO) handled the lobbying strategy for their organisation, as the senior management would have more connection with people from government agencies. Moreover, another clear reason why lobbying is unsuccessful for Malaysian ENGOs is because it contradicts the work principles of the Malaysian ENGOs, which are 'softer' and more engaging. This is in line with the discussion of the roles of Malaysian ENGOs in democracy, as discussed in Chapter 7, where both Malaysian ENGOs described that they would protest through gentle, democratic ways like petitions but not through hard or aggressive ways like organising a rally. Evidently, this is also associated with the fact that Malaysian ENGOs have a close relationship with the government and they must maintain this relationship, which in line with the discussion in the next chapter that the close relationship between ENGOs and the government is one of the barriers in environmental communication.

Furthermore, it is worth remembering that although none of the media interviewees spoke about lobbying strategies, the media are actually indirectly involved in lobbying through the write-ups in newspapers or by providing space for interviews and organising conferences (Tresch & Fischer, 2015). Taking certain popular environmental issues such as the Lynas and sturgeon fish projects, for example, the Malaysian media, particularly Media A and Media B, has extensive coverage of these issues either through their news articles or features, and this has indirectly shaped public understanding and opinion about these controversial issues. Most importantly, the media coverage of these two issues has mobilised the public to react to and protest against these projects. In fact, one of the interviewees from Media B mentioned that their coverage of sturgeon fish issues successfully stopped the project, which indicates that the media actually take part in lobbying activities.

The results of the interviews also discovered that campaigning is another essential strategy used by both the Malaysian ENGOs and the media in environmental communication. Unlike policy advocacy and lobbying, which are more specifically conducted by the ENGOs, a small majority of media interviewees from Media A revealed that their organisation has also used campaigning in environmental communication. A campaign is defined as a strategy involving social control via provocation (Paisley & Atkin, 2013). Meanwhile, according to EN6, ENGOs' campaigns include different target audiences, depending on the objective of the campaign. This is in harmony with Hauger, Daniels & Saalman's (2014) finding that two environmental campaigns organised by Greenpeace India and Greenpeace China had different intended audiences. According to these authors, the 'Endangered Waters' campaign organised by Greenpeace India targeted multiple audiences, including the local government, business firms and their investors, while the Thirsty Coal campaign organised by Greenpeace China was specifically aimed at Chinese government agencies.

Additionally, the findings of this study revealed three objectives of using campaigns as an environmental communication strategy by the ENGOs. First, the ENGOs aim to raise awareness and educate the public about a particular environmental issue. One example is the Join "Tx2" Tiger Campaign, which was organised by ENGO A to promote a 'symbolic tiger adoption' programme and also to educate the public about the importance of tiger conservation (ENGO A's website, 2010c). Similarly, ENGO B's Save Our Seafood Campaign also aimed to raise awareness about the 90% decline of the fish stocks in Malaysia and educate Malaysians about the importance of sustainable seafood consumption (ENGO B's website, 2010a). Secondly, some environmental campaigns are organised by the ENGOs in order to collect funds, such as the MYCAT Fundraising Campaign that was organised by ENGO B with the aim of getting as much funds as possible for tiger conservation (ENGO B's website, 2014b). Finally, some of the environmental campaigns organised by the ENGOs, such as campaigns to sign petitions, aimed to get support from the stakeholders. This is in harmony with the discussion of the roles of ENGOs in democracy in Chapter 7, where Malaysian ENGOs prefer to use petitions to protest against projects that can harm the

environment; therefore, to get people to sign the petition, the ENGOs must organise a campaign first to educate the public about the environmental issues.

Predictably, campaigning is a common strategy used by the Malaysian ENGOs and all their environmental campaigns organised are in line with their missions, visions and championed issues. ENGO A, which is focused on wildlife and marine issues, and ENGO B, which is focused on preserving the natural heritage of Malaysia, will not suddenly organise an anti-nuclear campaign, even though nuclear waste is an environmental concern; similarly, most of the ENGOs in the world will towards the cause that their organisation and their teams are fighting for. On the other hand, one of the interviewees from ENGO A revealed that campaigning is actually a new strategy that has been adopted by their organisation. EN6 explained that their campaigning strategy began in 2014, which shows that campaigning is considerably new to the organisation and more environmental campaigns should be done in the future.

On the other hand, this study showed the unexpected result that Malaysian media, particularly Media A, has adopted campaigning as one of the strategies used in environmental communication. Although media campaigns are rare and are often not as big as the ENGOs' campaigns, two interviewees from Media A mentioned that Media A had organised their own environmental campaigns like the 'Green Day Campaign'. Indeed, a few media interviewees spoke about the campaigning strategy, as most of them understood the term "campaign" as organising an event for a cause like the 'no plastic bags' campaign. Like the argument about indirect lobbying by the media through their environmental write-ups, I strongly believe that the media also indirectly use the environmental campaign strategy in their newspaper articles. Howarth (2012) indicated that the environmental campaigns in the media can be also done through the editorial decision to consistently write on one particular environmental issue in the newspaper with the objective of influencing public debate and local policy. In the meantime, although none of Media B's interviewees spoke about using the campaigning strategy, one of them agreed with one of the interviewees from Media A that the media should be a support system for the ENGOs' campaigns, particularly by giving free space for ENGOs to publish their campaign messages

in the newspapers. This is because media support for ENGOS' campaigns is undoubtedly crucial because it can provide public access to environmental information.

Also regarding the campaigning strategy, most interviewees from ENGOS A and B urged the need for their organisations to strategize their environmental campaigning and make campaigns more interesting, fun and appealing to the public. This is based on the fact that environmental messages are highly complex, scientific and, to some extent, unappealing to the audience. Therefore, it is vital for the transmitters of environmental messages like the ENGOS to be more creative in order to attract audiences. This is sometimes overlooked by large organisations. One example of an organisation which used an appealing campaign is Tourism Australian which used colloquial and fun phrases like "So where the bloody hell are you?" in their marketing campaign to attract tourists to come and visit Australia (Hong, 2008). Thus it is recommended that ENGOS use catchy and attractive phrases in their environmental campaigns.

Last but not least, the results of the analysis also suggest that both the ENGOS and the media have stressed the significance of collaboration with various stakeholders as one of the strategies used in environmental communication. To our knowledge, collaboration is generally acknowledged as part of the organisational relationship, partnership and networking effort (Mitchell, 2014; Imperial, 2015), which can positively lead to an improvement in the organisation's performance and assist innovation (Woodland & Hutton, 2012). Based on a comparative analysis between the Malaysian ENGOS and media, I found a clear distinction between the types of stakeholder collaborations by both social actors. The ENGOS seem to collaborate with more stakeholders than the media and the majority prefer to collaborate with the corporations and government agencies compared to the media, which prefer to collaborate with the ENGOS rather than other stakeholders.

In practice, the different preferences between ENGOS and media could positively be correlated to the different styles of environmental communication between the ENGOS and the media. As stated earlier in this study, particularly in

Chapter 7, the ENGOS do not merely depend on their newsletters or magazines to communicate environmental messages but they also engage the community directly, which is in contrast to the media, which are more focused on delivering environmental information through news articles. Thus it is crucial for ENGOS to collaborate as much as possible with the stakeholders to ensure that their community programmes can run smoothly. For example, EN10 confirmed that the ENGOS need the support of corporations to support their environmental communication work, especially providing funds for the ENGOS to use to run community programmes via their CSR projects. This is consistent with the findings from prior research like Den Hond, De Bakker & Doh (2015), who found that corporate companies routinely collaborate with NGOs via their CSR projects in order to earn a good reputation. In fact, NGOs, partnerships with corporate companies are crucial, as the ENGOS can obtain funding, the opportunity to advocate some relevant policies to the company and most importantly, the opportunity to conduct large-scale campaigns with the company (Heap, 2000). Within the Asian context, Cheung (2007) agreed that ENGOS in Hong Kong have collaborated with corporate companies to get sponsorship for their programmes, such as an airline company, which supported the ENGOS' campaign on endangered animal trafficking.

Additionally, the robust relationship between the Malaysian ENGOS and the government helps Malaysian ENGOS to recognise the government as one of their crucial partners in environmental communication. Some ENGO interviewees from this study emphasised their collaboration with the government, particularly in certain projects like Bird Checklist project. This contradicts the claims made by prior research (Seliger 2003b), which claimed that NGOs are independent and could work against the government. The media rarely collaborate with government agencies and only collaborated with them if the government agencies invited them to attend a related workshop.

Nonetheless, from the results of the interviews, I found that one of the reasons for the media and ENGOS to collaborate with other stakeholders is to obtain as much environmental information as possible from the stakeholders for their research and publications. This is why some of the ENGOS interviewees, like

EN8, revealed the importance of collaboration between the ENGOs and universities, as universities are the hub of environmental information and research. In a similar vein, it is crucial for the media get environmental information from a reliable source for their environmental reporting; hence, most of the media interviewees from this study stressed the partnership with the Malaysian ENGOs, as these ENGOs are the main sources for environmental information that can be quoted in news articles. In fact, the ENGOs are the agents who alert the media about any new environmental issue occurring in Malaysia, like EJ11's example of how the ENGOs informed her about the sturgeon fish issue. From there, the media conducted further investigations and created awareness of the issue. Presumably, the ENGOs also need the media as a channel to deliver the environmental information to the public (Hall & Taplin, 2007). Thus ENGO A, for example, have had an exclusive day with the media to give them an overview of their projects so that the media can choose which one they would prefer to cover. This is congruent with Yang & Calhoun's (2007) study of the media and ENGOs in China, which found that certain ENGOs in this region such as Green Earth Volunteers have organised monthly environmental salons that function as a base for mobilising certain influential environmental journalists.

Interestingly, collaboration between Malaysian ENGOs in conducting certain environmental projects is common in Malaysia; for instance, ENGO A and ENGO B collaborated in projects such as Save Our Sungai Selangor (S.O.S. Selangor) and Treat Every Environment Special (TrEES), which are parts of the Save Water Tower campaign. Another example cited in Wright (2007) is the Dolphin Coalition (DC) which was a collaboration between 40 American ENGOs like the American Human Society, the Center for Marine Conservation, the Defenders of Wildlife and others as part of the effort to lobby the US Congress of 1988 to prohibit fishing techniques that trapped dolphins. Consequently, collaboration among ENGOs can undoubtedly assist in improving the effectiveness of their aims and objectives (Mitchell, 2014).

On the other hand, unlike the ENGOs who collaborate with other ENGOs, there seems to be very little collaboration between the different Malaysian media outlets. This was highlighted by EJ9 from Media B, who revealed that the media

are keener to work independently and there is a lack of a collaborative community among them. Given this result, it is safe to conclude that the Malaysian media use had fewer collaboration strategies than the ENGOS. In fact, the overall results about the strategies used show that the Malaysian media seem to have fewer strategies for environmental communication compared to ENGOS. Generally, this indicates that the Malaysian media need to consider expanding their strategies in environmental communication to mirror the ENGOS. The findings and discussion on the level of collaboration between Malaysian the media and ENGOS will be displayed in the next section.

8.3 Findings: The Level of Collaboration between the Media and ENGOS in Environmental Communication

In brief, inter-organisational collaboration seems to be one of the pivotal strategies used by both the Malaysian ENGOS and the media in environmental communication. Hence, it will be beneficial to reveal the ENGO and media interviewees' interpretations of the level of their collaboration with each other. The main themes for the level of collaboration between both ENGOS and media are aligned with Horwath & Morrison's (2007) level of collaboration framework, which was discussed in Section 3.3.3 in Chapter 3, which include: (a) communication, (b) cooperation, (c) coordination, and (d) coalition and integration, as explained below.

(a) Communication

Communication is the lowest level of collaboration, where two or more individuals from different organisations talk, interact and discuss with each other. Six out of 13 media interviewees and 4 out of 11 ENGO interviewees explained that they have communicated with each other. In other words, the ENGOS and media have at least demonstrated the lowest level of collaboration. Moreover, some of the media and ENGO interviewees used the word 'only' to describe communication as the only level of collaboration between them:

“...Usually, we just communicate to each other **only**...” (ID EJ8).

“...I am more to[wards] communication... [To] that level **only**...” (ID EN9).

Furthermore, based on the interview, 4 out of 11 media interviewees and 1 out of 11 ENGO interviewees revealed that communication between the media and the ENGOs is mostly **seasonal**. Here, seasonal means that there is a gap in communication between them and they only interact with each other when there is a need for it. For the media, they only communicate and interact with the ENGOs when there is an environmental issue that requires them to talk to the ENGOs, as pointed out by one of media interviewees:

“...No, I would say, every time when issue surfaced; for example, that week you have two environmental issues, then that’s the amount of calls we [are] going to give to the ENGO... If, like, say, there are no calls, there are no environmental issues throughout the month, then we might not communicate with them at all...” (ID EJ1).

In relation to the media, the ENGO interviewees, particularly EN2 from ENGO A described their communication with the media as seasonal, which signifies a short-term relationship. This is because, the ENGOs only communicate and interact with the media when they are organising some environmental events which need media coverage or when the media contacted them to get their insights or comments on certain environmental issues:

“...We do not have a long-term relationship with the media... It is always every time we have something to run, and then only we would actually contact them [the media]... Or if they need us to respond to any of the issues, let us say, for example, someone writes a letter of opinion and I said ‘What do you think about this and this?’ And only then they would contact us...” (ID EN2).

(b) Cooperation

In contrast to communication, a large majority of the media interviewees (10 out of 13) pointed out that they had cooperated with the ENGOs; on the contrary, only 3 out of 11 ENGO interviewees revealed that they had cooperated with the media for environmental communication. Three media interviewees and one ENGO interviewee specifically stressed that cooperation is the highest level of collaboration between them by using the word ‘the most’, as shown here:

“...Cooperation is **the most** collaboration [we have]...” (ID EJ12).

“...I think cooperation is **the most** at this moment...” (ID EN8).

Two media interviewees spoke about **sharing expertise** as part of their cooperation with the ENGOs. For the media, the practice of sharing expertise mostly happens between the media and an environmental expert from the ENGO shares his/her environmental knowledge and information with the media on certain environmental issues. This is mostly based on the exchange of opinions.

“...Because they [ENGOs] have an expert and do their own research; hence we exchanging our opinions...” (ID EJ10).

Although none of the ENGO interviewees spoke about sharing expertise, one of them even stressed that there is no sharing of expertise between them and the media:

“...There is no sharing expertise between us...” (ID EN11).

On the other hand, unlike the sharing of expertise, almost half of the media interviewees (6 out of 13) and a few of the ENGO interviewees (3 out of 11) revealed that they **shared environmental information** with each other as another part of cooperation. For instance, according to EJ12, the ENGOs occasionally share information regarding their environmental events or projects with the media to get some coverage in the newspaper. This was also supported by EN8 from

ENGO B, who agreed that they regularly share information regarding their events with the media:

“...We have info sharing... Let’s say we are doing an event, so we share; we share the information...” (ID EN8).

In addition, EJ11 from Media B stated that most of the ENGOs shared their environmental information through press releases, which is consistent with EN3 from ENGO A, who revealed the use of press releases and letters to the editor to share information with the media:

“...The way we work is that if we do any press release or any letter to [the] editor anything [like] this, we send it out to all the media...” (ID EN3).

In the meantime, in relation to the sharing of information, one of the media interviewees explained that the Malaysian ENGOs are keen to share their opinions on certain environmental issues under their expertise:

“...Usually ENGOs will share their views on this and sometimes, they know a lot of things as well; like, if you talk about, say, a project – the new highway, that EKVE, East Klang Valley Expressway... So they are the one, they are the one to share that information...” (ID EJ2).

Some of the media and ENGO interviewees (two from the media and two from the ENGOs) added another crucial point regarding the kind of cooperation occurring between them, particularly **sharing the sources of environmental information**. The media interviewees noted that ENGOs would recommend the most viable sources for them to approach and research regarding a particular topic, which, at times, might not be thought of by the media.

“...They [ENGOs] would sometimes give us sources that we [had] not even thought of before...” (ID EJ8).

One of the interviewee from ENGO B agreed that the media had approached and asked them whether they had any contacts for sources of environmental information:

“...They asked me whether I have a contact person or not...” (ID EN11).

Another interesting finding in this study is that some of the media interviewees (2 out of 13) and almost half of the ENGO interviewees (5 out of 11) said that the cooperation between them is evident through the **support given by the media to the environmental events organised by the ENGOs**. EJ11 joined some ENGOs’ environmental events and EJ12 supported such events not only by attending such events but also by giving it coverage.

“...Like [ENGO B] organised one event called ‘Pedal for Nature’... Kayaking from Kuala Terengganu, turn[ing] around Peninsular Malaysia, then go[ing] to Perlis... So we try to report what they have done... When they go to a certain place for organising an event, we would also go... That is [an] example of how we cooperate with the ENGOs...” (ID EJ12).

In a similar vein, the ENGOs agreed that the media have given a tremendous amount of support to their environmental events. The ENGOs also described this support as taking form of attendance, the appearance of the media at their environmental events (ID EN4, EN10, EN11) and the coverage given by the media to their environmental events (ID EN5). In fact, the Malaysian media is very supportive of their environmental events and are even willing to be their official partners.

“...Cooperate with the media, you know; ask the media to become our official partner...” (ID EN8).

(c) Coordination

The third level of collaboration is coordination. The interview analysis suggests that 4 out of 13 media interviewees and 4 out of 11 ENGO interviewees indicated that they have reached the coordination level. In other words, both the media and ENGOs have coordinated with each other for environmental communication. Coordination is described by some media and ENGO interviewees as **working together on certain environmental issues**. One interviewee from Media A gave the example of how the media had invited the ENGOs for a trip to join and work with them on a story about a zoo:

“...Because often when we hear about a thing, we will say ‘Can you come with us and take us around?’... I did the zoo story recently; I actually called the NGO and said ‘You come with me; we will go together, ‘cause I won’t know what to look for; you will know what to look for’... You do things together...” (ID EJ5).

In the meantime, when new environmental issues surface, the ENGOs often organise a trip to bring the media to the site and show the media something that they think needs to be covered.

“...When there is an issue, sometimes they [ENGOs] will bring us to the location of event to see it by ourselves on what is actually happening... They set up one group and bring the media to monitor that area, taking pictures, to see the destruction, and they would provide us [with] their statement too...” (ID EJ7).

In relation to the media, one of the ENGO interviewees agreed that they are the ones who organised trips for the media.

“...[We have] a lot of media trips [where] we organised camps, everything for the media as well...” (ID EN8).

Additionally, some ENGO interviewees said that the reason for coordination between the ENGOs and media was to **pursue a common goal for environmental communication**. The first common goal, as pointed out by the two interviewees from ENGO A, is that both the media and the ENGOs need environmental stories for their newspapers and newsletters, with the aim of raising awareness and changing the readers' attitude towards the environment:

“...Connection and common goal... They need to get the stories out there; we need to get the stories out there, we want people [to] change by reading...” (ID EN1).

Another common goal between the ENGOs and the media is to create a better future, putting the emphasis on the importance of sustainability in Malaysian society.

“...We [ENGOs and media] overlap... We want to create public good, so, I mean, like, all our mission is basically... Because we want to build a better future where man exists in harmony with nature... So we want to conserve biodiversity; we want to move towards sustainability... A better future... (ID EN4).

(d) Coalition and Integration

In addition, coalition and integration are the highest levels of collaboration. However, the results of the analysis discovered that none of the media and ENGO interviewees spoke about a coalition between the media and ENGOs. Only one ENGO interviewee, EN3 from ENGO A, clearly stated that there was no integration between media and ENGOs, while some other interviewees (two from the media and two from the ENGOs) revealed that integration rarely occurred between the media and the ENGOs. This is because the media and the ENGOs have different objectives and missions, as stated by one ENGO interviewee:

“...Because, I think, the media houses and ENGOs have different objectives and different missions...” (ID EN4).

In fact, both the media and the ENGOs want to maintain their organisation's autonomy and avoid being manipulated by others:

“...Like I said before, we [media] still [hesitate] to cooperate with other organisations... I do not want to be manipulated by them...” (ID EJ8).

8.3.1 Discussion: The Level of Collaboration between the Media and ENGOs in Environmental Communication

In brief, in line with the discussion of Horwath & Morrison's (2007) level of collaboration framework in Section 3.3.3 in Chapter 3, this section aims to discuss the media and ENGOs' views of the current level of collaboration between them in environmental communication. As a whole, the results from the interview analysis in this study suggest that both the ENGO and media interviewees mentioned and discussed almost all levels of collaboration between them, including the levels of communication, cooperation, coordination, coalition and integration. It is interesting to note that Horwath & Morrison labelled communication as the lowest level of collaboration and integration is the highest. Remarkably, in relation to the level of collaboration, there are differences between the views of the Malaysian ENGOs and those of the media. Based on the interview, the majority of media interviewees in this study described their collaboration with the ENGOs as mostly at the cooperation level, whereas none of the ENGO interviewees had described any particular level of collaboration. In other words, the Malaysian ENGO interviewees in this study have a variety of views on the level of collaboration between them and the media, as some of them said that it was more on the communication level but some indicated that it was at either the cooperation or coordination level. The only similarity between the opinions of the media and the ENGO interviewees was that none of them spoke about coalition and integration (the highest level), except a few who revealed that integration between the media and the ENGOs is very rare due to the different objectives of both organisations.

As mentioned above, most of the Malaysian media interviewees and some ENGO interviewees viewed the level of collaboration between them to be at the cooperation level, which is the second level of collaboration. In brief, cooperation was defined by Horwath & Morrison (2007) as “low key joint working on a case-by-case basis” (p. 56). Meanwhile, other scholars like Paternotte (2014) explained that cooperation is a collective action such as acting together to build a link between two different agencies. Interestingly, the results of the analysis in this study resemble the claims by Horwath & Morrison’s (2007) that cooperation involves sharing information and expertise between organisations. Here, both the media and ENGO interviewees stated that they regularly shared environmental information with each other. The ENGOs usually share the environmental information regarding their events with the media through press releases or letters to the editor. The media stated that ENGOs will share their opinions on a particular environmental issue, but only if they have knowledge and expertise on it. This is probably because the ENGOs want to maintain their credibility by not talking about any environmental issues that are not related to their area of interest.

However, unlike sharing environmental information, the empirical results revealed that only a small number of interviewees (two media interviewees) spoke about the sharing of expertise as part of the cooperation between the Malaysian media and ENGOs. Sharing expertise was described by one of media interviewee as more the exchanging of opinions and knowledge among experts in the media and the ENGOs on certain environmental issues. Without a doubt, sharing expertise is crucial in environmental communication especially for filling the knowledge gaps among the environmental communicators, as both the media and the ENGOs will be able to obtain more environmental information in areas outside their expertise. Taking this remark into account, it will be vital for both the media and ENGOs to seize any opportunities to share the environmental information and knowledge in the future. According to Ipe (2003), there are two types of opportunities for sharing the knowledge: formal opportunities like through training programmes, and informal opportunities like social networks and personal interactions.

Interestingly, alongside information and expertise sharing being parts of the cooperation between the Malaysian media and ENGOs, this study discovered two more parts of cooperation: sharing sources and support for ENGOs' environmental events, which were not mentioned by Horwath & Morrison (2007). In terms of sharing sources of environmental information, the media interviewees said that the ENGOs have been very helpful in suggesting news sources they could talk to regarding the environmental issues they intend to cover. In fact, the ENGO interviewees from this study also agreed that they have no inhibitions about sharing their sources of environmental information with the media. As the ENGOs help the media to find news sources, the media, on the other hand, cooperate with the ENGOs through their support of the environmental events organised by the ENGOs. The media show their support for the ENGOs by giving them free publicity given for their environmental events, either through coverage in the newspapers or by being the official partner for the events. As mentioned in Chapter 7, the media are indeed very powerful, as some environmental issues fail to generate public concerns if this issue was deemed not to be newsworthy by the media (Hannigan, 2006). Hence, it is absolutely vital for the ENGOs to acquire as much support as possible from the media, particularly free publicity for their events.

According to the result of this study, nearly half of the media interviewees as well as some media interviewees indicated that they have reached the first or lowest level of collaboration, which is communication. Hence, it is not surprising that both the media and ENGOs have communicated once at least with each other, as they were working for the same environmental cause. However, it is interesting to note some interviewees labelled their communication as being more seasonal communication than regular or sustained communication. Seasonal communication means they will only contact or communicate with each other for certain purposes for a certain period of time. For instance, some interviewees confirmed that the media would only contact the ENGOs when there were environmental issues that they needed the ENGOs to comment on, while the ENGOs only communicated with the media when they needed publicity for their events. This could perhaps be because environmental issues are still not a priority but are more of a seasonal issue in the Malaysian media. As explained by some

media interviewees in this study, until recently, there was no specific desk for environmental content in the Malaysian media. In fact, most Malaysian journalists were required to multitask and hence none of them is trained to cover environmental issues specifically, as they also need to cover other stories like sport, politics and economics (Nik Norma, 2007). As a result, the media only communicate with sources like the ENGOS when an environmental issue surfaces. Similarly, some of the ENGOS' activities or projects, like research projects, did not necessarily need media coverage. Therefore, the ENGOS would only communicate with the media when they needed the publicity. This is consistent with a recent survey conducted by Lo & Peters (2015) which discovered that only 8.2% of Taiwanese and 13.7% German scientists had contacted the media more than ten times in a period of three years. This shows that most of their respondents contacted the media less than ten times in three years. This indicates that this phenomenon does not only occur in Malaysia but also all around the world, calling for the need to solve it in the near future.

Moreover, this study suggests that some media and ENGO interviewees agreed that they are now at the third level of collaboration, which is coordination. Horwath & Morrison (2007) defined coordination as "more formalised joint working, but no sanctions for non-compliance" (p. 56) as these organisations are actively pursuing a common goal and adjust themselves to work together. In line with Horwath & Morrison's definition of coordination, some media and ENGO interviewees from this study explained that the reason why they coordinate with each other is because they are pursuing a common goal, which is to get environmental information published in newspapers and newsletters to create public awareness, as well as reaching the goals of sustainability, environmental protection and a better future. As mentioned by a prior study (Roper, 2002), one of the critical factors of productive collaboration is that both parties must be clear about the goals of collaboration. Both the media and ENGOS for this study showed that they were clear about the goal of collaboration, which is to maintain sustainability. Hence, they are able to cooperate with each other. In addition, another reason for the coordination between the media and ENGOS in environmental communication is that both of them have been working together to cover the same environmental issues. According to the interviewees, sometimes

the media invite the ENGOs to join them on a trip, as the ENGOs are experts in environmental issues; at times, the ENGOs themselves prearrange a trip for the media to give them an opportunity to cover the environmental issues.

Interestingly, the overall findings of this study also showed that the media and ENGOs have not reached the highest level of collaboration, which is coalition and integration. This might be because both organisations have different objectives and missions. The main objective of the media is to gain profit for their businesses, while the ENGOs are more focused on volunteering and non-profit scientific research and activities. It is quite hard for both organisations to integrate, which means growing together as a union (Butterfoss, Goodmanl, & Wandersman, 1993) and banding together (Kaplan, 1986). It is also impossible for both organisations to integrate with each other and creates new joint identity (Horwath & Morrison, 2007), as both organisations want to operate on their own without being controlled by others. In fact, to ensure the autonomy of their organisation, a media interviewee (the editor for ENGO B) even used the phrase “do not want to be manipulated by them” to explain why they do not want to collaborate with the ENGOs at the integration level.

To summarise, it is legitimate to conclude that the collaboration between the Malaysian media and ENGOs has only reached the medium level, which is coordination. Furthermore, ENGO interviewees tended to be split roughly evenly among the three lowest levels (communication, cooperation and coordination). Although both the media and ENGOs only reached the third level of collaboration, the reasons why they did not proceed to the highest level are very understandable, as both the media and the ENGOs have different objectives and want to keep their organisations autonomous. A summary of the levels of collaboration between the Malaysian media and the ENGOs is displayed on Table 8.1 below. The findings and discussion of the current status of collaboration between the media and ENGOs in environmental communication will be presented in the next section.

Table 8.1: The level of collaboration between the Malaysian media and ENGOs in environmental communication

Level of collaboration	Media	ENGOs	Descriptions
Lowest: Communication Cooperation	✓	✓	<ul style="list-style-type: none"> • Seasonal communication
Medium: Coordination	✓	✓	<ul style="list-style-type: none"> • Sharing expertise • Sharing environmental information • Sharing sources of environmental information • Supporting ENGOs' events • Working together • Pursuing common and overlapping goals
Coalition	X	X	<ul style="list-style-type: none"> • Different objectives
Highest: Integration	X	X	<ul style="list-style-type: none"> • Remaining autonomous

8.4 Findings: Current Status of Collaboration between the Media and ENGOs in Environmental Communication

This section will clarify the interviewees' perspectives of the current status of collaboration between the ENGOs and the media in environmental communication. There are three major themes that emerged from the interview which were not been discussed in the theoretical framework of this study before, including: (a) easy collaboration, (b) hard and challenging collaboration, and (c) symbiotic relationships, as discussed below.

(a) Easy collaboration

More than half of the media interviewees (7 out of 13) and nearly half of the ENGO interviewees (5 out of 11) explained that collaboration between the Malaysian media and ENGOs is easy to conduct. Based on the interview, eight media interviewees said that the people who work for ENGOs have **positive attitudes** such as being helpful (ID EJ2, EJ5, EJ8, EJ9, EJ10), very friendly (ID EJ3, EJ5), very active (ID EJ7) and always ready and willing to share their views and give statements to the media (ID EJ1, EJ2, EJ5, EJ7). One media interviewee commented:

“...Like I said before, when we [media] have one particular issue, we will ask them... They are ready in 24 hours; they [are] always ready to give their opinions... Never say no to us; if they think it is under their area and they can give an opinion, they will give the opinion... At least they will say, ‘OK, wait; I will make my preparation, I will study the issue and then I will attach my statement...’ (ID EJ7).

In contrast to the media, only one interviewee from ENGO A explained that the media’s positive attitude made collaboration between these two different organisations easier:

“...They will proactively come to us, and ask us, you know, what they can cover and what is the series that they should develop with us in terms of wildlife...” (ID EN6).

In addition, collaboration between the media and ENGOs is also considerably easy is because the **Malaysian ENGOs need the media to be their channel** for delivering the environmental information (ID EJ2, EJ12). When the ENGOs need the media, they always take the first step to approach the media (ID EJ7, EJ11), ask the media to promote their events (ID EJ8, EJ9, EJ11) and want the media to cover or highlight their environmental stories (ID EJ4, EJ8) as frequently as possible. These factors have made the media’s job easier, as explained by nine media interviewees. Interestingly, some ENGO interviewees (EN1, EN2, EN4, EN6, EN7, EN10 and EN11) agreed with some of the media interviewees that they need the media as a channel to deliver their environmental information to the stakeholders.

“...Yeah, because obviously [for] your promotion and publicity, you depend on them [media]...” (ID EN5).

On the other hand, some ENGO interviewees also explained that they need the media because the media are powerful, particularly for reaching more audiences than the ENGOs. Unlike in Western countries, Malaysians are still highly dependent on the print media, especially newspapers, to access environmental

information. Therefore, it is crucial for the ENGOs to engage with the media and get coverage from them. An ENGO interviewee gave example of how the media's range is wider and the media coverage helps in obtaining more donations for their campaigns:

“...The campaigns, how the public can support us because through the media, a lot of people actually call in and make donations and all that... [The media reach] the masses and from there also corporates... We get calls from corporates asking... To work with us and all that... So the reach [of the] media is wider...” (ID EN7).

(b) Hard and challenging collaboration

Despite the large majority of media and the ENGO interviewees from this study who described the collaboration between them as easy, three ENGO interviewees (two from ENGO A and one from ENGO B) noted that their collaboration with the media has been difficult and challenging. However, none of the media interviewees spoke about the difficulties and challenges of collaboration with the ENGOs. Furthermore, one interviewee from ENGO B stated that one of the reasons for the difficulties and challenges in collaboration is due to the **bureaucratic practices of the Malaysian media**:

“...For example, I want to invite them for a press conference... Communicating with them is not easy... Because some of them require email, some of them still work with fax and all that... So it is quite annoying, and secondly, if we send to them early they will say, ‘Oh you have to send it one day before; only then we can check,’ and all that...” (ID EN7).

On the other hand, another two interviewees from ENGO A noted that collaboration between the ENGOs and media is difficult and challenging because the **environment is not the top priority of the Malaysian media**, as they are inclined towards other issues like economics, politics and entertainment.

“...Because environmental issues are not top priority... Because no one [is] really bothered, it’s not an issue that people can... It’s not like politics... Because it is not [a] priority, people are more concerned about economics, about politics, about entertainment...” (ID EN5).

(c) Symbiotic relationships between media and ENGOS

A few of the media and ENGO interviewees (seven from media and four from the ENGOS) stressed that there is a symbiotic relationship between the Malaysian ENGOS and the media. A symbiotic relationship was described by some interviewees as the conditions where both the media and ENGOS need and help each other (ID EJ1, EJ3, EJ4, EJ5, EJ9, EN1, EN5, EN7). Some of the media and the ENGO interviewees (six from the media and five from the ENGOS) from this study highlighted that the symbiotic relationship between them occurred because **the media are a crucial channel for ENGOS to spread their environmental information**. This is consistent with the earlier discussion on the reasons why the collaboration between both organisations is easy to do. One media interviewee explained on the role of media as a platform for the ENGOS to share their work to the public:

“...Cause they [ENGOS] want a platform to share the work they are doing and the events they are holding...” (ID EJ3).

On the other hand, another reason for the symbiotic relationship between the media and ENGOS is associated with the fact that **the media also need the ENGOS to be their sources** for environmental communication, particularly for providing environmental information and to be quoted in environmental news. This is also consistent with how most media interviewees indicated that they have a lot of collaboration with the ENGOS compared to other stakeholders; this is because ENGOS are essential sources for environmental information. Six out of 13 media interviewees and 4 out of 11 ENGO interviewees agreed that the media need the ENGOS as their sources. One ENGO interviewee explained how the media need them as their sources for their environmental news articles:

“...They sometimes need to do a story; they need our quote, so they will ask me, ‘[EN1], can I get quote from this?’ Then I work on it...”
(ID EN1).

8.4.1 Discussion: Current Status of Collaboration between the Media and ENGOs in Environmental Communication

From the interviews, I discovered two intriguing perspectives regarding the current status of collaboration between the Malaysian ENGOs and the media in environmental communication: collaboration could be easy or difficult. Most of the media and ENGO interviewees in this study confirmed that collaboration between them is easy due to two main factors: the positive attitudes of the ENGOs and the media, and the ENGOs’ need for the media as a channel of communication. Undoubtedly, positive attitudes, particularly being helpful, active, proactive and friendly, are the factor that made collaboration easier and more effective. The media also labelled ENGOs as proactive in the collaboration, as they always initialised the approach to contact the media to get publicity.

On the contrary, although only a small number of interviewees (3 from ENGOs) who spoke about the difficulty of collaboration between the ENGOs and media, it is still important to discuss this aspect, as this kind of information can be a great guide for improving collaboration in future. As described by one ENGO interviewee, it is hard and challenging to collaborate with the media due to their bureaucratic practices like requesting the ENGOs to send them a formal email or fax. This is in contrast to the working style of the ENGOs, which is more flexible and less bureaucratic. Prior scholars like Volti (2012) stated that bureaucracy works for organisations which have regular routines such as the state departments, which handle thousands of licence applications every day, but it is ill-suited for an organisation which deals with unpredictable things, such as scientists doing research who do not know when they will get the results of a test. On the other hand, we should also note that the journalists are also flooded with a massive amount of press releases, letters to the editor and phone calls from various parties who seek coverage in the newspaper (Hansen, 1994c). Hence, the journalist has sometimes limited time to cooperate with particular people like the ENGOs.

Given both sides of the question, the Malaysian media can at least rethink this bureaucratic practice, as they also need to deal with environmental issues, which are usually unpredictable, especially if it is related to disaster issues like tsunamis, floods and landslides. If they still exercise bureaucracy, it will be difficult for the ENGOs to approach and inform them of some new environmental issues that have suddenly surfaced. In the meantime, the ENGOs also need to understand the nature of media work, which is usually busy with many other things.

Meanwhile, another reason for the difficulty in collaboration between the media and ENGOs is because the environmental issues themselves are not a priority for the Malaysian media. One interviewee from ENGO A and one from ENGO B stated that the Malaysian media are not interested in picking up environmental issues compared to other issues like politics, economics and entertainment. This is consistent with the prior discussion on seasonal communication between the media and ENGOs, as environmental issues are not the priority of the Malaysian media. This is absolutely difficult for the ENGOs as they are focused on the environmental issues and they have a lot of environmental information to share with the media; unfortunately, the media have very limited space to cover environmental issues, as there are many spaces that need to be filled by other stories as well. As a result, the ENGOs are struggling to collaborate with the media, which is consistent with the discussion in Chapter 9 about the limited space in newspapers being not only a barrier for the media but also for the ENGOs as they rely heavily on the media as a channel for environmental communication.

In addition, in relation to the current status of collaboration between the Malaysian ENGOs and the media, I also discovered another interesting theme, which is that of symbiotic relationships. Despite some past researchers like Frangonikolopoulos (2014), based on the Greek perspective, claiming that the relationship between the media and NGOs is more a one-way relationship (meaning that only the ENGOs need the media but the media do not need NGOs to survive), this study found a contradictory reality where both the Malaysian media and the ENGOs revealed that they need each other, which shows that their relationship is not one-way but more a two-way relationship. Some of the media

and ENGO interviewees from this study even used phrases like “need each other” and “helping each other” to demonstrate their symbiotic relationship. Hence, it can be concluded that both the Malaysian media and the ENGOS need each other for different purposes. The media needs the ENGOS for news input and sources for environmental news articles; the ENGOS need the media as a channel to reach the stakeholders. The findings and discussion of sources are reliance for the publications, as well as the crosschecked results from the quantitative content analysis will be offered in the next section.

8.5 Findings: Sources Reliance for Publication as Another Strategy in Environmental Communication

This section will elaborate on the findings of the study of the sources used by the Malaysian media and ENGOS in environmental communication. Having reliable sources, as discussed in Section 3.3.2 is another strategy used by the media in environmental communication, particularly for obtaining support for their environmental articles. Although having reliable sources is often associated with the media, this study suggests that the ENGOS also rely on their sources in environmental communication. In short, three major themes emerged from this study, including: (a) sources are crucial for environmental write-ups, (b) source diversity in environmental communication, and (c) factors in source selection.

(a) Sources are crucial for environmental write-ups

Almost all of the media interviewees (12 out of 13) and more than half of the ENGO interviewees (7 out of 11) described the prominence of sources in environmental communication. Out of 12 media interviewees, five of them (ID EJ2, EJ3, EJ4, EJ7, EJ8) repeated the phrase “No sources; no story,” to indicate the importance of sources in environmental communication.

“...Sometimes you might think of a topic that you want to use, but if you cannot find the source of information or people to talk about it, [there’s] no story...” (ID EJ2).

“...Very important: no sources means no news...” (ID EJ8).

Some the media interviewees (5 out of 13) and one interviewee from ENGO A pointed out that **sources are important, as they are usually experts on environmental topics** such as academics, scientists and many more. In Malaysia, there are a lot of experts on various environmental topics (ID EJ5) who are able to assist the media and ENGOs, particularly by providing environmental information on and explaining a particular topic that may not be part of the media or ENGOs’ expertise. One media interviewee who does not have a background in the environment discussed the importance of having expert sources for explaining topics like timber:

“...Like me, my field is journalism and not [the] environment... Suddenly, my boss told me: ‘[EJ11], you write about illegal logging’ ... How can I know all these types of timber, right? That [is] why I need to study and find a source who can talk like ‘Oh, this timber is this and this type’, like that...” (ID EJ11).

Only one ENGO interviewee from this study agreed with the media interviewees that some of the sources have more expertise than them:

“...Of course yeah, they know more about the issue than I actually do, so they are the expert on the subject matter...” (ID EN1).

Moreover, some media interviewees (5 out of 13) and a large majority of ENGO interviewees (7 out of 11) explained that sources are crucial in environmental communication as **sources are the ones who provide the environmental information** to the media and ENGOs. From the environmental information given by the sources, the media are able to write a report for the newspapers and the ENGOs can write environmental articles in their newsletters. One media interviewee and one ENGO interviewee pointed this out:

“...You know, plants – as in chemical plants, logging, open burning, that kinds of things – so it is really important to have a good source on the ground; you can always give information...” (ID EJ5).

“...Yeah, there is a lot of things that we do not know out there also, and we depend on our members, our fellow academics, who goes to the field, to actually bring all this information to us...” (ID EN7).

On the other hand, some media and ENGO interviewees (three from the media and two from the ENGOs) noted that sources are also crucial **to be used as quotes in environmental articles**. The media are not allowed to write their own ideas or opinions in environmental news articles; hence, they need to quote the sources’ opinion to support their write-ups:

“...Our articles are primarily built on what the people are saying, what the stakeholders are saying...” (ID EJ3).

Additionally, according to some media and ENGO interviewees (six from Media B, five from the ENGOs), using and quoting the sources in environmental articles **gives credibility to stories**. In other words, the readers will believe, trust and not question or doubt the article written by the media or ENGOs. One media interviewee and one ENGO interviewee explained:

“...Because without a reliable source, it would be hard to get the confidence from the readers, as they would think we made up the stories by ourselves... So, for credibility, when we quote sources, readers would be confident [about] our stories...” (ID EJ7).

“...You know, if you have someone who has done a study and it has a result that [is] proven and then you know it is a lot more believable... Because it makes the, I think, people believe more if you have a very credible source...” (ID EN3).

(b) Sources diversity in environmental communication

More than half of the media interviewees (7 out of 13) and nearly half of the ENGO interviewees (4 out of 11) said that they do not stick to only one source but mostly used various types of sources for their newspapers and newsletters. Some of the interviewees used words like ‘many’ (ID EJ4, EJ10, EJ13), ‘anyone’ (ID EJ5), ‘varies’ (EJ6, EN9), ‘bunch’ (ID EN5), and ‘different’ (ID EN11) to describe the use of various sources in their environmental articles. The first type of source used only by the ENGOs is the **internal source**, which is a person who works under the same roof as the ENGO interviewees. In other words, the ENGO interviewees will get environmental information from or quote the opinions given by their colleagues. Some ENGO interviewees from both ENGOs A and B even used words like ‘all’ (ID EN4), ‘usually’ (ID EN1, EN5), ‘most’ (ID EN3), ‘a lot’ (ID EN3, EN11) and ‘always’ (ID EN7) to describe the high frequency of using internal sources. The main reasons for using internal sources are because ENGOs are scientific organisations who have their own experts who are reliable as sources and have research data to be referred to:

“...Usually, because as a research-based organisation, we also have our own researcher inside here...” (ID EN1).

Another reason given by two interviewees from ENGO A regarding the use of internal sources is associated with the time constraints that they face when preparing environmental articles. Thus instead of finding external sources, which will take more time, some of the ENGOs choose the faster and easier way by quoting their internal sources:

“...A lot of times, I mean, I guess, it is also easier to quote internally because you know, OK there is this report that we wrote, this paper that we wrote; its faster... A lot of the time, the media, if they want us to write something it’s like ‘Please give it to us yesterday’...” (ID EN3).

Additionally, 5 out of 11 ENGO interviewees stated that their **own scientists** are the most common sources that they quoted in their environmental articles. The scientists can be the field biologists (ID EN1, EN4) or part of the conservation team (ID EN1, EN4, EN7, EN10). The reason for using their own scientists as sources is that these people are experts in their field who have a vast level of knowledge (ID EN4) and have special backgrounds. For example, one of ENGO A's scientists is the only person in Malaysia who has acquired a PhD in tiger conservation (ID EN1) and ENGO B has their own forest experts (ID EN10). Most of these scientists have conducted fieldwork and know what is actually happening on the ground very well. This expertise (ID EN7) can be shared with the communicators who are usually responsible for writing the materials for the newsletters or press releases. Besides their own scientists, Malaysian ENGOs like to include their **own senior management** as their internal sources. From the perspective of ENGO A, the senior management can be their senior officers (ID EN5); for ENGO B, the senior management is the secretariat of the organisation, who is usually an academic (ID EN10), or the president and heads of department (ID EN11). Similar to the reasons for using their own scientists, two interviewees from ENGO B revealed that they prefer to use their senior management, as these people are a group of reliable experts:

“...Like in ENGO B, our president is a water expert... Our vice president also a biology expert...” (ID EN11).

In contrast to internal sources, **external sources** are another type of source used by both the ENGOs and the media. In general, external sources are the sources from outside the media and ENGOs organisation. One interviewee from Media A and two ENGO interviewees (from ENGOs A and B) said that they had used **scientific documents** like academic journals (ID EJ5, EN5, EN10), government documents, research centre logs and university research documents (ID EJ5, EN5) as well as a massive number of academic books (ID EN10) as their sources of information. One media interviewee, EJ5, gave an example of using NASA's scientific documents for her references in environmental communication:

“...I have used, like, satellite releases from NASA... They always look at logging around the work site... NASA has a system where they can track logging spikes around the world... So I have used that before...” (ID EJ5).

Additionally, some media interviewees (4 out of 13) and some ENGO interviewees (3 out of 11) revealed that they obtained environmental information from the **internet and social media**. One interviewee from ENGO B, for instance, gave the example of her dependence on the internet for information:

“...My source is more the ready material on the internet... Most of it is from the internet...” (ID EN9).

At the same time, more than half of the media interviewees (8 out of 13) and some ENGO interviewees (3 out of 11) indicated that **laypeople** are another form of external sources in environmental communication. Laypeople, especially the residents of certain areas, are people who call and inform the media and ENGOs about certain environmental issues occurring near him or her. One media interviewee gave an example of how the environmental issues get covered by the media after the public informs them:

“...We did the Cameron story, the one that’s Isabelle did, that one someone told us, and then we went... Same thing, someone told us about something about the zoo in Melaka, so we [went] there...” (ID EJ5).

On a similar note, ENGO interviewees also obtained information from the people who live where the environmental issues occurred:

“...For example, we have, like, say, Kuala Selangor Nature Park... All the issues there were raised by people staying there, in Ulu Geroh, *orang asli*; when they are opening up the forest and things like that, they will alert us... In Pahang, the sturgeon issues, the locals informed us, so it’s like that...” (ID EN8).

In addition to the laypeople living near an area of environmental problems, **victims of environmental problems** like landslides and tsunamis are other external sources for the media and ENGOs. Five out of 13 media interviewees and one out of 11 ENGO interviewees mentioned that victims are sources for environmental information. Victims, as described by some media and ENGO interviewees, are the people who experience the environmental problems first-hand and share their experiences for an environmental article:

“...I think [ENGO A’s magazine] has talked about victim that bumped into a tiger and then his child died, not because of injury but trauma...”
(ID EN9).

Interestingly, nearly all media interviewees in this study (12 out of 13) disclosed the importance of **ENGOs** as their sources of environmental information. Some media interviewees even used words like ‘main source’, (ID EJ6, EJ7), ‘strongest source’ (ID EJ6), ‘very important’ (ID EJ7), ‘most usage’ (ID EJ8) and ‘always’ (ID EJ9) to emphasised the importance of ENGOs as their sources. Interestingly, not only the media but also some of the ENGO interviewees (5 out of 11) indicated that other ENGOs could be useful sources of environmental information. Additionally, some of the media interviewees explained that the main reason why ENGOs are their top sources is because these ENGOs are proactive, particularly in alerting the media on environmental issues happening in Malaysia. Often, the media does not have to find ENGOs, as the ENGOs themselves will approach the media first. One media interviewee pointed out:

“...That why the importance of any ENGOs comes in... They alert the media, they push stories forward and they... If people do not care about it, they start picketing, they start protesting; that is how they attract the attention of the media, so you need them; we definitely need ENGOs...” (ID EJ1).

On the other hand, the second reason why the media prefers to use ENGOs as their source for environmental communication is because ENGOs have conducted an enormous amount of environmental research through their conservation work,

which can be referred to by the media. Because of their research, the ENGOs are described by some of media interviewees as a source which has a lot of data (ID EJ9), knows what is actually happening on the ground (ID EJ4) and which is able to give proven and accurate environmental information from their scientific research (ID EJ7). In addition, the media also prefer to use ENGOs as their sources because the ENGOs have a lot of experts in environmental fields, who are considered to be reliable sources for interviews and references.

“...For instance, like ENGOs B’s president, or vice president, is the head of Biology Department, Faculty of Environment, Universiti Putra Malaysia... So he is very knowledgeable person and somebody...” (ID EJ9).

Almost all media interviewees (12 out of 13) and more than half of the ENGO interviewees (7 out of 11) indicated that **scientists and academics**, especially lecturers and researchers from Malaysian universities are some of the crucial sources for environmental information. Similar to the reasons for using ENGOs as sources, some media interviewees indicated that they prefer to refer to academics, as they are experts on the environment. In fact, most of the academics have their specific area of expertise, which is very helpful for the media when they need to cover a certain topic such as dams, as explained by one media interviewee:

“...Dams: we definitely will speak to the experts who know the land... I think Malaysia does have a lot of expert, academics; you can always find someone involved in one of this things...” (ID EJ5).

In a similar vein, some media interviewees also pointed out that scientists are good sources, as they also conduct environmental research on their own. Similar to the ENGOs’ research output, media also refer to the scientists’ research findings in their news articles.

“...Like they [scientist] took a sample of dead marine animals due to heavy metal and oil spills in that area... That really occurred; that is

why I am confident to write it... They have facts from their research, not only one or two day's research but years..." (ID EJ8).

A large majority of media interviewees (10 out of 13) also revealed that the **Malaysian government** is one of their sources of environmental information. However, unlike the media, only two interviewees from ENGO B spoke about the use of government agencies as their sources. Examples of government sources given by both the media and ENGO interviewees are the state government (ID EJ1), government officers (ID EJ2, EJ12), fire fighters and police (ID EJ3), district officers (ID EJ13), the Ministry of Natural Resources and Environment (NRE) (ID EJ5, EJ9, EJ11), the Department of Wildlife and National Parks (*PERHILITAN*) (ID EJ8), the Department of Environment (ID EJ10), local authorities (ID EJ11) and the Department of Fisheries (ID EJ12, EN1, EN5). It is worth noting that the main reason for the media and ENGOs using government sources is because of the amount of data that can be referred to by the media and ENGOs:

"...Like the pig issue... This was based on the statistics provided by [Veterinary Department]... They calculated how many pigs went through their tax system... One pig costs RM1, so if they have 400 pigs, it will cost RM400..." (ID EJ13).

Interestingly, only the media interviewees expressed that they also prefer to use government sources as the government has the power to control a lot of things in Malaysia (ID EJ2), especially regarding rules and regulations (ID EJ8).

"...Like, I said, if you talk about landslides or deforestation in Cameron, ultimately, you have to go back to the Minister of Environment, because they are the one who have that control..." (ID EJ2).

The results of the analysis also showed that **politicians** are not common sources for environmental communication. Only 2 out of 13 media interviewees and none of the ENGO interviewees spoke about the use of politicians as their sources in

environmental communication. The categories of politician given by both media interviewees were either the Ministers or Deputy Ministers (ID EJ3), or Members of Parliament (ID EJ11). Some media interviewees like EJ7 discredited politicians by saying that “Politicians are the last person I would contact for the sources”. Similar to responses for politicians, just a few media interviewees (4 out of 13) and only one ENGO interviewee mentioned **corporate or business people** as their sources in environmental communication. For the media, corporate or business people can be their source only if they are covering an environmental story that is related to the corporate company’s projects: EJ11 gave the example of her experience interviewing contractors and resort entrepreneurs for her environmental stories. Meanwhile, for the ENGOs, EN2 explained that they usually quote their corporate sponsors.

(c) Factors in sources selection

The results of the interview analysis found six factors in source selection used by the Malaysian media and ENGOs for environmental communication. Of all the factors, five of them were consistent with Gans’ (1980) factors of source suitability include past suitability, productivity, reliability, trustworthiness, and authoritativeness. However, one of Gans’ factors (articulativeness) was not discussed by any of the media or ENGO interviewees in this study. Interestingly, a new factor emerged in this study, namely relevancy, which can be added to Gans’ factors of source suitability. In brief, **past suitability** means that the media or ENGOs have used the sources before. Some media interviewees prefer to use the sources that they have used before, as they have already built a relationship with them (ID EJ3), feel more comfortable with them (ID EJ11) and know the character of the source very well (ID EJ8), whether they are good (ID EJ4) or bad sources (ID EJ2). Nearly half of the media interviewees (6 out of 13) said that past suitability is one of the crucial factors for source selection. In fact, one editor from Media B expressed that she encouraged her journalists to use the same sources for their environmental articles:

“...The same and repeated sources... Sometimes the same person they [journalists] know; they would feel more comfortable... I really encouraged [them]...” (ID EJ11).

Unlike the media, only one ENGO interviewee from this study spoke about past suitability in source selection. Like some of the media interviewees, EN4 agreed that it is very crucial to know the sources very well, particularly the sources that had worked with the ENGOs before:

“...Oh definitely... Like, we had an article on dugong, I think; one of the professors from Universiti Malaysia Sabah (UMS)... So, of course, we would not publish unless we have worked with that person before...” (ID EN4).

Furthermore, very few media and ENGO interviewees (two from the media and one from the ENGOs) mentioned **productivity** as one of the factors for source selection. Some interviewees described productivity as the ability or willingness of the sources to talk a lot or more (ID EJ2, EJ3), give ideas on the environment (ID EN9) and provide a good quote (ID EJ3). For instance, one of the media interviewees pointed out:

“...So if the person talks a lot, and, yes, we [media] are very happy... Sometimes we also quote ENGOs because they are always willing to talk...” (ID EJ2).

Another prominent factor for source selection mentioned by the media and ENGO interviewees is the **reliability** of sources. Seven out of 13 media interviewees and 3 out of 11 ENGO interviewees stated that they only quoted sources that are reliable.

“...Like I said before, the reliable one... That is his [the source’s] daily job, so they are reliable... [They] can be trusted...” (ID EJ9).

“...So it is very hard, so we will only quote sources whom we know are reliable; in fact, we do not even use information from Wikipedia and all that...” (ID EN7).

In contrast, only three of the media interviewees and two of the ENGO interviewees discussed **trustworthiness** as one of the factors used to determine the suitability of sources. All three media interviewees described trustworthiness as being when the source is honest with no hidden agenda. In other words, the media must avoid sources, who just want to misuse the media for their own personal agenda and not for the benefit of the environment.

“...Sometimes, more or less, we take into account, maybe he or she [does] not really want to expose the issue but more for the sake of being in the newspaper... We must be careful, check whether the issue is serious or not, whether it has news value or [if the] source purposely wants to highlight the issue because he or she wants the news or to be present, wants publicity...” (ID EJ8).

A way to get a trustworthy source is through people who are close to the media or ENGOs like friends (ID EJ4) or close associate partners of the ENGOs like IUCN, Birdlife International, and etc. (ID EN8). Another way to determine the trustworthiness of the source is through an investigation of the sources' background and the environmental information provided by them:

“...You look at the work they do and all that... Go on the ground and then you know...” (ID EJ4).

Additionally, some media and ENGO interviewees (six from the media and six from the ENGOs) discussed **authoritativeness** as another key factor for source selection. Authoritativeness is described as whether the source has the rights and qualifications to talk about a particular environmental issue (ID EJ9, EJ11). A person who has the rights and qualifications to talk usually comes from a group of experts like academics (ID EJ1, EN10), scientists (ID EJ2), environmentalists or

biologists (ID EN7), who have expertise in a specific area of the environment. EJ11 from Media B explained how the media find authoritative sources:

“...For instance, if the issue is associated with dead fish due to river pollution, we [media] will interview the lecturer that [has a] qualification in the area of water pollution or water quality... Like the professor that I have interviewed; he taught in Universiti Teknologi Malaysia and he has expertise in water quality...” (ID EJ11).

On the other hand, some of the media interviewees in this study also mentioned that authoritativeness is associated with the position or the title held by the source. In other words, the sources who have a high position in an organisation like the president (ID EJ9, EJ10, EJ12), vice president, professor (ID EJ9), Minister (ID EJ10), Member of Parliament (ID EJ11) or local authority (ID EJ13) would more suitable to become a source for the media.

Remarkably, this study also suggests that 5 out of 13 and 5 out 11 media and ENGO interviewees believed that **relevancy** was a key factor in selecting the sources. Relevancy means that the sources selected by the media or ENGOs must be relevant to the environmental issues highlighted. In other words, it depends on the environmental issues or topics they wanted to write about (ID EJ2, EJ5, EJ8, EJ9, EN1, EN4, EN5, EN6, EN10). The media and the ENGOs cannot simply choose an irrelevant source that has no credibility to give insights, such as getting information or quotes from a mathematics professor on natural disasters like landslides.

“...For example, if you write about a story on El Niño, haze or the dry season, definitely you will speak to agronomists or agriculturists, but if it’s something like dams, we definitely will speak to the experts who know the land...” (ID EJ5).

“...Sometimes, you know, if, maybe, we were talking about environmental education, then maybe we would look for a comment from the Ministry of Education, or we might look towards, like,

maybe, student leaders and partner universities... So it really depends on the issue..." (ID EN4).

8.5.1 Cross-check between Qualitative Interviews and Quantitative Content Analysis of Newspapers and ENGOS' Newsletters

Most of the media and ENGO interviewees revealed that having reliable sources is one of the essential strategies for their publication. One of the editors from Media A, explained that: "...Sometimes, you might think of a topic that you want to use, but if you cannot find the source of information or people to talk about it, [there is] no story..." I decided to do a cross-check of the environmental articles in newspapers and ENGOS' newsletters to verify their claims about the importance of sources in environmental communication, as follows.

8.5.1.1 The use of sources in newspapers and ENGOS' newsletters

Figure 8.1 shows that compared to the sources used for ENGOS' newsletters, the media used more sources in their newspapers. Out of 1143 environmental articles in Media A's newspapers, 867 (75.85%) of them quoted at least one source. Similarly, 468 out of 591 Media B's environmental articles (79.18%) quoted at least one source. This is consistent with the claims made by a large majority of Media A and B interviewees that sources are crucial in environmental news reporting, as more than 70% of both media's environmental articles have sources. Meanwhile, although 7 out of 11 ENGO interviewees mentioned the importance of sources for environmental articles, the results of the analysis of their newsletters shows a different outcome. As displayed in Figure 8.1 below, both ENGOS A and B have fewer sources in their environmental articles. Of a total of 150 environmental articles found in ENGO A's newsletter, only 44 (29.33%) quoted a source while only 20 out of 166 environmental articles in ENGO B's newsletter, (12.05%) quoted a source. Possibly, most of the sources were only used by the ENGOS as their references and not quotation, unlike the media.

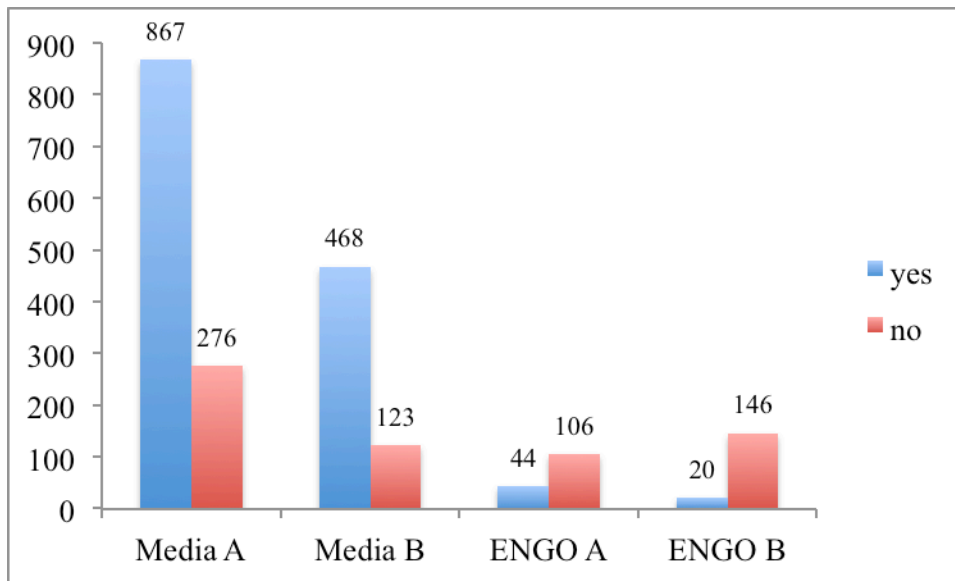


Figure 8.1: The frequency of sources in environmental articles

Furthermore, the results of the quantitative content analysis of Media A and B's newspapers and ENGO A and B's newsletters revealed that all four used a single source most often rather than using multiple sources (two or more sources) (see Figure 8.2), where 413 out of 1143 environmental articles on Media A newspaper (36.13%) quoted only one source. Similarly, 308 out of 591 Media B's environmental articles (52.11%) quoted only one source. For the ENGOs, 33 (22%) out of 150 environmental articles in ENGO A's newsletter quoted only one source, while 7 out of 166 environmental articles in ENGO B's newsletter (4.21%) quoted only one source. The number of sources used by ENGO B varied: out of 20 environmental articles, seven used only one source, another seven used two sources and six used more than two sources. This is in contrast to the results of the qualitative interview, where a large majority of media interviewees (7 out of 13) and nearly half of the ENGO interviewees (4 out of 11) said that they preferred to use multiple sources rather than a single source for their environmental articles.

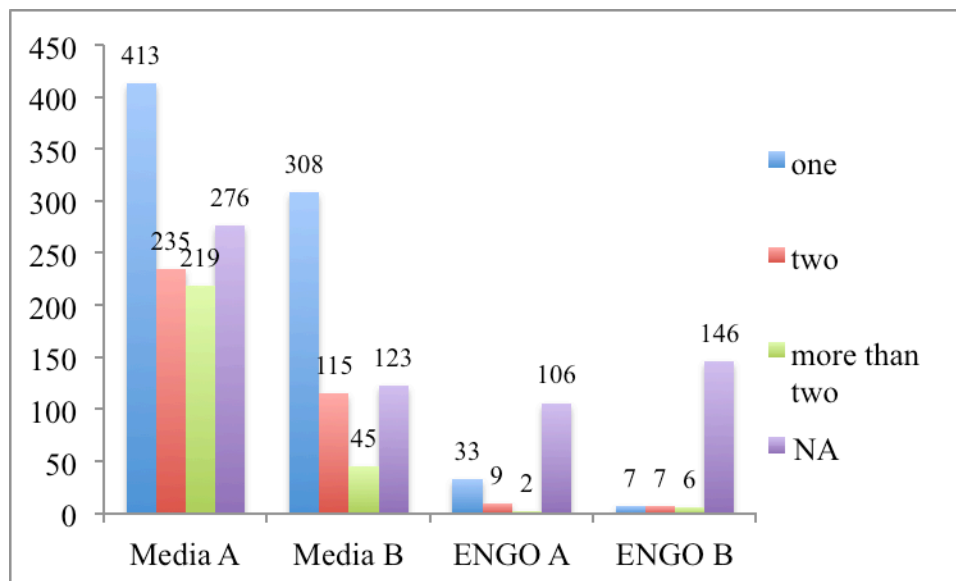


Figure 8.2: The number of sources used in environmental articles

Additionally, Table 8.2 describes on the various types of sources used by the media and ENGOs in their newspapers and newsletters. The results of the quantitative content analysis show that the media used more types of sources in their newspapers than the ENGOs in their newsletters. This is consistent with the results of the interviews. The government is the most quoted main and secondary source by Media A (main source=22.57%; secondary source=11.63%) and Media B (main source=30.96%; secondary source=8.12%). This is also consistent with the results of the interviews, where the majority (10 out of 13) noted that government agencies are crucial sources for environmental information. Interestingly, although only a few media interviewees (4 out of 13) spoke about the use of business people or corporates as a news source, the results of the quantitative content analysis show that business people are the second most quoted main source by Media A (12.07%) and Media B (8.79%). A similar result is also obtained for politicians, where only some media interviewees noted the use of politicians as a source, but politicians are the second most quoted main source after government agencies by Media A (12.07%) and Media B (12.85%).

On the other hand, although the majority of the ENGO interviewees (7 out of 11) mentioned that they mostly used internal sources (their own senior management or their own scientists), as their sources for their newsletter, the results of the quantitative content analysis show a different story. Based on the

quantitative content analysis of both ENGOs' newsletters, 'other ENGOs' are the most quoted main source in ENGO A's newsletters (14%) while 'laypeople' are the most quoted main source in ENGO B's newsletter (5.42%). Shockingly, none of the newsletters quoted any internal or external scientists as their sources; meanwhile, both newsletters quoted only two (1.33%) and or (1.80%) academics as the main source, as reported in Table 8.2.

Table 8.2 Type of main and secondary source used in environmental articles

Types of sources	Media A (N)		Media B (N)		ENGO A (N)		ENGO B (N)	
	Main source	Second source	Main source	Second source	Main source	Second source	Main source	Second source
Government	258	133	183	48	8	2	1	1
Politicians	138	43	76	19	2	-	-	-
Scientists	49	20	24	5	-	-	-	-
Academics	16	8	5	4	2	-	3	-
Laypeople	75	60	52	31	1	-	9	7
ENGOs	60	36	8	5	21	5	4	4
Victims	37	35	23	18	-	-	-	-
Business people	138	78	52	12	4	1	-	1
Actors	3	3	3	-	2	-	-	-
International news agencies	16	4	7	3	-	-	-	-
Unnamed sources	20	8	7	-	-	-	1	-
Society clubs	38	28	26	12	3	2	-	-
Local news agencies	15	3	1	-	-	-	2	-
Students	4	3	1	3	1	1	-	-
NA	276	681	123	431	106	139	146	153

Moreover, although the results of the interviews exhibited politicians to be the least used source for newspapers and newsletters, the result of the quantitative content analysis discovered a contradictory finding: politicians are the second most quoted main source for the media. Therefore, it is intriguing to see politicians appearing as the main sources for the environmental articles published by the Malaysian newspapers and ENGOs' newsletters. Furthermore, it was found that Ministers from other Ministries other than the Minister of NRE were among the most quoted sources by Media A (7.34%), Media B (8.62%) and ENGO A (1.33%). Some interviewees, such as EJ2, had given the example of the

importance of the Minister of NRE as a credible source: “Like I said, if you talk about landslides or deforestation in Cameroon, ultimately, you have to go back to the Minister of Environment, because they are the one who have that control”. Paradoxically, the results of the quantitative content analysis revealed that compared to other Ministers, the Minister of NRE is the least quoted source by both Media A (1.31%) and B (0.16%).

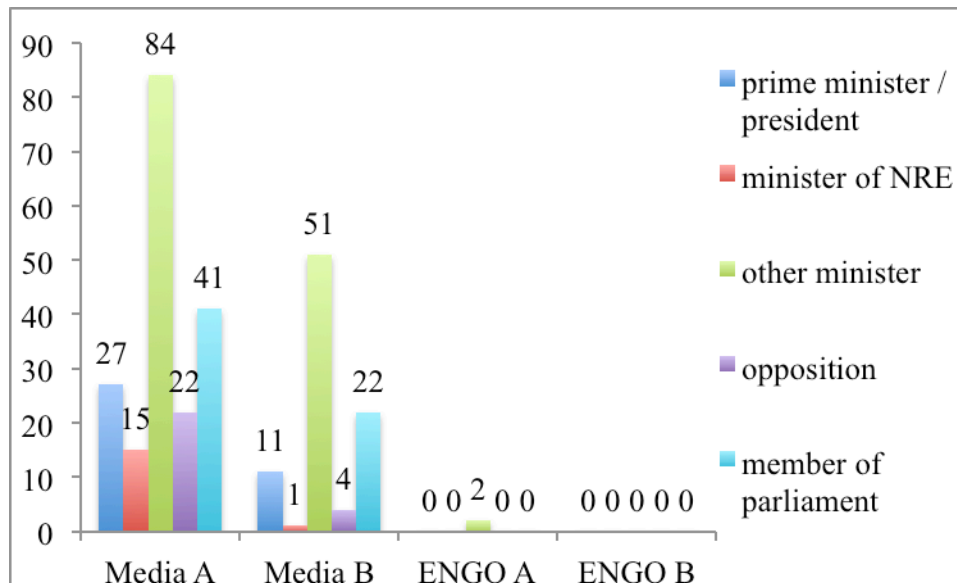


Figure 8.3: Politicians quoted in environmental articles

8.5.1.2 Statistical Result of the Chi-Square Test

Similar to section 7.6.1.2 in Chapter 7, an analysis of chi-square tests was also conducted to assess the different usage of sources between Media A, Media B, ENGO A and ENGO B. The result of chi-square indicates that there is statistically significant different between Media A, Media B, ENGO A, and ENGO B’s availability, number, and types of main, secondary, and politician sources used in environmental articles in newspapers and newsletters (asymptotic significance level is less than 0.05). Of course, this is in harmony with the result of the descriptive analysis above where all four organisations showed a clear different usage of sources on their environmental articles. Taking the availability of sources on environmental articles for example, there are 867 (75.85%) sources found on Media A newspaper, while 468 (79.18%) sources on Media B newspaper, only 44 (29.33%) in ENGO B newsletter, and only 20 (12.05%) in ENGO A newsletter.

The different availability of sources used in environmental articles on all four organisations could be due to the different number of environmental articles produced by them. In other words, the higher number of environmental articles produced by the organisation, the higher the sources usage. All in all, the detail for the chi-square test result is shown in Table 8.3 below. The discussion of sources reliance for publication as another strategy used by the media and ENGOs in environmental communication will be presented in the next section.

Table 8.3: Chi-square test result

Components	Value	df	Asymp. Sig. (2-sided)
(a) Differences in the availability of source used in environmental articles between all four organisations	409.886	3	.000
(b) Differences in the number of source in environmental articles between all four organisations	480.013	9	.000
(c) Difference in the type of main source used in environmental articles between all four organisations	537.011	42	.000
(d) Difference in the type of secondary source used in environmental articles between all four organisations	172.719	42	.000
(e) Difference in the type of politician source used in environmental articles between all four organisations	66.999	15	.000

*Significance at $P < 0.05$

8.5.2 Discussion: Sources Reliance for Publication as Another Strategy in Environmental Communication

Generally, in harmony with the theoretical discussion on the sources reliance of media as another strategy in environmental communication in Section 3.3.2 in

Chapter 3 earlier, this section lays out the discussion on the media and ENGO interviewees' interpretations on the important of sources for the publications of environmental articles in the newspapers and the ENGOs newsletter. From the media and communication viewpoint, a (news) source is often defined as an individual with a directly attributed statement, fact or quote within the news story (Dimitrova & Strömbäck, 2012; Ekman & Widholm, 2014). Interestingly, for most scholars, sources often associated and linked with the central need of the media's news story publication like the Ventriloquist Model that was discussed on Section 3.3.2, Chapter 3 explained that news is start with sources not the reporter. However, the result of this study was heuristic as not only the Malaysian media but the ENGOs also rely on sources for their newsletters and magazine publications. Based on the interview, more than half of the ENGO interviewees collectively agreed with a majority of media interviewees that sources are crucial for their environmental write-ups. However, the result of quantitative content analysis on ENGOs' newsletters surprising showed that less than 30% of the sources had appeared on the environmental articles in ENGOs A and B's newsletters. This contradicted the media with more than 70% of Media A and Media B's environmental articles had used at least one source. The lower percentage of sources in ENGOs A and B environmental articles posed a question whether their claims on the importance of sources during the interview were just their self-imagination. It also raised the possibility of maybe the ENGOs referred sources as sources included in their references and not just those in newsletters quotations, and whether, as opposed to the media, they relied less heavily on sources for their publications.

Before going further into the discussion, it is noteworthy to note that the result of this study discovered three major reasons of why the Malaysian media and ENGOs tend to rely on sources for their publication. First, the sources are considered, as the person who is an expert in the particular environmental topic likes scientists, academic or field researcher who usually provide the environmental information to the Malaysian media and ENGOs. Secondly, the media and ENGOs need sources to quote in order to support their claims in the environmental articles. Finally and most importantly, sources can bring credibility to the environmental articles written by the media or ENGOs. Past researchers

like Miller & Kurpius (2010) and Lacy et al. (2013) also agreed that sources do not only provide, they also increase the credibility of the statement made by the writer. Hence, by quoting the sources, the readers will be convinced by the environmental stories and have less doubt towards the media or ENGOs. For example, a past research by Conrad (1999) on the use of expert sources use among science journalists have discovered that it is crucial for journalists to choose the sources which have a reputable name like a director or a scientist to improve the credibility of the news.

Moreover, from the outcomes of the analysis, it is very interesting to note that there are two major diverse types of sources for the Malaysian media and ENGOs namely as the internal and external sources. Unlike the media who only used external sources, the ENGOs prefer to use internal sources for their newsletters publication. An internal source was depicted by some of the ENGO interviewees of this study as the person who works under the same organisation with the ENGOs. Specifically, there are two common internal sources listed by the Malaysian ENGOs, which are, the ENGOs A and B's researchers or scientists and their senior management like the President or the Head of Department. For the Malaysian ENGOs, they differ from the media as they are working under scientific-based organisations that have the access to a huge amount of experts such as credible scientists that can become the source for environmental information and to quote in the environmental article. In fact, other factors like time constraint in finding external sources also make the Malaysian ENGOs prefer to utilise their own internal sources for their publications. Having said that, the results of the quantitative content analysis are unfortunately inconsistent with the claims made by a majority of ENGO interviewees on they have used more internal sources as the results of the content analysis of both ENGOs A and B newsletters shown that other ENGOs and laypeople are more quoted than their internal sources like their own senior management and the president.

Beside internal sources, this study also showed that both the Malaysian ENGOs and media have used external sources in their newspapers articles and newsletters publications. However, the Malaysian media seems to employ more varied external sources than the Malaysian ENGOs. A majority of media

interviewees from Media A and B revealed that they have used government agencies, scientists academics, ENGOs and laypeople as their news sources, whereas a majority of the ENGO interviewees affirmed that scientists and academics are their most common sources. This result is not surprising as it might occur due to differences between the background of the media and the ENGOs organisations. As repeatedly mentioned in this study, the Malaysian ENGOs, particularly ENGOs A and B are working as scientific-based organisations and most of the environmental articles written on their newsletters and magazines are scientific write-ups. Hence, these articles are distinct from environmental articles on the newspapers as the environmental news articles are simpler than scientific environmental write-ups. Consequently, it is not surprising that the Malaysian ENGOs prefer to use sources from scientists and academics from universities than other sources to support their scientific environmental articles.

Additionally, it is apparent that laypeople is one of the essential sources for the media and ENGOs as they are the people who live in the area where the issue happened and have first hands experiences on facing the environmental problem. In the meantime, a laypeople is not necessarily a victim in the environmental disaster like landslides but the witness who ordinarily contacts the media or the ENGOs to voice their complain. For instance, one of media interviewees from Media B explained that a resident of Port Dickson had contacted her to complain about unsanitary pig farming activities that affected his residency area. The laypeople had undoubtedly assisted the media and ENGOs, particularly by being the ground informants who bring up new environmental information, which is not usually known by the media and ENGOs before the problems are reported by the society, who are living there. On the other hand, some of the media and ENGO interviewees expressed that the victims of environmental disasters like the victims of landslides; tsunami and earthquakes are key sources for environmental communication. This is because, compared with a layman or an ordinary people; victims are the people who have more truthful information as they experienced the problem first hand. For example, an ENGO A interviewee shared about a victim who lost their child during a tiger attack, and the victim showed a great deal of trauma. Such information is valuable for the readers who have never experienced this experience before so that they can

be careful in the future. In fact, this kinds of ‘real’ information as accounted by the victims can be used by the media and ENGOS as ‘scientific evidences’ to influence the public’s mind about certain environmental issues, as discussed in Chapter 7 on the topic of roles of media and ENGOS in social construction of reality.

Furthermore, as stated earlier, a majority of media interviewees prefers to use ENGOS as their environmental news sources and even labelled ENGOS as their ‘strongest’, ‘main’ and ‘very important’ source in environmental communication. Past researcher like McCluskey (2008) also confirmed that the environmental reporters for the media often contact ENGOS for their work. Another study by Zajc & Erjavec (2014) also discovered that ENGOS are the most quoted sources on articles on agricultural biotechnology issues published on selected Slovenian media. The results from the interviews also indicate that the selection of ENGOS as the main sources for news are greatly influenced by two reasons which include the expertise of the ENGOS in environmental issues and the ENGOS are proactive in approaching the media to get first hand coverage. Interestingly, past study like Van Leuven & Joye (2014) discovered the similar result, which shows fact that the NGOs have put a lot of effort in preparing media packages for media coverage. Hence, the media preferred to publish the ENGOS’ press release than the government press release. For instance, in Belgium, an ENGO article on international aid issues received more press coverage by Belgian media than the government’s press release (Van Leuven & Joye, 2014). Surprisingly, the media is not only the ones who preferred the ENGOS as their source, some ENGO interviewees from this study also indicated that they also took other ENGOS as their source for their publication.

Interestingly, from the findings of this study, the only similarity between the Malaysian ENGOS and media regarding source selections, as mentioned earlier, is that a majority of interviewees from the media and ENGOS stated that they prefer to use scientists and academics as their sources in environmental communication. Without a doubt, certain science and technology based environmental issues like the issue on genetically modified (GM) foods issue need sources such as credible scientists from either the university or the industry to not

only offer actual and useful information but also to clear any wrong speculation among the readers and the societies (Flipse & Osseweijer, 2012). Other researchers like White (2006) also agreed that complex science and environmental stories need to be explained by expert sources, this is in line with the results from the media and ENGO interviewees where the media and the ENGOs prefer to refer or quote scientists and academics as sources for environmental articles as these people are the expert in environmental topics and they have conducted massive amount of environmental research. Consistent with the findings of this study, Bromley-Trujillo et al. (2014) articulated that scientists from all around the world have conducted countless researches to ensure the world societies realise that climate change is a real phenomenon and the human being causes its occurrence. Meanwhile, Candela & Mariotto (2014) on their research gave examples from Italian news coverage on nuclear radiation, which explained the discovery of radioactivity and X-rays by scientists like Pierre Curies, and Antoine Henri Becquerel's have attracted world attentions on the science of radiation. Hence, scientists are crucial source for media and ENGOs. Unfortunately, the result of quantitative content analysis is not consistent with the claims made by most of media and ENGO interviewees as sources from scientists and academics had been rarely used in the newspapers and newsletters. Media A and B mostly quoted the government agencies, politicians and business people whilst ENGO A mostly quoted other ENGOs and ENGO B mostly quoted laypeople as their main sources in environmental article rather than scientists and academics.

In addition, even though there is a large majority of media interviewees from this study who spoke about the use of government officials as their news source, there are only two ENGO interviewees who mentioned about government sources. This is also consistent with the result of the quantitative content analysis where the government is the most quoted main sources in Media A and B's newspapers. In a nutshell, it can interpret that the government is an essential source for the Malaysian media but not the ENGOs. On the other hand, for the media, government agencies likes the Ministry of NRE, Department of Wildlife and National Parks, local authorities and other agencies as their important sources due to these two main reasons, which are the availability of data provided by the government for media reference and the power of government as the authority

which made their comments crucial and worth to be cited for environmental news. Sachsman, Simon & Valenti (2002b) also agreed with the media interviewees on the fact that government officials and agencies are the major source for the media due to the environmental issues itself is a major issue under the government control. According to them, the local government, for example has regular meetings on environment issues, which are covered by the local reporters. On the other hand, a study conducted by Corbett (1995b) showed that government agencies, in particularly the state wildlife agency is the most dominant source (30.5%) for the coverage on wildlife issues as most of the stories were focused on the management of wildlife.

Finally, unlike other sources discussed above, this study shows that politicians, corporate and business people, online sources and scientific documents are the least deliberated sources by the media and ENGO interviewees. In fact, none of the ENGO interviewees from ENGOs A and B mentioned politicians and only one ENGO interviewee spoke about corporate and business people as their source. This might be because all these sources are the least associated with the environmental issues in Malaysia. Although a good relationship between the media and politician is seen as a symbol of a well-functioning democratic society (Mellado & Rafter, 2014), one of media interviewee of this study mentioned that politician is the last person she would contact as her source. From here, it can be predicted that the media will only contact the politician if there is an environmental issue that is linked with politics like the claim made by Mellado & Rafter (2014) about the important of political figures as media sources on political issues. Similarly, according to the interviewees of this study, business or corporate people would only be contacted by the media when there is an environmental issues related to their company whilst the ENGOs would cite the business or corporate who sponsored their events. On contrary to most of the media interviewees' claims on the least used sources for environmental news reporting being politicians and business peoples, the result of the content analysis showed that both the politician and business people are the second most quoted main sources in Media A and Media B newspaper after government sources. Hence, although the media wrote about environment news, the politicians who are the most quoted in environmental

article is ‘other ministers’ and not the Minister of NRE, which also contradicted the ‘authoritativeness’ source selection criteria.

Additionally, the use of scientific documents like online sources are also relatively low as they can be consider as the least powerful sources quoted in the articles in the newspapers and ENGOS’ newsletters. Feasibly, it is more likely that scientific documents and online sources are more appropriate to be used as alternative sources rather than as major sources in environmental communication. Reich (2011) also agreed that the most credible sources are the one observed by the media themselves and not mediated by a third party.

Nevertheless, it is well understood that environmental news stories are often considered as ‘cross beat’ (McCluskey, 2008), hence, the media will often include multiple sources like government agencies, scientists, academics and ENGOS. In fact, having multiple sources are considered as better than just having one source for the media, as it not only it can balance the write-ups and check the accuracy of information given by the first source (Tiffen et al., 2013). However, this is not consistent with the results of the quantitative content analysis which showed that most environment articles in Media A and B’s had only one source.

Based on the discussion on the sources, which contributed most for environmental news and articles, the result of this study noticed another interesting theme, which is how both the Malaysian media and ENGOS selected the sources for their publications. Based on analysis of the interview, there are six factors for source selection across both social actors and five of them are in line with the suggestion by Gans’ (1980) factors of the suitability of sources including past suitability, productivity, reliability, trustworthiness, and authoritativeness that was discussed in Section 3.3.2, Chapter 3 earlier. One of the most striking findings is that I managed to discover a new factor that has not been discussed by Gans before, which is relevancy. In total, there are six factors of source selection by both the Malaysian media and ENGOS. Across all the factors, a majority of the media interviewees had discussed more on past suitability, reliability, authoritativeness and relevancy, which is similar to a majority of ENGO interviewees who mostly deliberated on authoritativeness and relevancy and

excluded past suitability and reliability factors. Inherently, this indicates that other factors like productivity and trustworthiness are less important to the media and ENGOs.

In general, the past suitability factor is crystallised by the some of the media interviewees indicated that the media have experienced using them as sources before. In other words, the journalists already know the source well, and can determine whether they are good or bad source. Furthermore, the journalists have developed a good relationship with the sources and more importantly, they feel comfortable to talk to each other. The descriptions about past suitability factor which were given by some media interviewees of this study was undoubtedly consistent with Gans' explanation that past suitability refers to the sources which had provided information before and had become a regular source. Moreover, by knowing the advantages of using the same source, one of editor of Media B for example, always encourage their journalists to find the persons that the journalists feel comfortable with. This is consistent with the findings of the past study by Reich (2011) who discovered that more than 90% of the sources were the person that the journalists have experienced contacting before, 74% of sources had been in contact with the journalist at least once a month while another 26% had have daily contacts. On the other hand, unlike the media, the study found that only one ENGO interviewee from ENGO A expressed that past suitability is also one of the crucial factors for source selection. According to this interviewee, they would publish the environmental information given by sources that they know well.

Furthermore, a majority of the media interviewees and some ENGO interviewees also spoke about reliability as another factor for source selection. According to Gans, a reliable source is indispensable as it makes the journalists' job easier and less effort is needed to check the validity of the information. Besides reliability, it was revealed that a majority of the media and ENGO interviewees mentioned about the importance of authoritative in selecting the source for environmental information. Interestingly, the interviewees had described an authoritative source as the person who have rights and qualifications to talk about the environment like a scientist and a person who hold a title or high

position in certain organisation like the president, vice president, minister and etcetera, of an environmental organisation. This is consistent with Gans' explanation that authoritativeness of the sources is determined by their official positions. Prior research like Seo & Lim (2010) also found government officials were the most dominant source in the US newspapers (88.2%) and in the South Korean newspapers (87.4%) when compared than other sources on nuclear issues due to their credibility and accessibility.

In addition, as detailed earlier, relevancy is the new factor for source selection, which is not listed by Gans but emerged from the discussion of interview. At a closer look, a majority of media and ENGO interviewees in this study confirmed that the sources must be selected based on the environmental issues they intend to broadcast. One media interviewee gave an example on how she selected agronomists as the sources for issue likes El Niño or drought whilst one ENGO interviewee gave example of quoting the Minister of Education on the issue of environmental education. In the simplest understanding, the sources must be relevant and appropriate to the environmental issues. Obviously, a Mathematics professor for instance, would not be relevant to talk about climate change or any environmental issues although he or she holds a professorship. Without a doubt, there are plenty of prior studies, which discovered the relevancy of sources in newspapers coverage. Reis (1999) on his analysis of the Earth Summit coverage had observed that government sources were the most quoted sources on two selected Brazilian newspapers; 50.9% on *Folha de S. Paulo* newspaper and 55.6% on *O Globo* newspaper. Similarly, Takahashi (2011) found that the three highest sources used in the media, particularly the *El Comercio* newspaper coverage on climate change issues in Peru were government officials (35%), followed by the international organisations (26%), and researchers (23%). Meanwhile, for the biotechnology issues, DeRosier et al. (2015) discovered that Kenyan newspapers mostly used scientists as their sources compared to NGOs, government, and businesses. From these past studies, it is obvious that different relevant sources were used for different environmental stories.

Meanwhile, the two remaining factors that were least discussed by both the media and ENGO interviewees were productivity and trustworthiness. More

specifically, productivity was described by the media and ENGO interviewees as the ability and willingness of the sources to talk more and give a good quote while trustworthiness was portrayed by the media and ENGO interviewees as honest sources who have no hidden agenda. Altogether, the descriptions of productivity and trustworthiness by the media and ENGO interviewees are consistent with Gans' explanation. It is vital to note that some media and ENGO interviewees also stated that a trustworthy source could be obtained through an investigation towards the sources. To make it simple, the media and the ENGOs often take sources close to them.

In conclusion, these findings axiomatically show that there is a foremost clear distinction between the source reliant between the Malaysian media and ENGOs. To elaborate, although both of them collectively agreed that reliance on sources are necessary for the sake of newspapers, newsletters and magazine publications, yet the types of sources used and the factors for their choice of sources for publication are slightly different. In terms of type of sources used on publication, a majority of ENGO interviewees primarily confirmed that scientists and academics are their sources while a majority of the media interviewees mentioned about the diversity of the sources used including the ENGOs, government agencies, scientists, academics and many more. Similarly, a majority of media interviewees have also considered more factors in their source selection than the ENGO interviewees. Taking these remarks into account, I would suggest that the Malaysian ENGOs consider broadening their usage of sources and factors for source selection for their publication in future, if it were necessary. As a whole, the findings of this study have the implication in filling the gap of the past studies, particularly about the fact that not only the media but the ENGOs rely on sources for their publication. The summary of this chapter will be offered in the next section.

8.6 Summary

In all, this chapter has explored the second research question of this study, which is: *What are the strategies adopted by media and ENGOs in environmental communication?* As previously discussed, there are four major themes discovered

under this topic, which are the strategies of Malaysian ENGOs and media in environmental communication, the level of collaboration, the current of status of collaboration between them and sources reliance strategy for publication.

Predictably, in terms of the strategies in environmental communication, the Malaysian ENGOs have two additional strategies than the media, which are advocacy and lobbying strategies where the media and ENGOs shared another two similar strategies, which are campaigning and collaboration strategies. Interestingly, this study discovered two striking outcomes which rarely been highlighted by past scholars, where both the ENGOs and the media have taken campaigning as their strategy in environmental communication. In term of the lobbying strategy, the discovery from this study presents a latest extension of the classic study conducted by Rusli & Cheh (1999) where this study discovered that both the Malaysian ENGOs usually take the direct lobbying strategy and none of them mentioned about grassroots lobbying as presented in their finding 15 years ago. This finding does not only in contrast with Rusli & Cheh's, it also contradicts the findings of Western scholars who contended that Western ENGOs have taken part indirect or grassroots lobbying.

In addition, as the majority of the ENGOs and media interviewees mentioned about the importance of the collaboration strategies in environmental communication, I took an initiative to detail out the current level of collaboration and the current status of collaboration between the media and the ENGOs. From the finding on the level of collaboration, it is save to describe that the level of collaboration between Malaysian ENGOs and media has only reached the coordination (medium) level while for the results regarding the current status of collaboration, a majority of media and ENGO interviewees indicated that their collaborations with each other have been easy due to the positive attitudes parties friendliness and helpfulness which are shown by the media and the ENGOs towards each other. In fact, most of the interviewees also realised that their relationship is more of a symbiotic relationship, in which the media and ENGOs need each other to survive.

Lastly, the empirical result of this study also unearthed similar to the Malaysian media, the Malaysian ENGOs also rely on sources for their newsletters publication. However, the Malaysian media have used more types of sources compared to a majority of Malaysian ENGOs who prefer to use sources like scientists and academics. In terms of source selection, the Malaysian media also considered more factors for their source selection than the Malaysian ENGOs. The overall findings are related to the strategies of Malaysian ENGOs and media in environmental communication as presented in Figure 8.4 and 8.5 below. For a better understanding, I have used three different colours to indicate, (1) green to indicate only the ENGOs, (2) red to indicate only the media, and (3) white for both the ENGOs and the media. This colour selection to indicate that there is a slight difference in the themes and sub-themes among the environmental communication strategies of the Malaysian media and ENGOs in environmental communication. The findings and discussion on the barriers of the Malaysian media and ENGOs in environmental communication will be discussed in the next chapter.

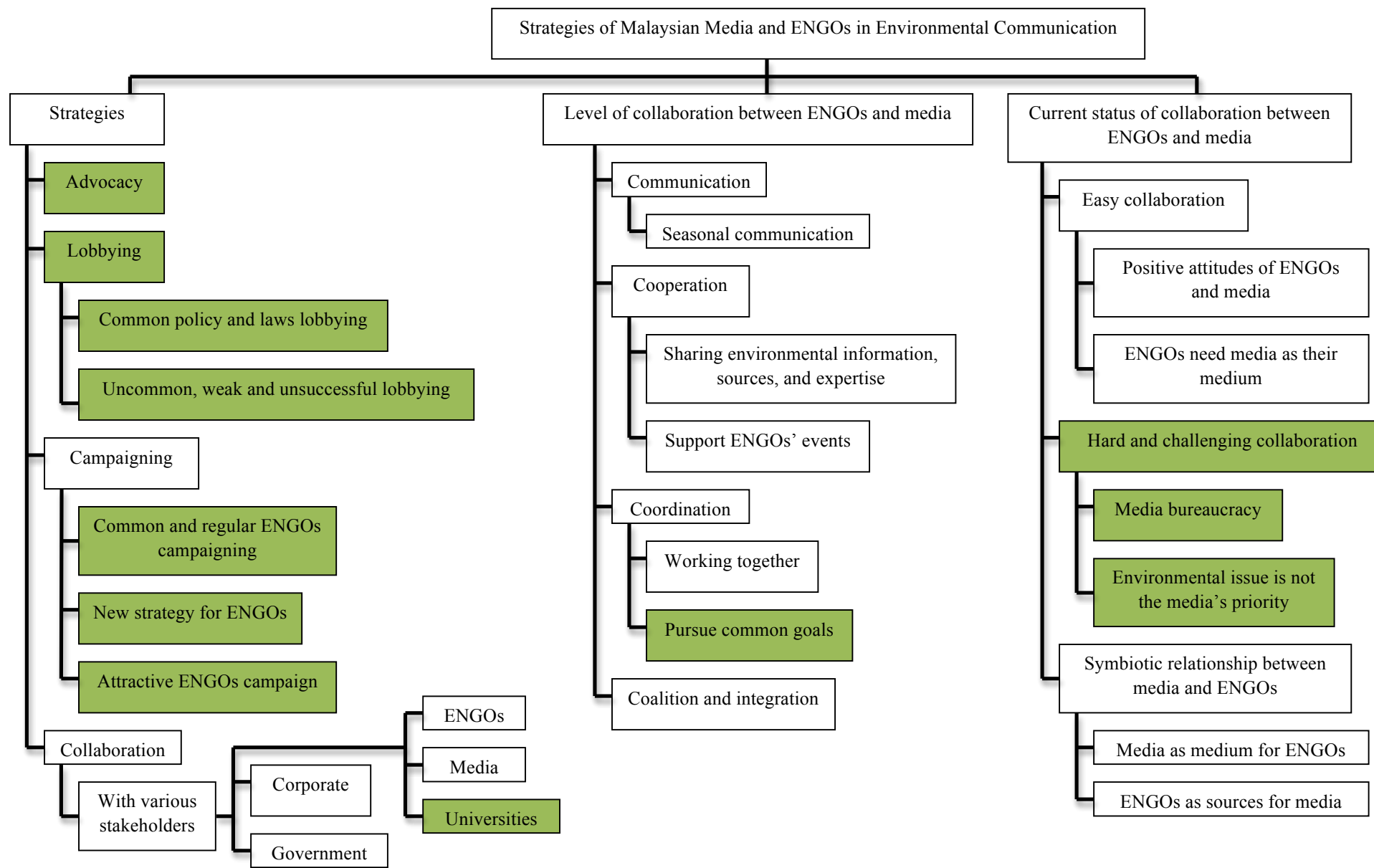


Figure 8.4: Summary of all themes and sub-themes of strategies of Malaysian media and ENGOs in environmental communication

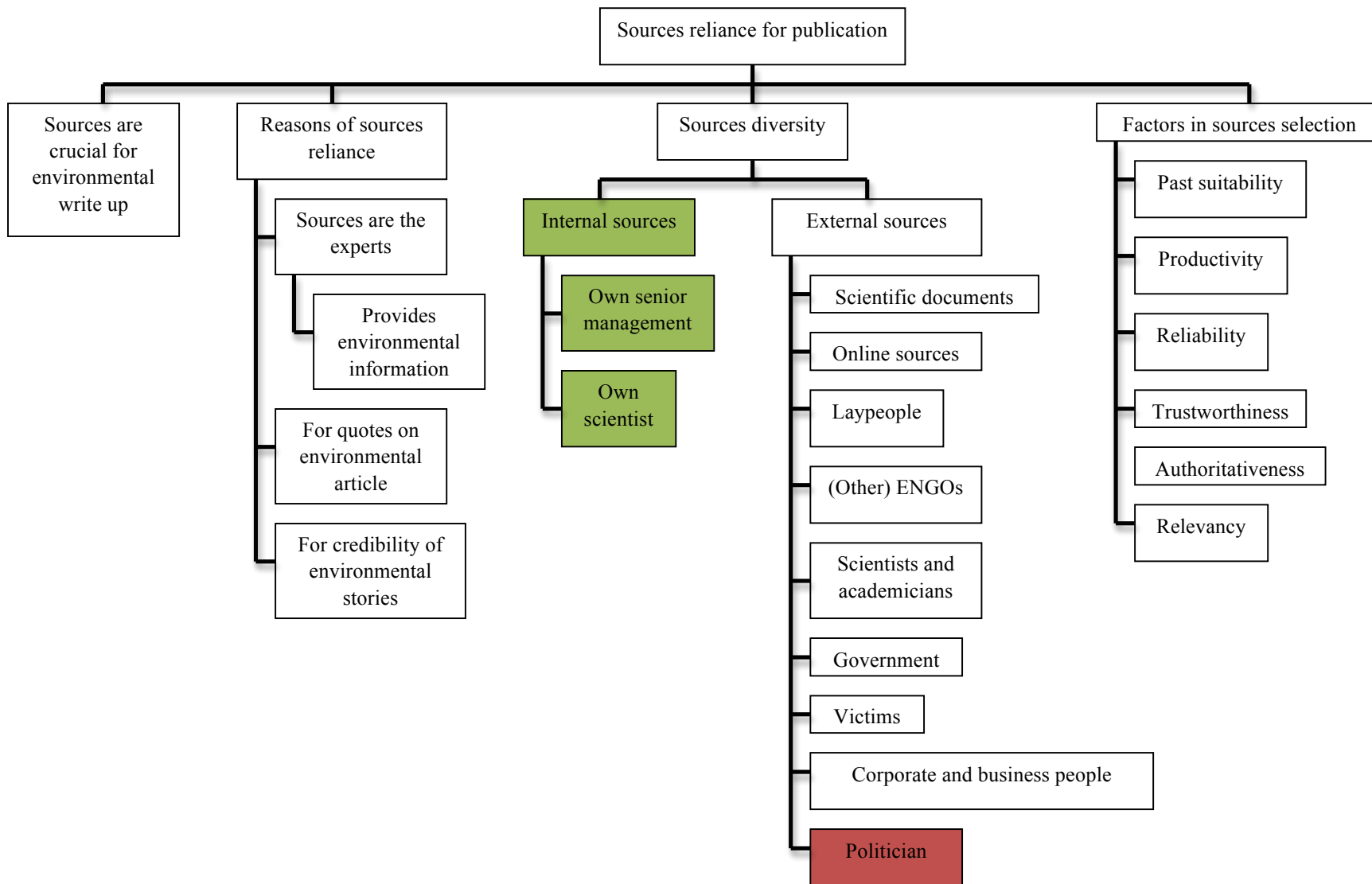


Figure 8.5: Summary of all themes and sub-themes of strategies of Malaysian media and ENGOs in environmental communication

CHAPTER 9

BARRIERS OF THE MALAYSIAN MEDIA AND ENGOs IN ENVIRONMENTAL COMMUNICATION IN MALAYSIA

9.1 Introduction

The aim of this chapter is to answer the third research question of this study, which is: '*What are the barriers faced by Malaysian media and ENGOs in environmental communication?*' Unlike the previous chapters, this chapter specifically focuses on presenting the results from the qualitative interview without incorporating the results of the quantitative content analysis of newspapers and ENGOs' newsletters. This chapter is structured into three parts: Section 9.2 provides a description of the findings regarding the barriers of the Malaysian ENGOs and the media in environmental communication, Section 9.2.1 discusses the findings, while a short summary in section 9.3 concludes the chapter.

9.2 Findings: Barriers in Environmental Communication

This section specifically reviews the barriers encountered by Malaysian ENGOs and the media in environmental communication. Seven major themes were identified under this section: (a) source barriers, (b) environmental information barriers, (c) sender or environmental communicator barriers, (d) medium or organisational barriers, (e) destination or gatekeeper barriers, (f) receiver or the public barriers, and (g) team support in coping with the barriers. All of these themes, except for the first and last themes (source barriers and team support in coping with the barriers) are in agreement with the theoretical framework in this study and will be reviewed as follows.

(a) Sources barriers

In brief, although sources important individuals for the media and ENGOS, as they provide useful environmental information that can be referred to and quoted by the newspapers as well as the ENGOS' newsletters, the results of the interviews in this study discovered that the Malaysian ENGOS and media face several barriers created by sources. The first barrier related to the sources is the **attitude problems of the sources**, such as being arrogant and tending to ignore the media (ID EJ13); being too defensive (ID EJ6, EJ12); having a hidden agenda, particularly trying to manipulate the media as a platform to gain popularity rather than to raise concerns about the environment (ID EJ7); and giving a late response to the media (ID EJ5). If responses from the sources are late, the journalists not be able to write good environmental stories within the short span of time given them by their editors (ID EJ4). Interestingly, out of all the attitude problems, the majority of the media interviewees (7 out of 13) and one interviewee from ENGO A confirmed that some sources are usually very uncooperative about talking to or providing research data or outcomes to the media and ENGOS. This was explained by an interviewee from Media A and one of the interviewees from ENGO A:

“...It is better to quote scientists, but not all scientists want to talk...”
(ID EJ2).

“...From businesses, it's not really that bad; some of them are very hesitant, like seafood work... When we asked for them the inventory, they did not give it to us...” (ID EN5).

In the meantime, according to some of the media and ENGO interviewees, the main reason why the sources are unwilling to talk or provide their data is because they are afraid that the media and ENGOS will discover their weaknesses and wrongdoing, and consequently, expose them to the public:

“...State government, because environmental issues related to weak management like river pollution is under the state government, right?”

[We may] attack them [the state government] back... They will not expose it...” (ID EJ7).

In addition to attitude problems, the result of the analysis also found that **sources’ capability** is also a barrier to the Malaysian media and ENGOS. Some of media interviewees from this study (3 out of 13) stated that some of the sources lacked environmental knowledge, which made it hard to talk to the media about and explain the exact problems that happened to them. One of the interviewees from Media B, for example, shared his experience of interviewing a local resident who lacked knowledge of the environment and therefore struggled to answer his question:

“...Regarding knowledge... We interviewed [a] local resident, ‘Uncle, why are you against this project?’ He answered: ‘I do not like this project because I do not like it.’ So the reporter must give a guide question to get the answer that we want...” (ID EJ11).

Interestingly, this barrier is not only experienced when interviewing local residents and the general public; the media and ENGOS also experienced it when they communicate with government sources.

“...The government people... Maybe climate change is a very difficult topic to handle... [When we] interview them for information...” (ID EJ2).

Furthermore, some of sources also lack knowledge of the job scope and expectations of the media and therefore they usually send repeated and cliché environmental issues which are not newsworthy to the media (ID EJ4, EJ5, EJ7). One interviewee from Media A urged news sources like scientists to be more media-friendly:

“...It helps if the scientific community – also the organisation is media-friendly; so for example, when someone does a study, it might be about climate change; it might be about anything, you know... When

you come out with the press release, or you brief the reporter or whatever, you know, they think how to frame it; either the scientists' result, how to make it relatable, translatable to the journalist, or maybe translate the sciences in general [so we can] understand and can report it..." (ID EJ6).

Additionally, the sources' capabilities are also associated with a communication skills problem among the sources. For instance, one media interviewee and one ENGO interviewee acknowledged that some sources have problems delivering and explaining environmental information to the media and ENGOs.

"...That is what is happening in Malaysia, it's very challenging... In universities, normally scientists or researchers, they do not have the communication skills to communicate whatever findings they found to the public... So knowledge stays in the university; [the public is] not empowered; public participation is less..." (ID EN8).

Moreover, the results of analysis also show that the **sources' organisational restrictions** also caused another barrier to the media and ENGOs in environmental communication. Five media interviewees revealed that some of the sources are bounded by their organisation's bureaucracy problems, which cause difficulties for the media and ENGOs in obtaining environmental information or interviewing them. One of the interviewees from Media A explained:

"...Yeah, sources like companies, corporations; they cannot talk because they only can get their CEO to talk... Sometimes, you know that people will say 'You need to call this person'... When you call that person, they will give you, you know; they will just pass, keep passing you on, or they will say it is confidential..." (ID EJ3).

In addition, some of the sources are also tied to their organisation's political background and orientation. Hence some of the sources are reserved about giving their comments on certain environmental issues, which might be against their organisation's interests:

“...For example, I can cite an example, in Penang where you have the DAP²⁹ Tanjung Bungah assembly man [YB XXX]; he had trouble speaking against the state government because he is a DAP member... So he has to be silent... The party will occasionally [place an] order on him so he cannot speak; you have to go to the opposition, despite him wanting to hit up the issue...” (ID EJ1).

(b) Environmental information barriers

This section will explain the results of the environmental information barriers faced by both Malaysian ENGOs and the media in environmental communication. Two media interviewees and one ENGO interviewee explained that much **environmental information is unavailable, inaccessible or incomplete**, which hinders the media’s or the ENGOs’ efforts to refer to these data. Environmental information from the government documents is usually unavailable because there are no studies or research that have been done by them or they might have the data but they refuse to tell the media (ID EJ2) by making the information confidential, which prohibits it from being released to the general public (ID EJ3, EJ7). This creates an apparent problem for the media, as they need to have recent data and statistics to support their claims in their environmental news stories:

“...Especially the one regarding access to information... If you do not have data, you say... You [need to] know what the accurate up-to-date figures on [deforestation are]...” (ID EJ2).

On a similar note, one of the ENGO interviewees also faced a similar problem to the media where the environmental information provided by the Department of Fisheries (DOF) Malaysia, for example, was incomplete and out dated:

“...The thing with DOF as well; a lot of their reports are not the latest one and for fisheries, the last stock data they had was 2007... But that

²⁹ DAP stands for Democratic Action Party Malaysia, which is one of the opposition parties in Malaysia.

is the only thing that we can quote because we do not have official statistics...” (ID EN5).

Additionally, a large majority of the media and the ENGO interviewees (nine from the media and four from the ENGOs) said that the **characteristics of the environmental information**, especially if it contains a lot of technical terms like ‘geoseismic’ or ‘*E. coli*’ (ID EJ1), ‘eutrophication’ (ID EJ2), ‘iodine’ (ID EJ7), ‘habitat’ (ID EJ8), ‘Environmental Impact Assessment’ (EIA), ‘ecosystem’ (ID EN6), ‘genetic modification’, ‘biotech or genetically modified organism’ (ID EN8) or ‘stargazing’ (ID EN11), this creates difficulties and challenges for the media and ENGOs in communicating, explaining and delivering the information to the general public. As well as technical terms, environmental information is also a complex topic to be explained by the media and ENGOs to the public. One interviewee from ENGO A commented:

“...When we start talking about more complex issues like when we talk about fisheries, then we talk about, you know, government giving out subsidies to fisherman that is why is you know more work’s out there and then less fish stock, and things like that, so people – they get turned off... So that is one of the challenges that we have, especially for a... Topic like that...” (ID EN5).

Furthermore, some of the media and ENGO interviewees described environmental information such as climate change, global warming, the dwindling of fish supplies (ID EN6) and river pollution (ID EJ2, EN9) being invisible and abstract topics and therefore very difficult to communicate to the public, as they are sceptical and doubtful about something they have not witnessed with their own eyes. On the other hand, some of the media and ENGO interviewees (five from the media and two from the ENGOs) said that environmental issues are often considered to be boring and less attractive compared to other issues like entertainment and politics. Therefore, the media and ENGOs have struggled to attract readers to read the environmental stories reported in the newspapers or the ENGOs’ newsletters. For instance, the editor of

Media A, who worked in environmental news reporting for many years, pointed out:

“...I was the news reporter for many years, also doing environment reporting – doing everything... Then I focus on environment reporting, doing a lot of it until I got tired because news for environment reporting is very difficult for the news, because stories tend to be long and can be dry, because, you know, science is very boring, so a lot of the editors also find it, *aiyoo*, so boring...” (ID EJ2).

Hence, in order to tackle the problems regarding the characteristics of environmental information that is technical, boring, less attractive, complex and heavy, the majority of the media and ENGO interviewees (6 media and 8 ENGOs) in this study suggested that environmental communicators should use simple words or phrases in each environmental write-up so that public will be able to understand it.

“...That is why we want to make it as simple as possible because if an article is full of scientific terms that they do not understand, they won't read it... So it is our job to simplify it...” (ID EJ3).

(c) Sender (environmental communicator) barriers

This section will discuss another barrier in environmental communication, which is the sender barrier. To be specific, within the context of this study, the ‘sender’ is the environmental communicator, who the person who is responsible for delivering environmental information to the general public. Hence, the sender includes the media and ENGO interviewees involved in this study. The first sender barrier is related to the **lack of experience among new journalist or ENGO staff member** in environmental communication. Five media and two ENGO interviewees agreed that new staff (in the first two years of work) usually struggled with their environmental communication work. Some of the media interviewees who were editors and sub-editors, like EJ2, EJ8 and EJ11, used the word “blur” to describe the conditions of new journalists who usually do not

know how to find environmental information and conduct the interview independently. Additionally, they also reported that new journalists often lack good rapport or contact with the sources, and this is considered challenging, especially when they need to contact a source for an interview (ID EJ3, EJ8, EJ11). As a result, nearly half of the media and ENGO interviewees in this study emphasised the importance of experiences among the media and ENGOs journalists and staff members. In other words, senior journalists who have more experiences are considered to be better, as they are perceived to know the field more than the junior journalists (ID EJ5, EJ6, EN8). Needless to say, in certain critical situations, a journalist who has more experience will know how to handle a situation better, as confirmed by EJ11, who is an assistant editor for Media B:

“...We managed to get a picture as evidence... They did not allow us to enter in daylight; we went at night because no security guard [was] there... We did various [things] to get the pictures... If the journalist has experience, they will have Plan B or C if the Plan A did not work...” (ID EJ11).

In contrast to the opinion above, some of the other media and ENGO interviewees (five from the media and six from the ENGOs) believed that being new or a novice in an organisation is not really a huge barrier but is more of a learning process in developing their knowledge and skills. This is because after certain period of time, the new journalist or ENGO staff member will be mature and will be able to work better in their environmental communication:

“...It takes time; like, you just got to slowly, build up your understanding about this thing, to understand the context in which a story fits, so that you can write it better... It is faster, it is easier, you ask the right question, you have it, you figure out the right, you know the right way to put the story and why the story is important... It takes time...” (ID EJ6).

Therefore, as a new, inexperienced person in the field, a journalist or ENGO staff member must put a lot of effort into learning new things from their everyday

work. For example, as mentioned, sources are crucial for the media and hence new journalists must always go out and develop their own contacts with the sources (ID EJ3). At the same time, new journalists will also need to do a lot of research on their own (ID EJ3, EJ6) so that they can understand the environmental issues very well. In fact, being new and a novice in the field is not problem at all, as their seniors or editors are always there to help, guide and train them (ID EJ3, EJ8, EJ11, EJ12, EN3, EN11). In the meantime, the organisation where they work; ENGO A and ENGO B, for example, have always provided training for their staff (ID EN4, EN8). The new ENGO staff members will also be encouraged by their organisation to learn something new outside the organisation, such as from conferences (ID EN4, EN5), workshops and seminars (ID EN4, EN10), as well as outdoor activities with the public (ID EN11).

Furthermore, some of the media interviewees in this study confirmed the importance of environmental communicators having a background in environmental or scientific studies. The chief editor of Media A, EJ7, for example, clearly affirmed that journalists who have backgrounds in environment or science will be his top priority for environmental news reporting, while EJ8, who is the editor of Media A, agreed with EJ7 on the significance of journalists having an environmental and science background. Hence, without a doubt, having a background in the environment or science will benefit the journalists, as they will have more knowledge of the environment, which makes it easier for them to understand the topic compared to others who do not possess any background in the environment or science. EJ6 from Media A, who has a bachelor degree in biology, shared her experience on how her background in science has benefited her daily work as a journalist:

“...I think I am lucky, and it is easier for me to understand certain topics, you know; maybe it is easier to follow something or easier for me to ask the right questions...” (ID EJ6).

Predictably, those who **do not have any background in environment or science** will struggle to understand the topic and, in some instances, it will be more

difficult for them to communicate or write about environmental topics compared to those who have a prior background.

“...If someone did not have any background was covering the monkey malaria thing, it might be harder for them to understand the nuances of what is going on, and therefore, like, it will take them more time and more research; you know, it will be a bigger task for them to figure out; they are going to work harder...” (ID EJ6).

This was not only expressed by some of the media interviewees but was also supported by some of the ENGO interviewees, like EN2, who had a background in English education. She admitted that she had “minimal knowledge of the environment”. However, in contrast to the opinion about the importance of an environmental and science background among the media and ENGO staff, some of the interviewees (EJ5, EJ12 EN2, EN6, EN8) stressed that having a staff member or a journalist with no background in the environment or science was not a problem at all and the media and ENGOs usually hire staff from various backgrounds³⁰. Media A, for instance, has journalists who come from law backgrounds (ID EJ5), whereas Media B also have staff and journalists from property consulting and *sharia* backgrounds who work in environmental reporting (ID EJ12). Similarly, ENGO A hired staff from various backgrounds such as marketing (ID EN4), while ENGO B has a staff member with an IT background who is working in the communication department (ID EN9). In fact, similar to the problem of being new in an organisation, some of interviewees claimed that there is usually a team member or senior staff member in the organisation to help and guide those who have no background in the environment. The assistant editor from Media B pointed to their experience in guiding the journalists who have no environmental background at all:

“...I have trained a lot of journalists who have no background at all, zero background...” (ID EJ11).

³⁰ Refer to the demographic profile of all media and ENGOs interviewees in this study in Chapter 7.

In addition, this result of this study found that some media interviewees, along with the majority of the ENGO interviewees (from the media and eight from the ENGOs) said that **passion and interest in the environment** among the journalists and staff of the Malaysian media and ENGOs are more crucial than having an environmental or science background. EN8, who is the manager of ENGO B, for example, pointed out that there is some staff in their organisation who started with no background in the environment or science but later became experts in the field due to their strong passion for the environment:

“...You see, [ENGO B] is already; we have our staff who are becoming experts in biodiversity, fireflies, without having any scientific background; it’s all interest and passion...” (ID EN8).

On the other hand, the results of the analysis also discovered that the majority of the media and half of the ENGO interviewees (nine from the media and five from the ENGOs) said that the **lack of knowledge of the environment** is another significant barrier for the media and ENGOs in environmental communication. Sadly, some journalists, for example, still do not even understand basic environmental terms like “habitat” (ID EJ8) and some groups of editors still have a poor understanding of the environment (ID EJ2). Due to a lack of environmental knowledge, some journalists still struggle to write about environmental issues accurately (ID EJ4, EJ7, EJ9) and struggle to find the right experts or sources for the news (ID EJ1). Meanwhile for the ENGOs, the lack of knowledge of the environment can also affect their environmental communication work, especially when they are facing direct questions from the public about certain environmental issues:

“...For example, we have a hornbill project in Temenggong Island... Sometimes, when the students ask us question that we do not even know the answer to... They asked a lot of questions like ‘How long do hornbills [take to] hatch?’... Also when I say something about technology, like the Lynas nuclear plant or mining, I will get lost a little bit...” (ID EN9).

Correspondingly, a majority of the media interviewees (8 out of 13) and a few ENGO interviewees (2 out of 11) also emphasised the importance of the journalists and staff doing prior research or homework, like doing a lot of reading (ID EJ5, EJ6, EJ10, EJ11, EJ12, EN9, EN10) and conducting their own research (ID EJ5, EJ7, EJ10, EJ11) to ensure they will be able have prior knowledge of the environmental issues (ID EJ5, EJ11, EN9) and, most importantly, to comprehensively understand it before they can deliver the information to the general public (ID EJ7, EJ9). One media interviewee, who is also the assistant editor for Media B, shared her experience of doing her homework:

“...Like me, when I want to write about environment, I must study a lot of things... It is like entering the university again... I must do a lot of research...” (ID EJ11).

This is very important in order to avoid giving misinforming environmental information to the public. Several examples given by three media interviewees and three ENGO interviewees about the situation where the journalist or the ENGOs communicator gave **misinformed environmental information** to the public happened because of lack of understanding of environmental issues (ID EJ7, EJ9), carelessness in cross-checking the accuracy of the facts (ID EJ2, EN5), misinterpreting the information given by the sources (ID EN10) and mistranslating the terms from Malay to English or vice versa (ID EN5, EN9). Therefore, it is very crucial for environmental communicators to double-check the facts before they deliver them to the public (ID EJ2, EJ9, EN9).

Besides that, the **practice of self-censorship** is another barrier in environmental communication. More than half of the media and ENGO interviewees (seven from the media and six from the ENGOs) acknowledged that self-censorship is a common practice in Malaysia. Some interviewees used phrases like ‘no choice’ (ID EJ2), ‘should not be practiced’ (ID EJ2, EJ5, EJ8), ‘not good’ (ID EJ4), ‘sad’ and ‘unfortunate truth’ (ID EJ5), ‘not encouraged’ (ID EJ8) and ‘huge self-censorship’ (ID EN3) to describe their disagreement with self-censorship among the media and ENGOs in Malaysia. For the media, self-censorship absolutely contradicts the media’s ethics, as journalists should write

about everything without any censorship and let the editors make the final decision:

“...I perceived that is the editors’ job... We just write what we perceive, then the editors will decide to run it or not...” (ID EJ4).

However, there are some other interviewees who perceived self-censorship as a need for the media; for instance, EJ6 used the words ‘personal standard’ to describe the importance of self-censorship, while EJ10 said that she ‘must’ do some self-censorship. In fact, based on the perspectives of the ENGO interviewees, self-censorship is important (ID EN7) and a must for ENGOs (ID EN9, EN11), especially to play it ‘safe’ (ID EN3) and to avoid problems like getting attacked or going against other parties (ID EN3). As for the media, it is more to avoid being sued by other parties (ID EJ2, EJ3, EJ10). On the other hand, some of the ENGOs and media interviewees said that they conduct self-censorship as a way to maintain and sustain their good relationships with other stakeholders.

“...Because we want to retain the relationship, you know; we are not going to work with someone for only one day...” (ID EN2).

Interestingly, in contrast to the majority, two media and two ENGO interviewees in this study clearly stated that they did not practice self-censorship at all in environmental communication. EJ3, for example, pointed out that “self-censorship is not practised for environmental news reporting but more for political news reporting...”

(d) Medium or organisational barriers

This section discusses the medium or organisational barriers faced by the media and ENGOs. These barriers have indirectly affected journalists’ and ENGOs’ environmental communication activities. The first organisational barrier is associated with the impacts of **media and NGO-related laws** in Malaysia. Five media interviewees and one ENGO interviewee said that media laws made them

lack freedom to write about and communicate environmental messages. Some of them used words such as “not free” (ID EJ4, EJ5), “terrible” (ID EJ5), “interfere” (ID EJ8), “trammel” (ID EJ9), “restriction” (ID EJ11) and “control” (ID EN8) to describe how the existence and implementation of certain media laws have impacted their freedom in environmental communication. An editor from Media B explained further:

“...Of course, some journalists wanted to write everything... But when they faced all these barriers, these laws, they cannot... So, this has interfered [with] them...” (ID EJ8).

One of the examples of the media laws discussed by some of the media interviewees in this study is the PPPA (1984). The PPPA is controlled by the Home Minister and states that if the media report something that is not favoured by the Ministry or the government (ID EJ1), they might not be able to renew their publication permit (ID EJ3) and the government can even revoke their publication licence (ID EJ11).

In addition, it is also interesting to note that some of the media and ENGO interviewees divulged that they have a problem in writing environmental stories that are associated with the government. Three different interviewees from this study, including one from Media A, one from ENGO A and one from ENGO B, provided the same example about the restriction on writing about the Lynas rare earth plant issue, as it involves one of the Malaysian government’s projects.

“...If the topic came out – like Lynas, for example – you know, like, if you want to touch that and then you get in trouble... It can be used to threaten [you] if they do not want you to cover a specific topic...” (ID EJ6).

Meanwhile, for the ENGOs, the control over the media has also indirectly impacted them, as the media is one the most important channels for delivering their environmental messages to the general public:

“...So I perceived if the atmosphere of the country itself – rules and regulations – the media control will sometimes control us...” (ID EN8).

Furthermore, in the debate about the implementation of media laws, some of the interviewees from both Media A and B expressed their concerns on the risks of being charged under these laws. EJ5 from Media A confirmed that the media “...cannot say a lot of things that you [would] like to because people say sedition, or *sub judice* or whatever...” In fact, EJ5 had witnessed one of her colleagues been arrested and sent to the jail by the police. Similarly, EJ13, who is also the former editor for Media B, agreed with EJ5 that a writer of an environmental article, who was also a journalist, had been arrested and jailed for writing about a sensitive issue.

However, in contrast to the discussion regarding the impacts of the implementation of media and NGOs laws, some interviewees of this study believed that the Malaysian media and ENGOS are still free to write about or communicate environmental messages (ID EJ7, EJ9, EJ12, EN1, EN3, EN8). For the ENGOS, the media and NGO-related laws do not affected them, as their organisations are more neutral and are not biased against other parties or ideologies (ID EN1). In fact, they always ‘play safe’ (ID EN3) and are less aggressive or less vocal compared to Western NGOs like Greenpeace (ID EN2, EN3, EN5). In other words, they do not use protest marches (ID EN7) and have not created any havoc in the country (ID EN8). Besides that, some of the media and ENGO interviewees also revealed that communicating ‘environmental information’ that only delivers facts and scientific proofs (ID EJ10, EN8) and positive educational messages (ID EJ11, EJ10) also makes them safe and free from the laws. It is different for journalists working on political issues, where the government will usually control how the journalist can write about political issues (ID EJ5). Most importantly, some of interviewees also revealed that in order to avoid problems with the media or NGO-related laws, it is crucial for the Malaysian media or ENGO practitioners to follow and abide the currently existing laws:

“...I perceive that if you have to follow the law of the country, if you want to do things, you do it right... Yeah, I perceive it is and there is no... If you do not do it, you are just asking for trouble...” (ID EN3).

Interestingly, the result of the analysis not only found that some of the media and ENGO interviewees claimed that the existence of media or NGO laws has no impact on them, but some interviewees also noted these laws were necessary and crucial for environmental communication in Malaysia. Five media interviewees and four ENGO interviewees confirmed that media and NGO-related laws are necessary, as these laws act as control mechanisms for the media and ENGOs so that they work in a responsible manner. Taking the Societies Act (1966), for example, this Act requires all Malaysian NGOs to be registered and this is very beneficial, as it can repel certain people who intend to misuse NGOs for wrong purposes, as explained by the manager of ENGO B:

“...If I am a government person, I... will perceive that we need the Registry of Societies (ROS), because that is a way for us to control whether all the NGOs are doing the correct thing or not... But then nowadays, those becoming – anyone can form NGO in those days... It’s a bit hard nowadays; they just can simply form and so this ROS, I perceive it is something good, if this is properly used...” (ID EN8).

Besides the impacts of the implementation of media and NGOs laws, **unnecessary interference from external stakeholders** like the government, politicians and developers on the media and ENGOs has also created another barrier in environmental communication. One pieces of evidence of this interference is the complaint made by these stakeholders to express unhappiness or disagreement by some parties with the environmental reporting in the media.

“...There are ministers that are unhappy and send a letter to us... The Ministry send[ing] letters to us is quite common...” (ID EJ9).

In extreme interference, a project's developers, for example, have hired guards or even gangsters to monitor and block journalists from entering their project site for environmental news reporting:

“...So, for example, I have a few reporters in Sarawak that always get threats from loggers, that kind of thing... Also, we did this sand mining story, so there [were] actually gangsters chasing down two of our reporters... So they had to, like, hide in like restaurants... Actually chasing them, sending them threats, that sort of thing...” (ID EJ5).

Meanwhile, despite of some of the media interviewees' revelation about the interference they face when reporting environmental news, a large majority of the media and ENGO interviewees (nine from the media and 10 from the ENGOs) stated that they have not faced any interference from any parties. For example, EJ8, who has worked for Media B for 19 years, said that he has “...never been interfered [with] by anything before...” Similarly, the manager of ENGO B, who has been working for 5 years, explained that, “We do not have letters directly from them.”

Furthermore, some of the media interviewees in this study also mentioned **media ownership** as another barrier in environmental communication. One interviewee from Media A stated that politicians in Malaysia are controlling the media through the media ownership system:

“...Because there are a lot of, say, environmental concerns [stemming] from businesses and businesses have links to politicians, and politicians control the media... Well, a lot of papers are owned by political companies, so it's not very healthy...” (ID EJ4).

As a result, when the owner controls the media, the Malaysian media obviously still lack freedom in reporting environmental news related to their owners. EJ6 from Media A shared her point of view on how media ownership affected the freedom in environmental news reporting:

“...I guess, that kind of thing, it only comes if, for example, like the owners have a project which they do not want you to report about; then it will play a role...” (ID EJ6).

Not surprisingly, the ENGO interviewees share the same sentiment as the media interviewees, where media ownership does not only affect the media, but also the ENGOs, who often use the media as a channel for environmental communication.

“...Well if you want the truth, all of the information out is going to be hard, like I said, because the media is the intermediary, right? So, like, they cannot report what they are supposed to report because the government does not want them to report, and they cannot, because the paper is owned by the third party...” (ID EN5).

In contrast to the effects of the ownership system on the media’s freedom, some of the media interviewees agreed that media ownership has nothing to do with freedom in environmental communication and they are still free to write about and report environmental issues:

“...Like there is no censorship; we pretty much have the freedom to do anything we want... So, I perceive that ownership does not really affect this so much... Cause, you know, they give us permission to pursue bigger stories, you know...” (ID EJ3).

In fact, almost all of the interviewees from Media B (five out of seven) claimed that most of the Malaysian public have misunderstood the ownership system of Media B. According to them, Media B is not completely owned by the Malaysian government, and its main role is not to safeguard the government’s interests. In contrast, Media B has specific national agendas and aspirations, which include focusing on prioritising Malay, Islam and the Malaysian constitution (ID EJ7, EJ8, EJ9). Thus reporting any issue, including environmental issues, associated with these three aspirations is the priority of Media B. Consequently, if the government conducted something that harmed the environment, Media B would not hesitate to report it in their newspapers without any bias:

“...When the government does something wrong towards the public, burdens them, we will loudly protest... If it was obviously wrong and receive a protest from the general public and NGOs, we will definitely disagree [with] the government... If I am not mistaken, there was a case before, [where] the government wanted to open a new palm oil estate and needed to cut the forest area... So we were the one who loudly protested...” (ID EJ7).

In the meantime, another organisational barrier been faced by the Malaysian media and ENGOs is related to **management problems**. Four interviewees from Media B (EJ7, EJ8, EJ11, EJ13) revealed that all of the media organisations in Malaysia have no specific environment desk that specifically focuses on reporting environmental issues. For instance, in Media B, the responsibility to report environmental news is put onto the science and technology (S&T) desk, which also overlaps with other genres, particularly science and technology (EJ8, EJ9, EJ10, EJ11). Furthermore, according to EJ8, who is also the editor responsible for the management of the S&T desk, the main reason for allocating environmental news to the S&T desk is because environmental issues are often interrelated with other issues like science. Another reason for not having an environmental desk is because the media have a limited number of journalists (a small team) who can write about the environment. Therefore, media outlets are not able to create a specific environment desk but can only allocate a small section for the environmental news, as explained by one of the editors from Media A:

“...Not actually an environment desk, because I only have one reporter, so it’s always been very a small team, so we come under the environment section; I will not call it a desk...” (ID EJ2).

In addition to the problem of not having a specific desk for environmental news, the Malaysian media also do not have a system that can train and nurture a journalist to really specialise in one specific area like the environment and develop the required skills to become experts in these specific areas. In other words, it is very difficult to find journalists who specifically do environmental reporting (ID EJ1, EJ9) and it is safe to say that there is no real “environmental

journalist” in Malaysia (ID EJ12, EJ13). The reasons for the lack of specialised environmental journalists are very clear; one of them is associated with the fact that the Malaysian media outlets practise a rotation working system among their journalists. The system is set up by the management to encourage all of their journalists to become experts in various areas rather than focus on just one field (ID EJ7). Thus a journalist has to report other forms of stories (ID EJ4) and, after a certain period of time, he or she has to rotate to another news desk and learn everything from scratch again (ID EJ6). Therefore, some of the media interviewees in this study, particularly, EJ4, EJ6 and EJ12, suggested that Malaysian media organisation should consider having a specific environmental desk for reporting environmental news for the sake of the future development of environmental journalism in Malaysia.

“...I perceive that will be really helpful, because it will create expertise and it will create pride, you know; it will create a more comprehensive kind of coverage...” (ID EJ6).

On the other hand, for some of the media interviewees (EJ1, EJ2, EJ4, EJ6 and EJ13), environmental news reporting is more an individual role of the media organisation and is not the main concern of the management. Thus, if someone in the media is passionate about the environment, he or she will have a lot of motivation to write and report environmental news. For instance, as explained by EJ2, who is the editor of Media A for example, said:

“...I perceive [that Media A’s] environment section is very peculiar in the sense that it is also very individual-driven... I had an earlier editor who was very supportive of environmental coverage, so, of course, she puts in reporters and so on to do [it], so it all depends on the individual...” (ID EJ2).

In addition, other media interviewees (5 out of 13) revealed that the current situation indicates that environment topics are still not the main priority of Malaysian media organisations. According to them, it is quite challenging for journalists who have an interest in environmental issues to frequently write

environmental news stories, as they have to follow the instructions of their top management and editors. Consequently, the visibility of environmental news stories in the newspaper is rather low when compared to the stories on other genres.

“...Low, because, like I said, the management of [the] newspaper itself perceives that the environmental stories less important; they have a lot of other news that is more important than the environment... The environment is not really important in Malaysia...” (ID EJ11).

Not surprisingly, some of the ENGO interviewees (3 out of 11) also shared the same opinion about the current situation in the Malaysian media that has paid less attention to environmental news stories. One of the interviewees from ENGO B said that most environmental news coverage in Malaysian newspapers was put on the middle or back pages, an indication that these issues are less important to the media:

“...Because usually the environmental news is on the middle or back pages... or the pull-out that, usually, people do not even read... Usually, people will read the front pages more... That is why it gets less attention...” (ID EN9).

Additionally, the results of analysis also show that a large majority of Media B interviewees (5 out of 7) explained that one the main reasons for the low invisibility of the environmental news in their newspapers is because their organisation’s priorities are more the political issues, particularly those concerning the Malays, Islam and the constitution of Malaysia. Hence, Media B has less coverage of environmental issues compared to political issues, as revealed by one of the interviewees from Media B:

“...If you look at Media B’s stand, it’s really a political paper – that you must understand – and outsiders must understand why Media B does not highlight the environment and so on... No, because Media B’s stand itself is more a politics paper...” (ID EJ9).

Interestingly, along with Media B interviewees, the interviewees from the ENGOs are also aware of this reason: they claimed that Media B's newspapers provide less coverage of environmental news due to the organisations' main priority, which is politics.

“...They are more like politically orientated; they will look forward for political – like especially Media B; they will look forward for politically oriented environmental issues...” (ID EN8).

Furthermore, some of the media and ENGO interviewees in this study revealed that the low visibility of environmental news in the newspapers is also because environmental news struggle to contend with other genre like consumerism (ID EJ10), politics (ID EJ8, EJ12), entertainment (ID EJ12) and breaking news such as the visit by the US President Barack Obama to Malaysia (ID EN2), the MH17 crash (ID EJ1, EJ7, EJ13) and the disappearance of MH370, as well as the tsunami (ID EN9). One of the interviewees from Media A, for example, shared his experience of taking down an environmental news story due to breaking news:

“...I can take an example like the Bukit Botak issues, the Bukit Relau issues where the trees are being cut, felled illegally... After a while, after one month, we have to compete with other on-the-day issues... For example, you cannot report [the logging issue] when a thing like MH17 is happening... The issues... Drop down the list...” (ID EJ1).

However, it should be noted that the low visibility of environmental news is not just contributed by the Malaysian media. Consequently, according to some of the media and ENGO interviewees, the low demand for environmental news by Malaysian readers is also one of the reasons why environmental news have low visibility in the newspapers. This was described by one of the interviewees, as follows.

“...Well, that depends on people's readership because the media caters to what people want to read...” (ID EN7).

Therefore, upon realising the low visibility of environmental news in the Malaysian media newspapers, a large majority of media interviewees (11 out of 13) and more than half the ENGO interviewees suggested that the top management of media outlets should increase the number of environmental news stories in newspapers in the future in order to attract the general public's awareness and increase their knowledge of environmental issues.

“...Because I perceived that the relationship between the audience and the media is reciprocal, like an audience does not know about topics if they never come across it... But if you publish something then, bit by bit... Like, just now, you said how much the influence the media has in the public perception about thing that they perceived as important... If you publish something, they will be like, ‘Oh, this is interesting,’ and then people might get interested in that subject...” (ID EJ6).

On the other hand, apart from the problem regarding the media's low priority for environmental topics, a large majority of the media interviewees in this study (8 out of 13) confirmed that there is **limited space** provided by the management of Malaysian media outlets for reporting environmental news in newspapers, and this creates another barrier in environmental communication. In regards to this, at the moment, there is no specific column for environmental news in the local newspapers (ID EJ6, EJ9, EJ13) and even if there are any news or issues, only small spaces (two to four pages) are given by the managements instead of the whole sections or pull-outs (ID EJ5, EJ11). Thus some environmental news needs to be shortened to fit the space available (ID EJ1, EJ9). The most probable cause for this is the media organisations' priority to make profits (ID EJ7 EJ10, EJ11, EJ12; EJ13). Since the media's profits are mostly generated from advertisements sold to advertisers (EJ1, EJ5, EJ11, EJ12, EJ13), some environmental news is even placed on hold if an advertiser-related stories appears, as explained by one of the interviewees from Media B:

“...Sometimes, if we have advertisements, we must prioritise the advertiser... For example, last time I went to an eco-care programme organised by *Petronas* in Kerteh, even though there were many stories

[on] before it, yet they were the advertiser in Media B; I must complete their stories first. Those that [are in the] queue must be put on hold first... It's always like that... That is common, as we need to prioritise the advertiser..." (ID EJ10).

Interestingly, the limited space provided by the media management for environmental news reporting has indirectly impacted the ENGOs. This is because these ENGOs are heavily dependent on the media as one of the crucial channels for communicating environmental information to the general public. Hence, some of the media and ENGO interviewees urged media organisations to consider allocating more space for environmental stories in their newspapers such as providing a special column for environmental news.

"...For the local newspapers, I perceive they should have one column that can talk about the environment... The environment should have its own column..." (ID EN9).

Furthermore, another barrier discussed by some of the media interviewees is the news culture of **'bad news is good news'** practised by Malaysian media organisations. Therefore, most of the environmental news reported by the Malaysian media sound negative and sensational, with little emphasis and focus on the positive side of the environment, such as environmental education. One interviewee from Media A admitted that this culture still exists and is being practised in Malaysia:

"...I perceived people believe more; people tend to believe more on negative news... I do not know, even as journalist, we look for more negative news, you know? That's just a news culture... Yeah, in anywhere..." (ID EJ4).

Consequently, this news culture has hindered the Malaysian ENGOs from getting their environmental messages published in the media unless they suit the media's expectations and preferences for negative issues, which can be considered rare for

the ENGOs, who are more focused on positive issues like conservation or environmental education:

“...We do not get a front page unless it is a really bad, negative issue... [If] the issue is something very dire or very dramatic, it tends to not get kicked out as much...” (ID EN6).

Moreover, while the Malaysian media face a barrier from their management, the ENGOs also face a barrier caused by their organisation, which is **limited funding** barrier. The majority of the ENGO interviewees (8 out of 11) discussed their concerns about the limited and tight funding received by their organisations. Some of the ENGO interviewees used words like “tiny budget” (ID EN4), “limited resources”, and “very low budget” (ID EN7) to describe the current limited funding conditions faced by their organisations. This is mainly due to the decline in the amount of funds given by their sponsors. Without a doubt, funding is crucial for the ENGOs, as funds are needed to conduct their routine activities such as organising events (ID EN10, EN11) and promoting the events to the public (ID EN4, EN6, EN10). Furthermore, the ENGOs also need funds to conduct their research and conservation work like turtle conservation or tiger adoption (ID EN2, EN4, EN9). Most importantly, as independent organisations, which do not gain any profit from their activities, the ENGOs also need funds to cover their management costs. These costs include the cost of paying the monthly salaries of the ENGOs’ staff and maintenance of their premises (ID EN9, EN10, EN11).

Furthermore, based on the analysis, more than half of the ENGO interviewees (7 out of 11) mentioned that the limited funding received by their organisation has an impact on the efficiency of their environmental communication work. This is because the ENGOs have to minimise the number of their projects (ID EN3, EN5) or have to prioritise the most crucial projects only (ID EN4). Moreover, limited funding has also caused the ENGOs to cancel many of their plans such as hiring staff to make translations of their publications (ID EN5). It has also delayed many environmental campaigns (ID EN7) and has also hindered many conservation projects (ID EN8). In response, instead of stopping

these projects, the ENGOs take the initiative to side line the projects until they are able to get new funders for their projects:

“...Oh yes, there have been smaller projects where we ran out of funds, so we put that work on pause until we [could] raise funds for it... Then we will continue...” (ID EN6).

In regards to this, some of the ENGO interviewees like EN1, EN4, EN5, and EN8 proposed that ENGOs should seek alternative funding like conducting fundraising, crowd funding or using applications such as Moneybox to overcome the limited funding barrier. The ENGOs could also collaborate with other stakeholders like universities or the corporate sector, which usually have sufficient funding for such programmes:

“...So for the Save Temengor campaign, we had actually many corporate agencies who collaborated with us to raise funds for the campaign...” (ID EN7).

Besides the limited funding problem, some of the ENGO interviewees in this study also mentioned how their **organisation’s orientation**, which takes a ‘less vocal’ and ‘less aggressive’ approach is another barrier in environmental communication. Based on the interview, EN5 and EN6 from ENGO A stated that their organisation is very non-vocal compared to other Malaysian ENGOs like SAM, CAP or international ENGOs like Greenpeace. Furthermore, some of the ENGO interviewees explained that their organisation always try to avoid an aggressive approach (e.g. protesting) and prefer to solve environmental problems in a professional manner such as having one-to-one discussions with the other stakeholders involved.

“...I perceived actually it is better if you have a close relationship with people because then you can talk on a one-on-one level on critical issues... Very often, we see that happening with the issues, so, sometimes... A better forum to address this will be maybe in a convention and face-to-face...” (ID EN4).

Apparently, the less vocal orientation taken by the organisations has had serious consequences for the ENGOs' environmental communication activities. For instance, ENGOs communicators face a lack of freedom and certain restrictions on the type of environmental information that they can deliver to the media, as explained by EN3 from ENGO A:

“...It sometimes is a barrier because, you know, I wish we could say things but then the organisation says, ‘Look, I am sorry; we cannot’... Yeah, I perceive [that] it falls back to the question of freedom, yeah, because, you know, I wish we can say things but then the organisation says, ‘Look, I am sorry; we cannot, yeah’... So sometimes, I feel, you know, it’s really hard...” (ID EN3).

Additionally, due to the ENGOs' preference to engage and work close with other stakeholders, the ENGO communicators are also required write in a softer manner in their write-ups about issues related to other stakeholders in order to maintain a good relationship with them.

“...Where we are too extreme, because we have stakeholders from the government, we always try to take, like, you know, like, a moderate stand because we cannot jeopardise our relationship with stakeholders because we work with the state government... When you talk about sensitive issues like logging, for instance, we cannot just blast talk in the paper and then condemn the state government because it will affect your working relationship and we have already have a good relationship with some of these people... So the moment you do that, then you need to perceive the consequence... So if I do this, yes, you get the attention, but how will it affect your rapport with the state government? And these people are the ones making decisions, so it is hard to balance... They might edit it, say, ‘Oh, we have to make the language softer, you know, because it will not go well with the stakeholders’... You know, that kind of thing...” (ID EN5).

As a consequence, ENGO A always receive criticism from the public, urging them to be more outspoken and vocal on environmental issues, rather than being soft.

“...Yes, we have often been accused of that or, yeah; that is always listed as one of our weaknesses: that we are not very vocal... We have more feedback and criticism about not having done enough...” (ID EN6).

(e) Destination (gatekeeper) barriers

This section presents a discussion of the barriers faced by the media and ENGOs from editors or the top management, who are considered as the **gatekeepers who hold the power** to decide which environmental information can or cannot be published. The outcome of the analysis found that 7 out of 13 media interviewees expressed that the editors and the top management are the gatekeepers who possess the power to decide which environmental news stories should be delivered to the public, which angle is the most appropriate and which picture is the most suitable to use. Similarly, 7 out of 11 of the ENGO interviewees revealed that their editors and top management are the gatekeepers who approve environmental stories for their newsletters, magazines and bulletins. However, it is interesting to note that for the ENGOs, the gatekeepers are usually members of the top management such as the CEO (ID EN1, EN2, EN3), the president (ID EN7) or the Head of Communication (ID EN2, EN3, EN4, EN5, EN6). This is slightly different from the media organisations, where the interviewees mentioned that the editors are the major gatekeepers. Consequently, two main points were discussed by the media and ENGO interviewees in this study in regards to the gatekeeper roles in editing and censorship, which has created barriers in environmental communication. Some of the media interviewees revealed that the editing process has a significant impact, as the editors tend to edit and cut their environmental news stories to make them shorter and simpler (ID EJ5). This process might cause the environmental news stories to lose credibility when too much content is edited out (ID EJ9), or wrongly edited (ID EJ2). Meanwhile, for the ENGOs, the editing process is a bit bureaucratic, where articles have to be

checked by the Head of Conservation, followed by the Head of Communication and, finally, the CEO, who conducts the final checking (ID EN3, EN4). This process is very time-consuming but often, the media want the material quickly (ID EN3).

However, in contrast to some of the media and ENGO interviewees' opinions about the negative effect of the editing process, other media and ENGOs considered editing as good practice, as the editing process usually involves copyediting like writing the headlines, choosing the pictures, English language use (ID EJ2) (particularly the grammar and spelling) (ID EJ5, EN8, EN10), Malay language use (ID EJ8, EJ12) and paragraph structure (ID EJ11). Moreover, some of the media and ENGO interviewees said that editing is good, as the gatekeepers can help to check the accuracy of the facts (ID EJ2, EJ8, EN4, EN7, EN9, EN11), and to ensure a better quality environmental write-up for the readers. One of the editors from Media B spoke about the important of the editor's role in improving the environmental news story:

“...No, because if we [editors] can, we want to make the story better...
If not, they will include certain terms, what we call a ‘rubbish story’...
So, it’s our role; the editor [has] to make the story better... Sometime,
if it is not possible, then we will put it into the trash bin...” (ID EJ8).

Besides the problem with editing, some of the media interviewees in this study also revealed that there may be an order from the editors or top management to censor certain environmental information from the public. For example, EJ4 from Media A described her experience where she was ordered to “not highlight certain issues”. Some of her environmental stories were also turned down due to censorship. Other interviewees, like EJ5, labelled censorship as something that “happens quite frequently” in the media. Ironically, this problem was voiced not only by the journalists but also by editors, who have also received orders from the top management to censor some environmental information, as pointed out by EJ2, who is an editor from Media A:

“...You will also have times when you get orders from the higher management people about certain stories that you cannot cover; censorship... Yeah, there are orders, I perceive, in every newspaper...”
(ID EJ2).

Some of the media interviewees from Media A revealed that censorship occurred when the environmental issues that are associated with advertisers like palm oil plantations (ID EJ2, EJ3, EJ4) or environmental issues connected to the government like the highland highway and the Bakum Dam (ID EJ2). Some of the ENGO interviewees also agreed that censorship occurs in their organisation. EN1 from ENGO A, for instance, said that “We have it [censorship] for some stuff you cannot tell.”

(f) Receiver (public) barriers

This section explores the final barrier encountered by both the Malaysian media and ENGOs in environmental communication, which is the barrier from the receiver. Within the context of this study, the receiver refers to the audience or the readers who receive the environmental information from the media or the ENGOs. Six media and four ENGO interviewees said that Malaysians in general still **lack knowledge of environmental issues**, especially if the issues are more scientific like *E. coli* (ID EJ1), the Lynas nuclear plant and radioactivity (ID EJ4), malaria (ID EJ5), biodiversity, the Wildlife Act and endangered species (ID EJ8), water catchments (ID EJ13), and seafood and oceans (ID EN5). Some of the interviewees used words such as ‘very poor’ (ID EJ5) and ‘zero knowledge’ (ID EN8) to describe the current level of environmental knowledge among Malaysians. This eventually creates a barrier for both the media and ENGOs in environmental communication, as the public do not know much about the issues.

“...Definitely because people do not understand... We buy our rice, you know; we have a shortage of meat, and we are losing how many species a day because of logging in Sarawak... Orangutans – about several hundred died during last El Niño in 1997... People do not

understand it; people do not care; people do not know... I do not know what it is but it just does not seem to affect [them]”... (ID EJ5).

Interestingly, the findings from the analysis also discovered that the Malaysian public do not only lack knowledge of the environment, they also have limited **knowledge about ENGOS**, particularly the existence of some ENGOS (ID EN9, EN10), the vision or mission of the ENGOS (ID EN3, EN5, EN9) and the ENGOS’ capacity as NGOs and not the government (ID EN6). This creates a problem for the ENGOS, especially when the public keeps asking or complaining about something that is beyond their job scope and capacity:

“...Yeah we get the questions sometimes... ‘Oh, I saw undernourished cows in the field. So [is ENGO A] going to do something about it?’ I do not answer those kinds of questions... I do not reply to those, you know... Sometimes I do, which is bad... But it just shows you the public did not even bother to understand the kind of work your organisation is doing... We sometimes have to respond to them and say ‘No, we do not do that kind of work... We do not work with pets; we only work with wildlife.’ And they asked, ‘Oh, can [ENGO A] supply your turtle for an event?’ which pisses me off...” (ID EN5).

In addition, a large majority of media interviewees (9 out of 13) and a few ENGO interviewees (4 out of 11) said that the Malaysian public, especially the people who live in rural areas like coastal communities (ID EN6) still **lack awareness of environmental issues**, which creates another barrier for both the Malaysian media and ENGOS in environmental communication. Most importantly, Malaysians are only aware and care about environmental issues if one occurs close to them or affects their livelihood, as explained by one interviewee:

“...Oh, I do not care where my rare earth comes from... Unless I am living in Kuantan... If it is general, I do not care what is happening everywhere else... It is the kind of issues you get... [It’s] only my *taman* I care [about]; I do not care about everyone else’s *taman*; yeah, it is that kind of thing...” (ID EJ5).

Besides the Malaysian's low knowledge and awareness of the environment, the analysis also found that Malaysian's **negative attitude towards the environment** could be another barrier for the Malaysian media and ENGOs. Some of Malaysian have a '*tidak apa*' (in English: 'it's OK' or 'it does not matter') attitude (ID EJ5), where they take things for granted (ID EN8). For example, there are still people who perceive wasting water (ID EJ4), dumping rubbish into the river (ID EJ9) and open burning as small matters (ID EJ8). Eventually, most of them know what they do is wrong but they still do it and expect other individuals to do something like 'clean the rubbish' for them (ID EN5, ID EN8, EN9). At the end of the day, an interviewee lamented that journalists "...can write whatever they want because it will not make any difference..." (ID EJ5).

On the other hand, the results show that some of the ENGO interviewees from this study revealed that Malaysians' **low English proficiency**, especially among less educated and rural communities, can be another barrier for both ENGO A and ENGO B, who use English as their main medium of environmental communication. ENGO B, for example, uses English in 70% of their environmental communication work (ID EN8). Due to a lack of English skills, some of the public have difficulty understanding the language used by the ENGOs (ID EN8); even worse, they will not read the material given out by the ENGOs (ID EN5). Recognising, this barrier, some of the ENGO interviewees indicated the importance of identifying the audience first and using the right language for the right audience. EN1 from ENGO A said that instead of using English, they use Malay when speaking to indigenous people and Chinese when they communicate with Chinese people. Similarly, EN8 from ENGO B also agreed that they use Malay to approach local school students and use English when they meet international school students. Furthermore, in order to ensure that the environmental messages get across, ENGO A also hired staff who can speak local dialects like '*Bajau Laut*', the local dialect used by the costal *Bajau* community, who only speak their own dialect (ID EN6). Most importantly, both the ENGOs have extended the use of Malay, Malaysia's national language, in their publications:

“...That is why for local schools and all, we came out with our own *Cipan* newsletter... The *Cipan* newsletter is specifically for all the school nature clubs, and is in Malay...” (ID EN7).

“...So now our newsletters [have taken the] initiatives of coming up with Malay...” (ID EN8).

Additionally, five media interviewees and six ENGO interviewees agreed that the environment is not an issue listed under the **priority interests of the Malaysian public**. This creates another barrier for both the media and ENGOs. EJ1 from Media A, for example, stated that “Malaysians are preoccupied with other things and not the environment; it is not the top three, definitely not the top three”. EN2 from ENGO A agreed that “the environment *per se* is not a focus in this country...” Hence, due to the different interests and priorities among Malaysians, some media and ENGO interviewees said that it is very challenging to communicate environmental issues in Malaysia, as people do not care about it.

“...Yes, it is challenging to push the environmental story, as the reader is not interested in it... If you write [about] the issue of sand logging that can caused house collapses, people won’t care...” (ID EJ12).

(g) Team support in coping with the barriers

In general, although many barriers confronting the Malaysian media and ENGOs have been detected, as shown by the discussion above, some of the interviewees said that they have received a lot of support from their team members and colleagues, which has helped them to cope with the barriers they face in environmental communication. Eight out of 13 media interviewees from this study agreed that the editors were always there to help them out and guide them whenever they are facing a barrier. The chief editor from Media B shared his experience of helping his journalists when they need help and guidance:

“...The editor was very helpful... If he or she saw that the reporter was lost [the situation when the reporter was stuck or had no idea], the

editor will discuss it with them, give them guidelines again on what to do... If there is a need for the editor to get involved like [when they] need a source or idea, then we [editors] will give it to them..." (ID EJ7).

In comparison to the media, for the ENGOS, their leaders, such as managers, always lend their hand to help the ENGO staff members when they are facing any barrier in environmental communication. EN10 from ENGO B said, "[EN8], who is the manager, is very helpful."

9.2.1 Discussion: Barriers in environmental communication

From the outset, this study observed six major barriers encountered by both Malaysian ENGOS and the media in environmental communication. These barriers encompass source barriers, environmental information barriers, sender (environmental communicator) barriers, medium (organisation) barriers, destination (gatekeeper) barriers and receiver (public) barriers. Interestingly, all of these barriers are in accordance with the theoretical debate on barriers in environmental communication as discussed in Section 3.4 in Chapter 3, except for the source barrier, which emerged from the interview data. As repeated quite often in this study, particularly in Chapter 8, Malaysian ENGOS and the media rely heavily on their sources, especially for obtaining environmental information and quotes for their environmental articles in order to make the stories more credible (Miller & Kurpius, 2010). Although sources are very important to Malaysian media and ENGOS, this study found that sources can also potentially create a problem for the Malaysian media and ENGOS' environmental communication activities. Generally speaking, it is apparent that the barriers caused by the sources, especially in environmental communication, are not widely studied by scholars and therefore, the findings of this study will not only offer valuable insights on this matter will also contribute in terms of filling a current gap in the literature.

Some of the media and ENGO interviewees in this study revealed that some sources have attitude problems like being arrogant, too defensive or

dishonest, having a hidden agenda; being tardy or purposely delaying their response and being very uncooperative when the media want to interview them or when the ENGOs ask them for data. This often happens when the source is doing something environmentally harmful and they are afraid that the media or ENGOs will discover their weaknesses and expose them to the public. Hence, it is evident that the sources' attitude problems can be a major barrier to both the media and the ENGOs in environmental communication. Taking the example of the sources being tardy and delayed their responses, this can affect the media, as the media need to publish environmental articles, especially reports on environmental events, on a daily basis. This means that if the sources provide their responses to the media four to five weeks after an environmental issue has emerged, this particular environmental issue will probably be considered as old, stale and not timely, and will therefore have a low or no news value. In 1976, Yankelovich, in his study on Harte-Hanks newspapers, showed that audiences lose interest in reading newspapers if they have already seen the same information via other media like the television (Shelton, 1978). Therefore, it is important to get a quick response from a source to ensure that a particular environmental issue is still timely and relevant.

In addition, another interesting viewpoint shared by some of the media and ENGO interviewees regarding sources barriers was related to the problem of the capability of sources, particularly related to the low level of knowledge of the environment and how the media works, as well as problems related to communication skills. For example, some of the media interviewees in this study explained that some sources, like laypeople or government officers, have problems answering questions related to environmental issues during the interview due to their limited knowledge of environmental issues, especially on complex issues like climate change. Undoubtedly, this creates another barrier to the media, as not only does the source fail to give the expected answers, but the media also need to work hard to give guided questions and to probe for as much information as possible until they get the desired answer. This is in line with the findings of past studies like Zajc & Erjavec (2014), who also discovered that source like the scientists from Slovenian universities, for instance, were not able to answer the questions fluently due to their lack of knowledge of biotechnology.

Other than that, apart from a lack of knowledge, some of the media and ENGO interviewees in this study shared their problem of handling sources who lack communication skills, particularly when explaining environmental information. EN8, who is a manager from ENGO B, for instance, explained that it is very challenging for the ENGOs when they work with scientists and researchers, as these sources have problems communicating the scientific research findings for public consumption. This is in line with Treise & Weigold (2002), who claimed that scientists are occasionally accused by the journalists as having inadequate skills in simplifying scientific information. In another instance, Saari, Gibson & Osler's (1998) research found that one of their interviewees, a Canadian journalist, described scientists as 'poor promoters' due to their bad skills in promoting their research output to the press. Thus, based on this finding, it is advisable for the sources, especially scientists and researchers, to leave their comfort zone and learn to communicate environmental issues in simple, plain languages to the media in order to get newspaper coverage. Another problem related to the sources' barrier as discussed by the media interviewee is the lack of capability to understanding the media's job scope and expectations. Some of the sources keep sending repeated environmental issues to the media; at times, these issues have less news value, which decreases their potential to be used by the media.

Interestingly, in the previous chapter, I discovered that some of the Malaysian ENGOs complained about how the media's bureaucratic practices have created a serious obstacle to collaboration. However, in this section, some of the media interviewees took their turn to complain about some sources' organisations which practise bureaucracy and have made their environmental communication work very challenging. EJ3 from Media A pointed out that certain companies only allow their CEO to be interviewed and journalists need to go through several individuals before getting permission to conduct the interview. Indeed, the problem of bureaucracy not only occurs in Malaysia but also in other places, as documented by Appiah et al. (2015), who discovered that journalists in Ghana had less contact with the scientists compared to public information officers for interviews due to the bureaucracy problem. Alongside bureaucracy, some of the sources are also restricted by their organisation's political background and are not

allowed to provide comments on certain environmental issues, which are against their organisation.

In addition to source barriers, the findings of this study also discovered that the nature of environmental information itself is another barrier for the Malaysian media and ENGOS. Some media and ENGO interviewees noted that some environmental information, especially that sourced from government departments, is often incomplete and sometimes unavailable and inaccessible. This creates a massive difficulty in delivering relevant information to the public, as they need all of the data and information to support their claims in their environmental articles. Two media interviewees (EJ3 from Media A and EJ7 from Media B) revealed that some environmental information is even labelled as 'confidential' by the government and because of this, the media are not allowed to access or release it to the public. This is not surprising, as this has been discussed thoroughly in Chapter 7, where some of the media interviewees are concerned about the freedom to access environmental information in Malaysia. In fact, past Malaysian researchers like Mustafa (2012a) agreed that the power of the government to classify documents as 'secret' under the OSA (1972) is one of the major barriers to environmental journalism in Malaysia and has been discussed in Section 4.8.2.2 in Chapter 4. On the other hand, as noted by Memon (2000), the Malaysian government lacks relevant data related to environmental quality. The findings of this study also found that some interviewees, such as EN5 from ENGO A, mentioned the same problem, where the Department of Fisheries Malaysia, for example, did not have the latest data on fisheries, which made it impossible to quote up-to-date data on their environmental articles. This is absolutely a situation, as quoting government or scientific publications is essential for strengthening and verifying the information (Major & Atwood, 2004) obtained by the ENGOS and the media.

Furthermore, the characteristics of environmental information such as the use of technical terms, being too complicated, having an intangible subject, and being boring and less attractive can create serious barriers to the environmental communication activities of the media and ENGOS. For example, some media and ENGO interviewees in this study confirmed that technical terms like 'ecosystem',

'habitat', 'genetic modification' etc. are difficult to put into their environmental articles and to communicate directly to the non-experts or the public. This is in line with the statement by Fischer (1974), who agreed that translating technical jargon like 'chemical oxygen' to the average reader is not an easy task. Other researchers, like Friedman (1983), also agreed that the uncertainty and complexity of environmental issues, which usually contain technical terms, make it difficult for the media to write about these issues. Putnam (2002) also agreed that it is hard to explain certain environmental issues (e.g. the issues of public's safety and wellbeing connected to nuclear power plants and the risk of radiation to the public), as there is a high possibility of the public being misinformed.

In a related vein, some interviewees in this study said that some environmental issues, like climate change and global warming, are difficult to communicate and explain to the general public, as they are issues that are invisible to the public eye. Interestingly, a large number of scholars like Trumbo (1996); Filho (2009); Antilla (2010); Gibson et al. (2015); Tong (2015a); and León & Erviti (2015) agreed with the viewpoints of the media and ENGO interviewees that invisible environmental issues like climate change and global warming are difficult to explain to the public. This is mostly because the issues are less relatable, not visible and distant from the public's daily lives. In fact, other researchers (Seiler, Engwall, & Hollert 2013) used the term "Ivory Tower" as a metaphor to explain how difficult it was for the public to imagine the surroundings of an Ivory Tower, because the public do not live there and it is too far away from daily life. One example of these issues is climate change, the effects of which are not often visible to humans. As a result, the media are often accused of exaggerating scientific information for the sake of attracting public attention by groups of sceptics who do not believe in climate change (Weingart, Engels, & Pansegrau, 2000).

Moreover, during the interviews, some of the media and ENGO interviewees said environmental issues were boring and less attractive and that therefore, these issues cannot compete with more interesting issues to attract the readers. As a result, some journalists struggle to convince the editors to publish stories on environmental issues when there are many other interesting and

sensational issues like murders, sensational court trials and entertainment (Archibald, 1999). Furthermore, the characteristics of environmental issues, which are usually boring and less attractive, are also reasons why these issues are less visible in Greek newspapers (Kostarella, Theodosiadou, & Tsantopoulos, 2013). In general, recognising that environmental information can often be boring, less attractive, heavy, complex, abstract and intangible, and sometimes too technical, some media and ENGO interviewees in this study suggested that all environmental communicators should consider simplifying the environmental information without changing the original meaning in their environmental articles. Significantly, EJ3 from Media A and EN8 from ENGO B emphasised that simplifying environmental information is very crucial as the public, especially the villagers, have problems understanding the contents of environmental articles if the environmental information presented is too scientific and technical. Moser (2010) also contended that the communicator is responsible for finding clearer and simpler metaphors to overcome the challenges of complex environmental issues like climate change. Perhaps the simplest way to communicate complex and boring environmental issues is through the use of graphics and photographs, as suggested by Bostrom et al. (2015) in their recent study on the methods used for communicating complex and abstract environmental issues such as oil spills. That study claimed that the use of graphics can be very helpful for the environmental communicator. This is also in line with the findings on the roles of the Malaysian media and ENGOs in social constructions of reality, as discussed in Chapter 7, where a simple way to ensure a clear understanding of certain environmental issues is via infographics and picture instead of using many words.

Next, the empirical findings show that the third barriers the Malaysian media and ENGOs have faced in environmental communication are sender barriers, which are some of the most daunting barriers discussed by the majority of the media and ENGO interviewees compared to the two prior barriers. Firstly, some of the media and ENGO interviewees mentioned that being a new and novice journalist or ENGO staff member who lacks work experience can be a barrier in environmental communication. Some editors (EJ2 and EJ8) and sub-editors (EJ11), new journalists were described as being in a 'blur', where they do not know how to find relevant environmental information or conduct an interview

on their own. Furthermore, the majority of new journalists have had very limited contact with the sources; hence, it is very challenging to write about environmental news. This is not the case for senior journalists, who have already built a good rapport with the sources and have vast knowledge of how to gather environmental information independently.

However, although a lack of experiences can be a barrier, there are some media and ENGO interviewees in this study who are optimistic that this is not a huge barrier, as everyone goes through a similar process. Sooner or later, the novice will learn and develop their understanding and build rapport with the sources with the assistance of the editors and senior management, or through training arranged by their organisation. Agreeing with the importance of training, EN4 from ENGO A claimed that his organisation has regularly provided capacity building and training sessions to strengthen the communication skills of their staff, which is very beneficial for new staff. In relation to the discussion on the importance of training in an organisation, past researchers like Hansen (1994c) discovered that training is more important than having a specialised degree from a university, while Kenny & Gross (2008) highlighted that training, especially for journalists, editors and media owners, is crucial to ensure that all journalists (and ENGO staff members) are aware of their roles and values in a democratic society. For instance, in Vietnam, journalists are given intensive training in the skill of interpreting scientists' statements so they are able to write it in a simpler way for public consumption (Hue, 1999). In addition to training, Mustafa (2012a) remarked that workshops between environmental journalists and academics or educators are excellent platforms for exchanging experiences and enhancing environmental knowledge among the media and ENGOs in Malaysia.

This study also discovered that educational backgrounds and knowledge of the environment are crucial for both the media and the ENGOs in environmental communication. Although a few of the media interviewees (especially the group of editors like EJ7 and EJ8 from Media B) emphasised the importance of having an educational background in the environment or science for journalists covering environmental issues, the majority of them, especially those from Media A, believed that not having an educational background in the environment is not a

barrier. This was similar among for majority of ENGO A and ENGO B interviewees: most of them said that their organisations also employ staff from various backgrounds like marketing or information technology to support the communication department. Furthermore, most media and ENGO interviewees agreed that one's passion about the environment is far more important than the educational background. They mentioned that with passion and interest, someone who has no environmental background can patiently and slowly learn until they become an expert in the field. Indeed, passion about one's work is always vital, no matter which occupation someone has. Therefore, we always hear famous sayings like the one from the CEO of Apple, Steven Jobs, who declared that "The only way to do great work is to love what you do." In line with the discussion of the importance of passion in work, Ramaprasad, Gudipaty & Vemula (2015), in their study of Indian journalists, proved that many of their interviewees said that working as a journalist was a 'dream' job and they still love their jobs; even though they receive a very low income (below about \$835 in spring 2014), they still have above-average job satisfaction.

On the other hand, it is undeniable that having a background in the environment and science is highly advantageous for the media and the ENGOs. EJ6 from Media A, who obtained her bachelor degree in biology, for example, said that she can easily understand topics like parasitology, as she studied them before at university. This is in contrast to those who have no environmental or science background, such as EN2 from ENGO A, who said that she has 'minimal knowledge of the environment,' as she came from an English language background. Without a doubt, having no formal education about the environment or science is one of the major factors why some media and ENGO employees lack environmental knowledge. As a result, for some of the media interviewees (EJ4, EJ7 and EJ9), the lack of environmental knowledge made it hard for them to deliver environmental news stories properly, whereas other media interviewees (EJ1) said that without proper environmental knowledge, a journalist will struggle to find the right sources to talk to about the issue. EJ8, who is the editor of Media B, added that there are still some journalists who are not able to understand the meaning of simple terms like 'habitat'. Interestingly, this situation does not only occur among Malaysian journalists but also among journalists in other countries

as well. For instance, Tsekos & Matthopoulos (2008), in their research on Greek journalists, discovered that a lack of proper environmental education among the journalists is one of the main reasons for ineffective environmental information in Greek society.

Furthermore, in a worst-case scenario, some of the media and ENGO interviewees stated that a lack of environmental knowledge and understanding, especially among the journalists, can lead to serious consequences, such as misinformation about the environment or mistranslation of the environmental terms to non-expert public. Consequently, the public will receive factually inaccurate environmental information and if they find out the truth, they will not trust the media anymore. At the end of the day, the credibility of the media as the main broadcaster of environmental information will be damaged. Hence, in order to avoid the misinformation or mistranslation of environmental information, some ENGO interviewees from this study suggested that the media need to double-check and proofread their work, for which they could request the help of others, such as staff members or sources like the ENGOs to recheck and validate the environmental information before they publish it. A recent study conducted by Ashwell (2016) on New Zealand's science reporters, for example discovered that some of the interviewees in his study stated that confirming the accuracy of facts through double-checking is vital, as it is one of the best ways to preserve the standard of good journalism. The most important suggestion given by interviewees for solving this barrier is for the media to always do their homework, such as doing a lot of research on environmental issues. This must be taken seriously by all the media, as they need to understand the issue before they write about or communicate it to the public.

Additionally, this study also discovered that self-censorship by the Malaysian media and ENGOs is another barrier in environmental communication. In the academic sphere, self-censorship has always been defined as a journalist's decision to exclude information they have obtained (Skjerdal, 2010). Interestingly, although self-censorship is often considered as a bad practice that violates journalistic ethics and professionalism, the result of the analysis show that some of interviewees in this study consider self-censorship as 'common' or even

‘required’ and a ‘must’ in order to avoid problems. EJ2 from Media A explained that self-censorship is conducted to avoid offending other stakeholders, while some other interviewees (EJ3 and EJ10) described the act of self-censorship as a cautious move to prevent lawsuits or penalties. Interestingly, the results of this study also discovered that some interviewees indicated that self-censorship is not only practised by the media but also the ENGOS. Therefore, similar to the media, some ENGO interviewees described self-censorship as a way to maintain their good relationships with other stakeholders and prevent problems like getting attacked or conflicting with other parties. The reasons why the media and ENGOS conduct self-censorship are not surprising, as a lot of past researchers like Tong (2014b) have highlighted that self-censorship among the Chinese media, for example, is one of the methods used to maintain good relationships with economic and political organisations; moreover, Lee & Chan (2009) also agreed that the media always try to avoid displeasing highly influential groups like the government, advertisers or even business people via self-censorship. In other words, self-censorship is one way to prevent punishments like being sued or getting banned, and is a quite common practice in authoritarian or semi-democratic countries (Yesil, 2014) such as Malaysia.

It is pivotal to note that the only striking and surprising result here is that the ENGOS, who are supposed to be transparent and always boast about transparency in environmental communication, also practise self-censorship. Perhaps the ENGOS perceive self-censorship positively, as it helps to protect their and other parties’ names, or perhaps they do not realise the negative impact of self-censorships, especially on their own credibility and on society, which has the right to know everything. One of the bad consequences of self-censorship, as highlighted Nadadur (2007), is that the media, like the Pakistani media, for example, is still unable to play its role as a watchdog and to freely report information to the audience. Failing to be a watchdog can ruin their credibility in the eyes of the public (Lee & Lin, 2006). Obviously, these consequences do not only affect the media but also the ENGOS if they continue to exercise self-censorship. Without the trust and support of the public, ENGOS cannot function, as well as discussed in Chapter 7, particularly in regards to the roles of ENGOS

and the media in environmental legitimacy, where the transparency of the ENGOs plays a key role in legitimising themselves in the eyes of society.

Moreover, this study discovered that the fourth barrier, which is the medium or organisational barrier was another one of the most discussed barriers by both the media and ENGO interviewees. As they have worked for Malaysian media and ENGOs, some interviewees felt that the media and NGO-related laws can be a barrier to environmental communication. Some media and ENGO interviewees used terms like “terrible”, “interfere”, “restriction”, and “control” to describe how these laws have a serious impact on their freedom in environmental communication activities. For instance, some of the media interviewees (EJ1 and EJ3 from Media A and EJ11 from Media B) spoke about how the implementation of the PPPA (1984) has controlled the media, particularly through the power of Malaysia’s Home Minister to control the permits and licenses for publication, which is in line with the discussion of the impact of the PPPA in Section 4.8.2.1, where under the new amendment in 2012, Section 13(B) states that:

“A person who has been granted a license or permit under this Act shall be given an opportunity to be heard before a decision to revoke or suspend such license or permit is made under subsection 3(3), 6(2) or 13(1), as the case may be” (The Printing Presses and Publications Act, 1984).

Without doubt, many past researchers have discussed the PPPA; Abbott (2011) for example, agreed that an application for a publication permit under the PPPA could be refused or suspended by the Home Minister (recently known as the Home Affairs Minister) without any judicial review. In the past, three local newspapers, including Media A, *Sin Chew Jit Poh* and *Watan*, had their licenses suspended in 1987; in 2002, some issues of the international news magazines *Newsweek*, *Time* and the *Far Eastern Economic Review* were blocked from being distributed in Malaysia (Wang, 2001; Ramanatha, Lim, & Kaur, 2006; Lee, 2007). Therefore, the implementation of media laws like the PPPA, together with other laws like the ISA (which has been abolished recently), the OSA, and the Sedition Act are often said to be the main tools used by the Malaysian government to

control public opinion in Malaysia (Mohd Azizuddin, 2011c); therefore, they constrain the transparency and independence of the Malaysian media (Sankar, 2013). In fact, the Malaysian media have always been labelled as a “docile media”, where the media are fully monopolised by the government (Hasmah, 2007) and are often accused of being pro-government (Smeltzer, 2008). The assertions made by past researchers about the undesirable impact of media laws are in line with the findings of this study, where some of the media interviewees (like EJ6 from Media A) said that they have had problems discussing or talking in detail about environmental issues associated with the government like the issue regarding the Lynas nuclear plant. Some of them (EJ13 and EJ5) even worry about the risks of being penalised, such as being arrested and jailed by the police; therefore, for them, it is better to not to touch on certain ‘sensitive’ environmental issues in Malaysia.

Interestingly, the result of analysis also discovered one point that was not discussed in the theoretical framework of this study and has been rarely discussed by past researchers. This truth is that the control imposed by the government via the media laws has indirectly controlled the ENGOs as well. EN8, who is the manager of ENGO B confirmed, that the control over media has impacted them as well because of the ENGOs’ reliance on the media as their main channel used to deliver environmental information. As a result, when the channel is being controlled, then the environmental information, as well as other stakeholders who rely on the channel, will also indirectly be controlled. In fact, just like the media, some ENGO interviewees also revealed that they do not want dwell on some environmental issues associated with the government, like the issue of the Lynas nuclear plant.

Meanwhile, in contrast to the opinions mentioned above, some media and ENGO interviewees in this study thought that the media or NGO-related laws have no impact on environmental communication at all. This is because the environment, unlike other controversial issues such as politics, is more focused on scientific and factual write-ups for educational purposes. In fact, some of the ENGO interviewees believed that their organisational orientation is more neutral, less aggressive and less vocal compared to Western ENGOs like Greenpeace.

This, according to them, is the main reason why the laws related to the ENGOs or the media have no impact on these interviewees' environmental communication activities. Additionally, some of the media and ENGO interviewees agreed that as long as the media and ENGOs abide by the Malaysian laws, they will not have any problems with the authorities. Most importantly, it is critical to note that some of the media and ENGO interviewees in this study perceived the implementation of media and NGO-related laws as being good for environmental communication, especially as a tool or mechanism to control the media and ENGOs so that they work in a responsible manner. In fact, this study found that some ENGO interviewees acknowledged that the requirement by the Malaysian government that all ENGOs need to be registered with the Registrar of Societies under the Societies Act (1966) is a good and systematic procedure, especially to inform and make the public aware of their existence. Unfortunately, this finding is not in line with the discussion of the implications of media and NGO-related laws in Section 4.9 in Chapter 4 and is in contrast to the findings of past Malaysian researchers like Azeem Fazwan (2011), who claimed that the Societies Act is an unnecessary law that restricts and penalises Malaysian NGOs. Furthermore, Mohd Azizuddin (2011d) asserted that the Societies Act is a restrictive law that has given too much power to the Home Affairs Minister to decide which organisations fulfil their requirements for registration. This result is also inconsistent with findings from other Asian researchers like Yang & Alpermann (2014), who claimed that the registration requirement of Chinese NGOs is difficult to fulfil and is one of the ways used by the state to control the NGOs. Consequently, the Malaysian ENGO interviewees in this study do not perceive this Act to be the government's tool for penalising them, but more as a tool to recognise their existence which, in return, has been very helpful in enhancing their credibility in the public's eyes.

In addition to the media laws, some of the media interviewees in this study also revealed that they have encountered unnecessary interference from other stakeholders, especially the government, politicians and developers in their environmental communication activities. The first type interference discussed by some of the media interviewees is related to complaints or criticism submitted by some of the stakeholders to their department or senior management, as these stakeholders can be unhappy about their environmental reporting on issues that

clearly attracted their interest. EJ11 from Media B shared her experience as an assistant editor who often receives phone calls from the police asking why they wrote environmental stories that damaged their reputation. Secondly, some of the media interviewees also revealed that there is another form of serious interference faced by them, which comes from the developers of certain projects who have blocked and threatened the journalists intending to uncover the bad environmental practices in their project. One media interviewee from Media A (EJ5) confirmed that a journalist was chased by gangsters hired by the developer when they conducted their environmental reporting in Sarawak. Apparently, this is a serious safety issue, which requires serious attention from media organisations, as stressed by Lisosky & Henrichsen (2009) about the increasing number of journalists who have been abducted and killed recently due to their work. Therefore, the safety of the journalists should be top priority for the media.

Furthermore, a closer look at the results of the analysis suggests that there are some barriers that specifically faced by the media organisations and not the ENGOs and vice versa. As noted in Section 4.8.1 in Chapter 4, the Malaysian media is said to be controlled by the politicians through the ownership system. Media A, for example, is owned by the MCA, while Media B is affiliated with UMNO via UMNO's investments in Fleet Holdings (Wang, 2001; George, 2007; Mohd Azizuddin, 2014a). Consequently, some of the media interviewees, especially those from Media A, pointed out that the media ownership system has caused the Malaysian media to suffer from a lack of freedom in communicating and writing about environmental messages. In this respect, EJ6 from Media A commented that they are not allowed to report environmental issues that are not favourable to the owners. Some past studies have shown that this situation does not only occur in Malaysia but also in other countries such as Pakistan, where the Pakistani media have to sacrifice their professional quality and conduct reporting based on the owners' and the government's interest (Nadadur, 2007). In the world's most populous nation, the Chinese media are controlled by the state and are therefore forbidden to report any sensitive political issues (Tong, 2014b). In Indonesia, the media are used as a powerful weapon to promote the owner's interests (Tapsell, 2012b). In regards to this, there is no doubt that media ownership, whether in Malaysia or in other countries, is a worrying condition that

clashes with Habermas' media and democracy theory, where the emphasis is on free and independent media. It also contradicts Hannigan's social construction of reality theory, as the media have no power to define and construct the reality of environmental problems in the public mind; instead, the owner (who is usually the government) holds the power to construct reality through its political ownership and control.

Some media interviewees said that media ownership is not a barrier in environmental communication. For instance, although Media B is owned by UMNO and the ownership system has often received criticism from past researchers like Sankar (2013), who claimed that media ownership is a tool used by politicians to spread their ideologies as well as being a reason for a lack of media transparency and independence in Malaysia, the results of this study discovered that many media interviewees, especially those from Media B, believed that there is a serious misunderstanding about the ownership of Media B among the Malaysians. According to these interviewees, Media B is not just the government's media, and the public should know that they will not hesitate to report any environmental news, including issues that touch the government's interest, as long as it contributes to their main goal, which is the prioritisation of the Malays, Islam and the Malaysian constitution. Furthermore, in order to clarify the misunderstanding by the public about Media B's freedom to report environmental news related to the government, EJ7, who is the chief editor for Media B, confirmed that whenever the government did something wrong, they will loudly protest against it and report it in the newspaper without any bias or hesitation.

The findings of the analysis also observed that media organisations' management problems could be another burdensome barrier for the media in environmental communication. The first management problem is associated with the fact that most of (or perhaps almost all) of the media organisations in Malaysia do not have their own environmental desk that specifically focuses on environmental reporting. Some of Media B's interviewees (EJ8, EJ9, EJ10 and EJ11) said that environmental reporting was put onto other desks like the S&T desk, which makes their responsibilities overlap with S&T reporting.

Consequently, without a dedicated environmental desk, it is quite difficult for journalists to specifically focus on environmental reporting, as they also juggle with other science and technology issues. Some of the media interviewees also discussed two major reasons why the Malaysian media do not have their own environment desk, which include having a small team or limited capable journalist who can cover the environmental news, and having a media system that emphasises multi-tasking (experts in several beats) rather than being focused on one beat. Furthermore, some of the media interviewees (EJ7 and EJ8) stated that because the media system puts great emphasis on multi-tasking, most of the journalists are subjected to the rotation system, where they are assigned to a new desk every one or two years. As a result, there are still no ‘environmental journalists’, experts or specialists on environmental topics in the Malaysian media.

Having a specific beat like an environmental beat (also known as an ‘advocate’s beat’) is crucial for a media organisation, as the beat system is established with the aim of creating a fixed work routine among the journalists (McCluskey, 2008), which makes the journalists’ job easier and saves more time (Lublinski, 2011). At the same time, an earlier study conducted by Saari, Gibson & Osler (1998) among Canadian science journalists noted that working in one specific beat had optimised their work performance compared to those who juggled other beats where journalists are often less familiar and less comfortable with the issues. This is also supported by the results of the study conducted by Tandoc & Peters (2015), which found that playing multiple roles with different routines can cause conflict among the journalists. Therefore, it will be good for the Malaysian media to solve this problem and to consider having a specific environmental beat in the future for the betterment of environmental journalism in Malaysia.

In addition to the discussion of the management problems of the media, some of the media interviewees also indicated that the media do not prioritise environmental issues compared to others issue like politics. Past researchers like Magno (1996) claimed that the main reasons why environmental news reporting is still abysmally underdeveloped is because the media organisations themselves

viewed the environment as being less valuable or not newsworthy. This is in line with the findings in this study, where some of the media interviewees said that environmental news reporting is an individual's role rather than a management concern. In other words, environmental reporting occurs when someone in the organisation, like an editor or a journalist, is passionate about environmental issues, but if the person leaves, no one will take care of these issue and therefore, his or her efforts will be abandoned. Moreover, many Media B interviewees noted that another reason why Media B gives less attention to environmental topics is because their media organisation focuses more on political issues, as well as championing issues regarding Malay, Islam and the Malaysia constitution. EJ9 from Media B clearly explained that Media B's stand as a 'political paper' has influenced the directions of their news coverage to focus more on politics rather than the environment. This statement is also supported by interviewees like EN8 from ENGO B, who realised that Malaysian newspapers like Media B are mostly politically oriented and thus they tend to report more on politics or environmental issues that are associated with politics. As a result, the number of environmental articles in the newspaper is rather low compared to articles on other issues. On the other hand, the media organisation's orientation is not the single reason behind the low visibility of environmental issues' in the Malaysian newspapers. There are also other factors, like the low level of reader demand for environmental news stories compared to other stories like politics or entertainment. Consequently, environmental issues have to compete with other issues, especially breaking news or trending issues and seasonal issues like election reports. A recent study conducted by Lester, McGaurr & Tranter (2015) on Australian newspaper's representation of the environment and environmental movement organisations during the election proved that election coverage reduce the space for environmental reporting. However, considering the importance of environmental news to the public, especially towards their environmental awareness and knowledge, many of the media interviewees, along with some ENGO interviewees, suggested increasing the number of environmental articles in local newspapers in the future.

Furthermore, there are more stumbling blocks associated with media organisations, which include the problem of the limited space allocated by the

media management for environmental news and the culture of ‘bad news is good news’ among the Malaysian media. Interestingly, the findings of this study, particularly on the problem regarding the limited space for environmental news, is contradictory to the findings of Nik Norma (2007), who discovered that none of the Malaysian journalists in her interview spoke about this problem. The problems with space in printed newspapers, particularly for environment and science issues, are quite common and have been widely discussed by past researchers. Archibald (1999), for instance, contended that environmental journalists find it challenging to communicate scientific data due to the limited space available in the newspaper, whereas Bucchi & Mazzolini (2003) noted that a massive number of the stakeholders the blamed the media for allocating small spaces to scientific issues compared to other issues like politics. The limited space for environmental news in Malaysian newspapers not only causes the low visibility of environmental news but also affects the quality of environmental information, especially when it has to be shortened. This was noted by Rong (2009), who claimed that environmental news would become less thorough and neglect the importance of the root cause of the environmental problems due to the short length of environmental news articles. Consequently, the public will only receive shallow environmental information that barely helps to improve their environmental knowledge. Surprisingly, besides the media, some of the ENGO interviewees also realised the problem regarding the limited space for environmental news among the Malaysian media. Thus some of the ENGOs, together with some of the media interviewees, also urged the media to consider having more space for environmental topic in the future.

As mentioned earlier, another barrier associated with the newsroom culture of the Malaysian media is the ‘bad news is good news’ motto. This is not a new finding as researchers like Galician & Pasternack (1987) explained that it is quite common to find journalists who ‘over-highlighted’ bad news and published it more than good news. This was also proven by Djerf-Pierre’s (2012) findings from her analysis of 50 years of environmental reporting on Swedish television, which discovered that four major environmental themes including environmental catastrophes, environmental alarms, environmental scandals and environmental controversies were the topics that appeared most often on the news. Alarminglly,

this practice has made it difficult for the Malaysian media and even the ENGOs to publish good or less sensational environmental information in newspapers, such as articles regarding environmental education or environmental conservation topic. EN6 from ENGO A, confirmed that they rarely get front page coverage on the newspapers, as their environmental issues are not dramatic and are more focused on environmental education issues. Obviously, for the sake of the public's environmental awareness and knowledge, this newsroom culture should be changed and, as stated by Hue (1999), the media should also report positive stories on environment.

The ENGOs also discussed two major barriers faced by their organisations, namely, limited funding and the organisations' orientation. It is very well known that ENGOs are independent and non-profit organisations that operate on the funds they receive either from donors or members of the organisation. Undoubtedly, funding is crucial for the survival of the NGOs (Gosh, 2009), especially for management costs like paying the salaries of the ENGO staff members and, most importantly, for conducting and sustaining their environmental programmes or research projects. Taking ENGO A, for example, a total of 15,800 ringgit (approximately €3430) is needed to cover the expenses of field equipment for the tiger conservation project; this does not include other costs (ENGO A's website, 2016d). Despite some ENGO interviewees, especially those from ENGO A, perceiving limited funding as not being a barrier and who said that their expenses are still under control, the majority of ENGO interviewees in this study claimed that the present conditions of the ENGOs show that both ENGO A and ENGO B have a tight and low budget due to the decline in the funding allocated by the sponsors as a consequence of the Malaysian economic downturn. As a result, more than half of the ENGO interviewees noted the impact of the shortage of funds on their environmental communication works; EN7 for example revealed that some of their environmental campaigns have been suspended while EN8 shared about the impacts of the lack of financial resources on their conservation projects. Admittedly, this funding problem is nothing new to the academic world and has been extensively discussed by past researchers like Frank, Longhofer & Schofer (2007) who contended that most Asian NGOs are poorly funded, including the NGOs in developed Asian nations like Japan; Singh

& Serina (2012) agreed that having a limited amount of funding is one of the constraints for Malaysian ENGOs in organising their environmental education programmes. Thus, for facing this limited funding barrier, some ENGO interviewees in this study suggested that the ENGOs should seek alternative funds like conducting fundraisers or using Moneybox, which can generate funds without depending on major sponsors. In regards to alternative funds, Schwartz (2004), for instance, found that Chinese ENGOs were able to find alternative ways to get funding by consistently seeking help from multinational corporations such as Royal Dutch Shell to obtain sustainable funding for their projects, while Manzo (2000) discovered that Indian NGOs like *Lokayan* pledge foreign funds from the United Nations and seek volunteers' help in selling its journal for their survival.

In addition, the result of analysis also discovered that some of the ENGO A's interviewees perceived their organisation's orientation to be a bit passive, as it is less vocal and puts too much emphasis on the importance of engaging with other stakeholders, which has caused some problems in environmental communication activities. EN3 from ENGO A revealed that due to their organisation's orientation, they are restricted when talking about certain types of environmental information to the media, while EN5 said that they always need to use 'softer language' when they have to give their comments on other stakeholders like the government so that they do not jeopardise the relationship between the organisation and the stakeholders. Consequently, ENGO A is always labelled as not being as vocal as international ENGOs like Greenpeace or WWF International; because of this, they also often receive criticism from the public that wishes them to be more vocal and outspoken. Interestingly, passive ENGOs not only found in Malaysia but also in other countries like Vietnam, where the ENGOs are labelled as 'weak' (Phuong, 2007); in Eastern European countries such as Bulgaria, Hungary, Slovakia and Romania, the ENGOs are often characterised as being 'less vocal' in advocating environmental problems (Botcheva, 1996). Obviously, this less vocal orientation is in contrast to the legitimacy theory that was discussed in Chapter 7 where the ENGOs should operate within society's expectations. If the ENGOs fail to be more vocal towards the government, as is expected by society, this will create a legitimacy gap where

society will start to perceive the ENGOs as being less credible and will slowly lose their trust of the ENGOs.

Furthermore, the results of this study also demonstrated compelling evidence that the existence of gatekeepers controlling and monitoring the environmental articles before publication also creates another barrier to the environmental communication activities of the media and the ENGOs. In the study of communication, a gatekeeper is often referred to as an agent like the editor-in-chief or the sub-editor in a media organisation who holds the power to decide which environmental news is to be published or ignored (Muzammil, 2011). However, the findings in this study show a new insight, namely that it is not only the media that have gatekeepers: the ENGOs also have their own gatekeepers who are responsible for editing and censoring certain environmental information. Meanwhile, unlike the media, who have the editors and sub-editors as their main gatekeepers, the ENGOs' gatekeepers are not necessarily the editor of the newsletters, magazines or press releases; gatekeepers can be the top managers like the heads of department or the president of the organisation. Apparently, for both media and ENGO interviewees, the gatekeeper roles causes another barrier to environmental communication, as claimed by EJ9 from Media B, who stated that the editing process cuts important environmental news content and causes the news to lose credibility. Interestingly, this is not only noticed by journalists; editors like EJ2 also agreed that editors who lack knowledge of the environment might wrongly edit and shorten environmental news. Editing processes involving trimming and cutting the news content are quite common, as space in newspapers is expensive and limited (Vandendaele, De Cuypere, & Van Praet, 2015). On the other hand, in contrast to the media interviewees, ENGO interviewees like EN3 perceived that the problems with editing are related to time constraints that slow down their work rather than affecting the quality of the environmental articles.

It is interesting to note that in addition to editing, censorship activities imposed by the gatekeepers have also affected both the media and ENGOs. Some of the media interviewees like EJ5 confirmed that censorship is a common practice in the media; other media interviewees like EJ2 and EJ4 revealed that

they have received orders from the gatekeepers not to highlight certain environmental issues like the palm oil issues associated with their advertisers or the Bakum Dam issue, which is connected to the government. This is not surprising, as past researchers like Yesil (2014) agreed that the freedom of the media is fragile and can be threatened by state censorship and corporate pressure. This was also supported by Arsan (2013), who found that 46 out of 54 (85%) of his respondents (Turkish journalists) agreed that the advertisers' wrongdoings are usually censored and reports on government-related issues need to be toned down. However, it is also surprising to discover the fact that censorship is not only practiced by the media but also by the ENGOs, as confirmed by some of the ENGO interviewees like EN1, who clearly mentioned that there are certain things that they cannot tell the public. Censorship, whether by the media or ENGOs should not be exercised, as it totally conflicts with the notion of democracy where the media and ENGOs should be free but fair to highlight any environmental issue. Both the media and the ENGOs should not be biased in selecting certain environmental issues and in setting their agendas, because this contradicts the idea of a democratic society, where the public deserves to obtain complete and accurate information (Tandoc & Peters, 2015).

On the other hand, the editing and censorship processes imposed by the gatekeepers are not necessarily detrimental. For some of the media and ENGO interviewees, editing is good. This is because the gatekeeper can assist the journalist or ENGO employee to improve the quality of their environmental articles (e.g. helping them to check the spelling, grammar and the accuracy of the contents). This argument is acceptable, as the gatekeepers are usually people who have more experience and knowledge of environmental issues, and they are able to assist the journalists or the ENGO employees to write better environmental stories that are factually accurate for public consumption. Similarly, censorship is also perceived by some interviewees from ENGO A as a vital instrument for exercising more care in delivering some environmental messages to the public, as careless writing might ruin their relationships with other stakeholders like the government.

Last but not the least, the media and ENGO interviewees in this study also shared another barrier, which is the barrier coming from the receivers of environmental information. Five major barriers are created by receivers (the Malaysian public), including lack of knowledge of environmental issues and the existence of ENGOs, a lack of awareness of the environment, negative attitudes towards the environment, a lack of English proficiency and having more interest in things other than the environment. In this study, some of the media and ENGO interviewees said that Malaysian society has little knowledge of the environment, particularly of complex and scientific environmental issues like *E. coli*, nuclear radiation, biodiversity and other issues. This is consistent with the finding of past studies like Rafia et al. (2012), who discovered that Malaysians still lack knowledge in certain areas like ozone depletion, which somehow influences their purchasing behaviour. Sadly to say, Malaysians' knowledge and their awareness of environmental issues are still very low, especially among the communities in rural areas. This is also supported by Agamuthu & Fauziah (2011), who claimed that Malaysian society still has a low awareness of the environment and this has contributed to the failure of a recycling programme in Malaysia. Some media and ENGO interviewees stressed that the low level of environmental awareness among Malaysians had caused a lack of interest in caring about the environment unless the environmental problem affects their livelihood. EJ5, for example, indicated that people do not care about rare earth unless they are living in Kuantan, which is the location of the Lynas power plant project. This statement is similar to the claim made by Phuong (2007) about the Vietnamese, who demonstrated the "not in my backyard syndrome", where they only care about the environmental issues that occur near them. As a consequence, the low level of environmental awareness and knowledge causes the Malaysian audience to sometimes struggle to understand the environmental information delivered by the media and ENGOs, such as the issues regarding shortages of rice, fauna extinctions due to illegal logging and the El Niño weather phenomenon.

Alongside the low knowledge and awareness of the environment, some ENGO interviewees from this study also highlighted an interesting finding about Malaysian's low knowledge of the existence and work of the Malaysian ENGOs, which is a topic rarely discussed by past scholars. Remarkably, although both

ENGO A and ENGO B are two of the most well-known ENGOs in Malaysia, particularly due to the international brand carried by ENGO A and by ENGO B being the oldest ENGO in Malaysia, along with their excellent work and achievements, they still face this barrier, where the Malaysian public is still unclear about their job scope and capacity as ENGOs and not as the authority. EN5 from ENGO A, for example, shared her experience of handling a member of the public who contacted the ENGO A to deal with a cow problem and people who requested ENGO A to supply turtles for an event, which are nothing to do with the work of ENGO A. These situations show that some Malaysians are still ill-informed about issues championed by the Malaysian ENGO and their roles. This complicates the ENGOs' environmental communication work and makes it more difficult than it should be. However, this finding is not surprising and can possibly be related to the finding of Aini & Laily (2010), where only a very small number of their respondents (2.5%) were members of ENGOs in Malaysia; this indicates the very low level of support and in Malaysia participation in the ENGO.

Additionally, some of the Malaysia media and ENGO interviewees also revealed that Malaysians' negative attitudes towards the environment have also caused another barrier to both the media and the ENGOs. EN8 from ENGO B described how Malaysian society always takes things for granted; other interviewees like EJ4, EJ8 and agreed with this statement by giving an example of how Malaysian society still wastes water, dumps rubbish into rivers and does open burning. The *'tidak apa'* (in English, 'It is OK' or 'It does not matter') attitude has been passed down from generation to generation and is difficult to change. Sadly, most Malaysians are actually aware of their wrongdoing but they still do it and expect someone to take action on their behalf. For example, most Malaysians are aware that throwing rubbish on the road is wrong; but many still do it, as they know that there are cleaners who are going to clean the rubbish on their behalf. Junaidi (2012) provided an example of how the landslides in Cameron Highland and the flooding in Kuala Lumpur International Airport 2 were related to this *'tidak apa'* or 'head in the sand' attitude. Such attitudes are obviously very harmful and should be changed by the Malaysian society. The *'tidak apa'* attitude among the majority of Malaysians makes it undeniably difficult for the Malaysian media or the ENGOs to change their mindset about the

environment, as this attitude has been strongly embedded in their daily lives. EJ5 from Media A pointed out that the media can write whatever they want but at the end of the day, it will never make any difference.

Another problem regarding the receiver of environmental information is related to their English proficiency, where some of the ENGO interviewees revealed that there are still Malaysians who have low English proficiency, especially those in the middle class and people living in rural areas. Despite the fact that Malaysia is best known as a British colony, the problem with English proficiency among Malaysians is nothing new, as the use of English has declined since the 1970s when the Malaysian government implemented a policy to strengthen the use of Malay (national) language as the medium of instruction in schools and universities (Davies, Hamp-Lyons, & Kemp, 2003). Sadly, the current reality shows that the lack of English proficiency is not only suffered by people in rural areas but also among Malaysian university graduates, as they are more monolingual and only master Malay as the national language (Azirah, 2014). This situation has obviously impacted the environmental communication work by ENGO A and B as their main communication medium, especially for the newsletters and magazines, is English. EN8 from ENGO B explained that most of the time, the public struggles to understand their messages, while EN5 from ENGO A admitted that the public does not even read the material given out through their environmental programmes. However, unlike other barriers, the ENGO interviewees in this study have managed to solve this drawback by using the concept of using the 'right language for the right audiences'. As confirmed by some interviewees, ENGO A have taken the initiative to hire a translator when they communicate with the local *Bajau* community, which hardly speaks Malay or English language, while ENGO B have taken the step of coming up with a Malay newsletter for school students, as Malay is the main medium in local schools.

Conclusively, the last barrier generated by the receiver is related to their low interest in the environment compared to other topics like politics, entertainment or economies. Ironically, unlike 'rice and curry', which are part of the Malaysian life, environment issues are not a Malaysian favourite. This has been mentioned repeatedly throughout this study. For example, in the discussion

of the roles of the media and ENGOs in environmental legitimacy in Chapter 7, some media and ENGO interviewees shared the similar problem of how environmental issues are never the top priorities for Malaysians and this has created a legitimacy gap. In fact, past researchers like Prasad et al. (2012) also discovered the same result, where Malaysians focused on issues other than the environment. In another study, Sharifah, Laily & Nurizan (2005) discovered that 52% of the respondents agreed that economical development is more important in Malaysia and it is fine to sacrifice nature for the sake of development. A more recent study by Siti Nor Bayaah, Nurita & Azlina (2010) found a similar result, where almost half of their respondents (41%) disagreed about the importance of preserving nature from economic development. This clearly shows how the environment is still seen to be less important in some Malaysian communities. Consequently, it is challenging for ENGOs and the media, particularly, journalists who specifically work on environmental topics which are less favoured by society, as most people will not care or even be interested to read an environmental story unless it is related to politics. The summary of this chapter will be offered in the next section.

9.3 Summary

This chapter has debated the third research question of the study and has itemised six key barriers faced by both the Malaysian media and ENGOs in environmental communication that undoubtedly need a great deal of attention from both media and ENGOs in order to find a solution to minimise these barriers and improve the quality of environmental communication in the future. Noticeably, some of the barriers are quite common, like limited funding for the ENGOs, while some other barriers, like source barriers or ENGOs censorship activities, are new in academic debate and require further investigation. Unexpectedly, both the media interviewees and the ENGOs had shared a lot of similar barriers in environmental communication; at the same time, there were also several specific barriers that were only faced by either the media or the ENGOs. These barriers include the limited funding problem, which was only discussed by the ENGO interviewees. In the meantime, certain barriers like the effects of media ownership and media laws

were only discussed by the media interviewees, but were supported by the ENGOs who observed this problem.

On the other hand, the majority of the media and ENGO interviewees in this study do not perceive all these barriers as being reasons to discontinue their efforts in communicating and educating Malaysians on environmental issues; instead, these barriers have shaped them into stronger and more mature environmental communicators. Furthermore, at the end of the interview sessions, most of the interviewees agreed that they have work in an organisation that has excellent team members and leaders (such as editors and the top managements) who are always keen to support each other, especially during difficult times. Inherently, a supportive team in any organisation is very crucial, as it will assist the members to have more personal resources like motivation and energy (Brummelhuis, Oosterwaal, & Bakker, 2012) and at the same time, boost their confidence to be more creative in searching for strategies to solve any difficult barriers that block their way (Kennedy et al., 2009). The overall findings of the barriers faced by the Malaysian ENGOs and the media in environmental communication are presented in Figure 9.1 below. Similar to Chapters 7 and 8, I have used three different colours: (1) green to indicate the ENGOs, (2) red to indicate the media, and (3) white for both the ENGOs and the media to show the similar and different themes between the Malaysian media and ENGOs. The findings and discussion on the representation of environmental information by the Malaysian media and ENGOs will be displayed in the next chapter.

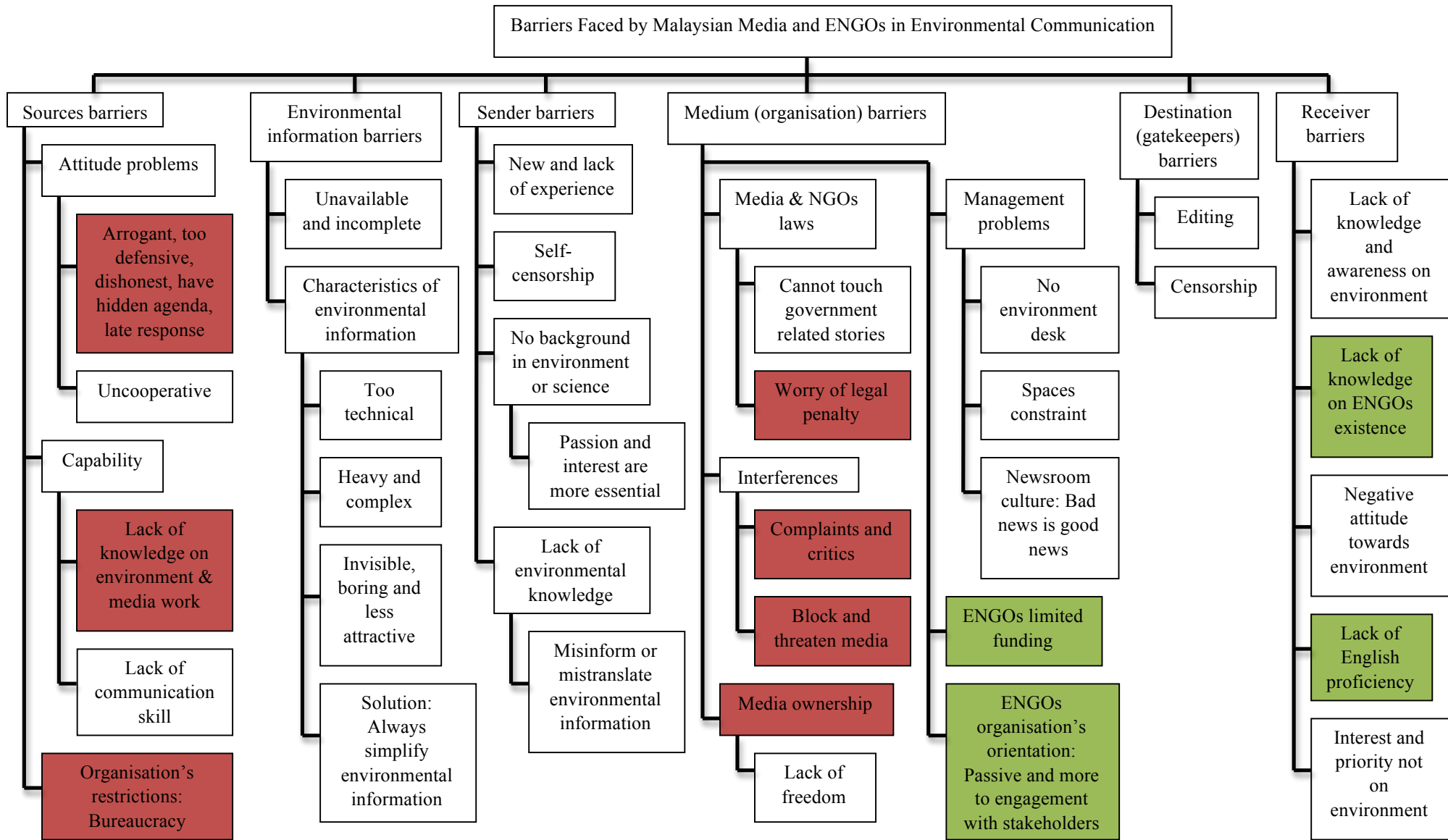


Figure 9.1: Summary of all themes and sub-themes of barriers of Malaysian media and ENGOS in environmental communication

CHAPTER 10

REPRESENTATION OF ENVIRONMENTAL INFORMATION BY THE MALAYSIAN MEDIA AND ENGOs

10.1 Introduction

The main objective of this chapter is to answer the fourth research question of this study: *What are the types of environmental information represented by Malaysian media and ENGOs in environmental communication?* Similar to Chapters 7 and 8, the results of the interviews are analysed and presented together with the results of a quantitative content analysis of newspapers and ENGO's newsletters as a cross-check on a selected section of the data. This chapter begins with the findings of types of environmental information represented by the Malaysian media and ENGOs in Section 10.2 and concludes with a short summary in Section 10.3.

10.2 Findings: Types of Environmental Information Represented by the Malaysian Media and ENGOs

The result of the analysis of the interviews discovered four major themes regarding the types of environmental information represented by Malaysian ENGOs in their newsletters and Malaysian media in their newspapers, namely (a) environmental effort topics, (b) environmental problem topics, (c) least covered topics, and (d) factors in the selection of environmental topics.

(a) Environmental effort topics

Environmental effort topics can be understood as environmental stories that are positive in nature, such as stories of actions in saving the environment (ID EJ2). Of all the environmental effort issues, conservation is the topic most discussed by some media and ENGO interviewees; for instance, EJ2 mentioned the turtle conservation issue, EJ5 and EN7 spoke about general animal conservation, EN1

discussed wildlife and fresh water conservation, and EN5 examined tiger conservation. Apart from conservation, there are other environmental effort topics published in ENGOs' newsletters and newspapers, as confirmed by some of the media and ENGO interviewees in this study. These topics include reports on environmental events, particularly, the coral reef campaign (ID EJ6) and the eco-care campaign (EJ10); stories on environmental research findings from reputable environmental organisations, such as Forest Research Institute Malaysia about forestry information (ID EJ9); stories on environmental management like forest reserves (ID EN10), park management (ID EN3, EN6), bio-development and land gazetting (ID EJ3); stories on fisheries and sustainable seafood (ID EN5); waste management (ID EN10) and environmental education (ID EN2).

(b) Environmental problem topics

In comparison to environmental effort topics, some of the interviewees, especially from the media discussed environmental problems as one of the main environmental issues that appear most frequently, both in the newspapers and ENGOs' newsletters. EJ8, who is the editor of Media B commented that:

“...To my knowledge, since I worked as a journalist, most of us gave attention to the negative impact on the environment...” (ID EJ8).

Out of the various issues associated with environmental problems, deforestation or illegal logging, environmental pollution and natural disasters were the three main topics discussed by both the media and ENGO interviewees. Nine out of 13 media interviewees and 3 out of 11 ENGO interviewees stressed that environmental stories on deforestation or illegal logging are the most often represented in their publications.

“...I see a lot of [emphasis on] forests... Those are the main stories I have seen...” (ID EJ4).

“...In newsletters? More deforestation...” (ID EN11).

Interestingly, the majority of media interviewees in this study (7 out of 13) mentioned environmental pollution and natural disasters as the most published topics in newspapers. None of the ENGO interviewees in this study spoke about pollution and natural disasters as topics published in their newsletters. In general, there are various types of environmental pollution presented by the media, including river pollution (ID EJ2, EJ11, EJ13), sea pollution caused by oil spills (ID EJ8, EJ12) and other general types of pollution like air and visual pollution (ID EJ2, EJ3). Similarly, for natural disasters, issues like droughts (ID EJ3), haze (ID EJ5, EJ7, EJ10), floods (ID EJ5) and landslides (ID EJ8, EJ9, EJ10, EJ11) were among the most prevalent in both Media A and B's newspapers. On the other hand, other environmental problem topics like the loss of biodiversity issue were mentioned. These include the loss of marine life like turtles (EJ12, EN1, EN5, EN6) or wildlife such as tapirs (EJ5), tigers (ID EN1), rhinos (ID EN1), elephants (ID EN6), orangutans (ID EJ5, EN1, EN6), especially in association with trafficking (ID EJ4, EJ6, EJ12). Only a few interviewees mentioned other environmental problems such as the Lynas nuclear power plant (ID EJ4), agricultural issues such as palm oil (ID EJ4) and ferns (ID EJ6), or dam issues (ID EJ5).

(c) Least coverage topics

In brief, only three media interviewees in this study revealed that the media have placed less emphasis on heavy environmental issues such as policy analysis, global warming, environmental economics and organic farming (ID EJ6); instead they prefer to represent lighter and simpler environmental topics like pollution (ID EJ9). EJ6 explained further:

“...You do not have a lot of discussion about environmental policies and you know... Like the analysis, yeah; it is more kind of like news-based kind of stuff and if there is a feature, it is quite usually a simple thing...” (ID EJ6).

Interestingly, some media interviewees also elaborated why simple and light environmental issues appear more frequently in the newspapers. Firstly, from the

media's perspective, it is always editorial decisions made by the top management, such as the CEO, who are more inclined towards lighter stuff rather than heavy material and also because of the dedicated section for environmental stories like the section in Media A's newspaper, which is meant to entertain readers (ID EJ6). Secondly, this is also related to the problem of the readers' capability, especially in terms of their low environmental knowledge and desire to read heavy environmental information (ID EJ8).

(d) Factors in the selection of environmental topics

In my study, both the media and ENGO interviewees agreed that the **(news) value** of environmental information is one of the primary factors used to determine which information is included or excluded in newspapers and ENGOs' newsletters. EJ3, for example, stated that "we must look at the news value itself; whether it can attract the readers or not". Other media interviewees (EJ4, EJ5 and EJ11) stressed the importance of picking up environmental stories that have a higher news value. Among all values, timeliness was one of the factors most discussed by both the media and ENGO interviewees (six from the media and two from the ENGOs). In general, some interviewees defined timeliness as 'current' (ID EJ2, EJ9, EJ10), 'new' (ID EJ2), 'latest' (ID EJ11, EN10), and 'recent' (ID EN3) environmental topics. In other words, environmental topics that have timeliness are not old or repeated topics (ID EJ2, EJ13). It is also worth noting that most of the environmental issues that are timely are reports on environmental events:

“...Yeah, so, the timeliness issue... So, you know, in conjunction with a special event or if there is something special being held like – I do not know – some walks...” (ID EJ3).

“...So, and then the last issue... Was on turtles because it is, you know, ‘World Sea Turtle Day’ in June... Sometimes they coincide it with a major event...” (ID EN6).

Another vital news value used to select environmental information for publication is the impact of the environmental information itself. Six media interviewees and 1 ENGO interviewee agreed that they would choose environmental information that is more impacting like “big” (ID EJ5, EJ12) and “serious” (ID EJ6) environmental topics that garner more attention from the authorities (ID EN1).

“...If it is a smaller issue, it probably won’t make the news... Maybe there will be a smaller story, but it won’t be, like, a huge picture, like, kind of thing, cause some issues are not that big... But stuff like, for example, the death of pygmy elephants recently... That one is really big news... That one will [be] really big because people actually care...” (ID EJ5).

“...Usually it involves tragedy, like river pollution... After... People died... We would be able to make it big...” (ID EJ7).

Besides timeliness and the impact of the environmental information, some media and ENGO interviewees in this study (five from the media and two from the ENGOs) stressed that proximity is another essential value when considering which environmental topic should be accepted for publication. Proximity selects for the environmental topics that commonly occur in Malaysia (ID EJ4, EN9) or even take place in one specific state in Malaysia, such as Selangor (ID EN10) and are very close to the Malaysian public (ID EJ10). Various environmental issues frequently occur in Malaysia and often get attention from the media or ENGOs such as drought, pollution and deforestation.

“...You know, it is an issue they see everyday when they are driving along the highway; you know, they see all the trees being cut off and, you know, stuff like pollution and droughts – it is stuff they experienced...” (ID EJ3).

“...It is dry country... I mean, it is dry season and you got your rainy season, so all these issues are the environmental issues [that] are the most common issues, especially in our country...” (ID EJ4).

Finally, and most interestingly, only five media interviewees revealed that environmental stories that have a human interest element will entice them to publish them in the newspapers. Human interest is used to describe environmental stories that matter to the public and affect their life (ID EJ3, EJ5, EJ6, EJ8, EJ11). One interviewee from Media A gave an instance of an environmental news story that has a human interest value attached to it:

“...This particular disaster and oil spill: you have to find the human side of it, and then you have to, you know... So when people read, it is interesting to them...” (ID EJ6).

Additionally, some media and ENGO interviewees (five from the media and one from the ENGOs) also disclosed that the **interest of readers** in certain environmental issues is a crucial factor in the selection of environmental information, whether for newspapers or ENGOs’ newsletters. In other words, the media and ENGOs are highly dependent on people in terms of the kind of environmental topics they would like to read (ID EJ3, EJ6) and care about (ID EJ5, EN3).

“...Yes definitely... We always have to look at what the public does first; what is the biggest concern to the public, what would they be interested to know... How can we attract them or how can we get the message to them? So we always think about when we do our messaging, we always think about what is [the biggest] most concern to the public...” (ID EN3).

Most importantly, it is worth remembering that unlike ENGOs, which are non-profit organisations, the media are more profit-driven and must take readers’ preference on environmental issues into account in order to maintain good readership and circulation, as pointed out by chief editor of Media B:

“...In the end, we cannot deny the fact that the newspaper industry involves business, so we must have a business element on it... So if we do something that is self-indulgent, then the reader will not want to

read it and they will not buy it... Sooner or later, our newspaper would risk bankruptcy...” (ID EJ7).

Apart from readers’ interest, a handful of media interviewees said that journalists’ and editors’ interest also contributed to the selection of the environmental news articles to be published.

“...It is probably really bad, but the criteria are what is interesting to me and what excites me, which is maybe not a good thing for a journalist because journalists are supposed to think about the audience more... I think that is one of my problems...” (ID EJ6).

“...Maybe someone, some NGO would have emailed them [editor] or told them ‘Oh, this is happening,’ you know, so then they will tell the reporter to go and pursue the story...” (ID EJ4).

On the other hand, the **background of the media and ENGOs** also influenced the selection of the environmental information that is published in newspapers or ENGOs’ newsletters. For Media B, the main focus of the organisation is on the national agenda, particularly on Islam, the King, Malay rights and Malaysian constitution; therefore, any environmental issue that is associated with these four pillars will be given more priority (ID EJ7, EJ8, EJ12, EJ13). Both ENGOs A and B have their own vision or mission and their own championed environmental issues that need to be focused on.

“...Yeah, of course, our mission is to stop the degradation of the planet, the natural environment and we want to build a future where humans live in harmony with nature...” (ID EN1)

“...Because our mission is to maintain the Malaysian national heritage...” (ID EN9).

In terms of championed issues, ENGO A, for instance, emphasises flagship species such as orangutans, tigers and turtles (ID EN1, EN5); fisheries and

sustainable seafood (ID EN5); and wildlife habitat conservation in (ID EN1, EN2). ENGO B is more focused on animal conservation in habitats (ID EN7, EN9), deforestation (ID EN9) and species protection (tapirs, tigers and elephants) (ID EN11). Therefore, similar to Media B, environmental information published by both ENGOs A and B will be more focused on the issues that are in line with their vision or mission and their championed environmental issues, instead of random environmental issues. Of course, on occasion, ENGOs and especially the media still pick up other environmental issues that are out of the scope of their publication.

“...But sometimes also, like recently, one of the hot issues was that the Selangor government was [putting] a new highway that is going to cut across the Selangor State Park... So, although we are not specifically working in that area, it is something that, you know... Concerns us...” (ID EN3).

10.2.1 Cross-check between the Qualitative Interviews and a Quantitative Content Analysis of Newspapers and ENGOs’ Newsletters

Similar to Chapters 7 and 8, the results of a quantitative content analysis of newspapers and ENGOs’ newsletters was used as a cross-check on a selected section of the qualitative interview results. As mentioned before, a total of 1143 environmental articles were found in Media A’s newspaper and 591 environmental articles appeared in Media B’s newspaper. For ENGOs, 150 environmental articles were found in ENGO A’s newsletter and 166 environmental articles in ENGO B’s newsletter.

10.2.1.1 The environmental information represented in newspapers and ENGOs’ newsletters

In brief, the results of the quantitative content analysis found that there were 64 environmental topics in 2050 environmental articles that were collected from Media A and Media B’s newspapers and ENGO A and ENGO B’s newsletters across a three-year investigation period from 2012 to 2014. Table 10.1 shows that

of the four organisations, Media A presented the greatest variety of environmental topics in their newspapers (63 environmental topics (98.43%) out of the total of 64 environmental topics), followed by Media B with 56 environmental topics (87.5%), ENGO B with 23 environmental topics (35.93%) in their newsletter and ENGO A with only 18 environmental topics (28.12%).

Additionally, it is interesting to note that the topics of environmental management (5.86%), floods (6.73%) and wildlife (7.08%) are the three most published topics in Media A's newspaper; for Media B, the topics of floods (18.27%), water crises (7.44%) and wildlife (6.09%) are the most frequently published. For ENGO A, the topics of wildlife (24.66%), marine protection and conservation (21.33%), and sustainable living (19.33%) are the three most frequently presented in their newsletters. For ENGO B, the topics of eco-tourism (16.86%), sustainable living (20.48%) and wildlife (13.25%) appeared often the most in their newsletters. It is valid to conclude that floods are the most popular environmental topics for Media A and Media B while wildlife and sustainable living are the most popular environmental topics among ENGO A and ENGO B. Interestingly, wildlife was recorded as the most published topic by all four organisations.

Nevertheless, the results of the qualitative interview showed that the media focused more on negative impacts on the environment (ID EJ8). The results of the quantitative content analysis revealed that more than 50% of the environmental topics presented by both Media A and Media B's newspapers were linked to environmental problem topics such as chemical pollution, climate change, clogged drains and deforestation, as clearly presented in Table 10.1 below. This is also consistent with the claims made by some of the media and ENGO interviewees in Chapter 9 about the culture of 'bad news is good news' in the Malaysian media that has, in turn, affected the ENGOs' environmental communication activities, especially as they previously intended to give more coverage to environmental effort topics like education and conservation.

Interestingly, the outcome from the qualitative interviews showed that most of the interviewees mentioned three major environmental problems

including pollution, deforestation and natural disasters, which appear most often in Media A and B's newspapers. However, the results of the quantitative content analysis portrayed a different story in which, topics like deforestation and pollution were not the most published but had only average coverage in both Media A and Media B's publications. This is in contrast to the topic of natural disasters, which actually had the highest number of publications, especially in the flood issue, in Media A and Media B's newspapers, which is consistent with the claims made by most of the media interviewees in this study.

On the other hand, the results of the quantitative content analysis are also in line with the statement made by some media interviewees who claimed that topics such as marine conservation and environmental management were often printed in Malaysian newspapers. Interestingly, the results of the quantitative content analysis also revealed that that heavy and complex environmental issues like chemical pollution, cloud seeding, environmental policies and laws, and global warming are less published in both Media A and Media B's newspapers. Taking the global warming topic, for example, in a three-year period, there was only one article (0.08%) presented on this topic in Media A's newspaper and none (0%) was published in Media B's newspaper, which again is congruent with the claims of some media interviewees like EJ6, who confirmed that environmental issues that are more heavy and complex like global warming are less published in their newspaper compared to light and simple environmental topics.

Additionally, during the interview, the majority of ENGO interviewees from ENGO A and B stated that the vision and mission of their respective organisations were used to determine which environmental issues should be published in their newsletters. Thus, it is not surprising to learn that wildlife, marine protection and conservation, and sustainable living are the three most presented topics in ENGO A's newsletter while eco-tourism, sustainable living and wildlife are most published topics in ENGO B's newsletter. In fact, both ENGOs A and B share a similar mission or vision, particularly on the species' habitats; therefore, wildlife issues are among the top issues published in both ENGOs' newsletters. As a whole, a summary of all the environmental topics in

Media A and Media B's newspapers and ENGO A and ENGO B's newsletters is displayed in Table 10.1 below.

Table 10.1: Types of topic in environmental articles

Topic	Media A (N)	Media B (N)	ENGO A (N)	ENGO B (N)
Agriculture	26	24	1	3
Air pollution	11	2	-	-
Biomass	4	2	-	-
Carbon emissions	8	1	-	-
Chemical pollution	3	1	-	-
Climate change	18	3	-	1
Clogged drains	8	2	-	-
Cloud seeding	3	1	-	-
Dams	3	5	-	1
Deforestation	23	17	-	1
Development impact	23	6	-	3
Droughts	5	-	-	-
Earthquakes	22	17	-	-
Earth Hour	10	2	6	-
Eco-tourism	17	11	1	28
El Niño	6	5	-	-
Endangered plants	2	1	1	-
Energy	40	7	1	1
Environmental management	67	23	-	6
Environmental policies or laws	7	1	-	-
Equinox	1	-	-	-
Fisheries	10	-	2	-
Flash floods	15	15	-	-
Floods	77	108	-	-
Forest fires	10	5	-	-
Forest protection	11	4	8	12
Global warming	1	-	-	-
Haze	16	14	-	1
Hill development	10	-	-	-
Landslides	30	12	-	-
Land conservation	10	3	3	3
Lightning	2	1	-	-
Marine education	5	-	9	1
Marine life	23	13	6	-
Marine protection and conservation	43	14	32	10
Mining	11	2	-	-
National parks	9	-	1	-
Nuclear reactors	21	14	-	-
Oil spills	6	2	-	-
Open burning	6	2	-	-

Rainfall	19	7	-	-
Rear earth (Lynas)	12	11	-	-
Recycling	15	1	-	21
Snow	13	9	-	-
Soil movement	3	2	-	-
Storms	32	17	-	-
Sustainable living	65	7	29	34
Tourism	42	16	3	10
Transportation	12	8	-	-
Tsunamis	2	9	-	-
Typhoons	28	13	-	-
Underwater tunnels	-	3	-	-
Urban greening	11	3	-	-
Volcanoes	8	8	-	-
Waste disposal	22	17	-	1
Waste management	27	15	-	1
Water conservation	13	6	3	2
Water crises	51	44	-	-
Water rationing	11	3	-	1
Water resources	21	10	2	-
Water pollution	23	4	-	1
Waves	3	2	-	-
Wetlands	6	-	5	2
Wildlife	81	36	37	22

In brief, Figure 10.1, 10.2, along with Table 10.2, show the distribution of environmental articles in Media A and Media B's newspapers and ENGOS A and B's newsletters based on the day, month and year of publication. It is necessary to note that environmental articles in ENGOS' newsletters are not published on a daily basis, unlike media newspapers. Therefore, it is not possible to compare the number of daily environmental articles between the media and the ENGOS. Similarly, ENGO A's newsletter is only published every three months, so it is also irrelevant to compare their publication with the media and ENGOS B, which publishes its newsletter every month. Based on Figure 10.1 below, the distribution of environmental articles in Media A and B's newspapers are consistent or equal every day, but fewer appear on Sunday (0.09% for Media A and 10.49% for Media B). Over three years, Media A had the highest number of environmental articles on Tuesday (16.44%) while Media B seems to have had more environmental articles on Saturday (18.10%).

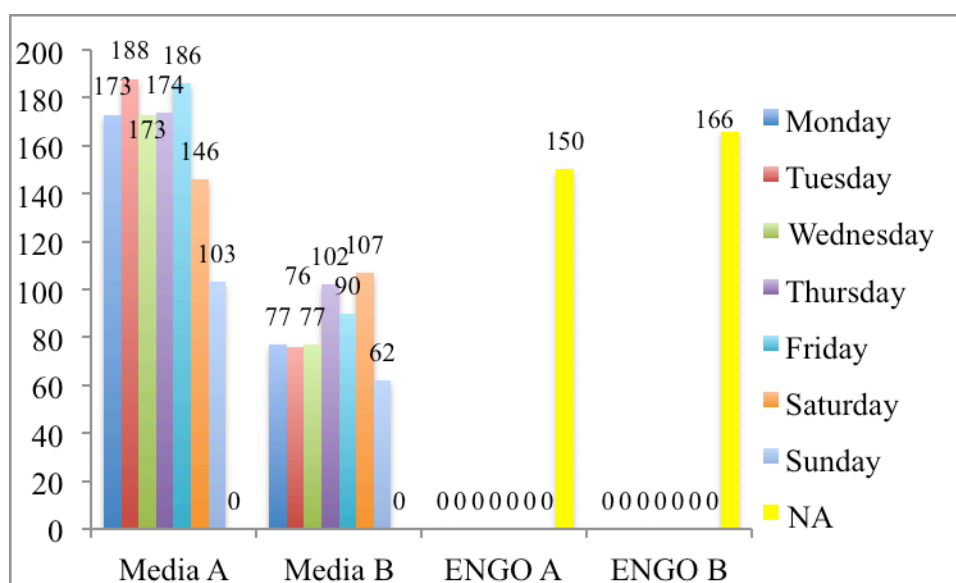


Figure 10.1: Number of environmental articles per day

In addition, Table 10.1 below reveals that there is a significant difference between the number of environmental articles based on monthly publications between Media A and B's newspapers. From 2012 to 2014, Media A had the highest number of environmental articles in its newspaper in January (11.19%) but Media B has the most environmental articles in its newspaper in December (18.10%). The quietest month for Media A is in October (4.98%), while Media B reported the lowest publication of environmental articles in August (5.92%). As a whole, Media A undoubtedly has the highest number of environmental articles in their newspaper every month (January to December) compared to Media B. Both ENGOs A and B have a consistent number of environmental articles in their respective newsletters.

Table 10.2: The number of environmental articles per month

Month	Media A (N)	Media B (N)	ENGO A (N)	ENGO B (N)
January	128	65	-	18
February	116	57	-	8
March	101	41	-	18
April	100	37	-	13
May	70	54	-	16
June	105	41	-	14
July	116	28	-	15
August	89	35	-	11
September	85	43	-	15
October	57	40	-	12

November	72	43	-	14
December	104	107	-	12
January–March	-	-	58	-
April–June	-	-	29	-
July–September	-	-	32	-
August–December	-	-	31	-

Moreover, as shown in Figure 10.2, there is a fluctuation in the number of environmental articles published by Media A and Media B newspapers and ENGO B's newsletter, but for ENGO A, which had a decreasing number of environmental articles published in their newsletter from 2012 to 2014. The number of environmental articles in Media A and Media B's newspapers and ENGO B's newsletter dropped slightly in 2013 but increased again in 2014. This is different from ENGO A, which has reduced the number of environmental articles from 2012 to 2014.

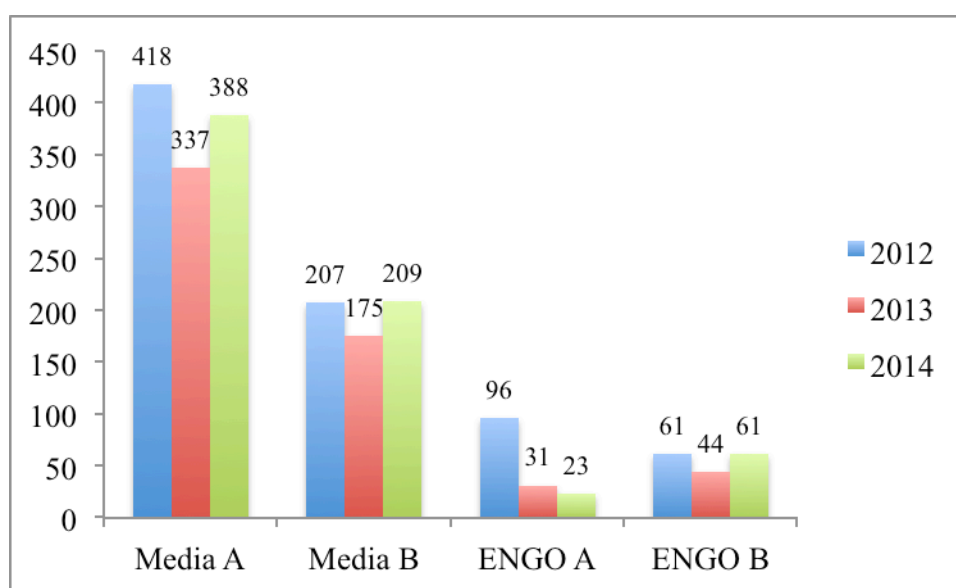


Figure 10.2: Number of environmental articles per year

Moreover, in terms of the language used for environmental articles, Media A, Media B and ENGO A only used a single language (English for Media A and ENGO A, and Malay for Media B), but ENGO B used two languages for the environmental articles in their newsletters (English and Malay). It is noteworthy that the languages used for environmental articles by both the media and ENGOs were in line with the organisation's background and whether they operate in English or Malay (the national language). The details of the language used for

environmental articles by the Malaysian media and ENGOs are displayed in Figure 10.3 below.

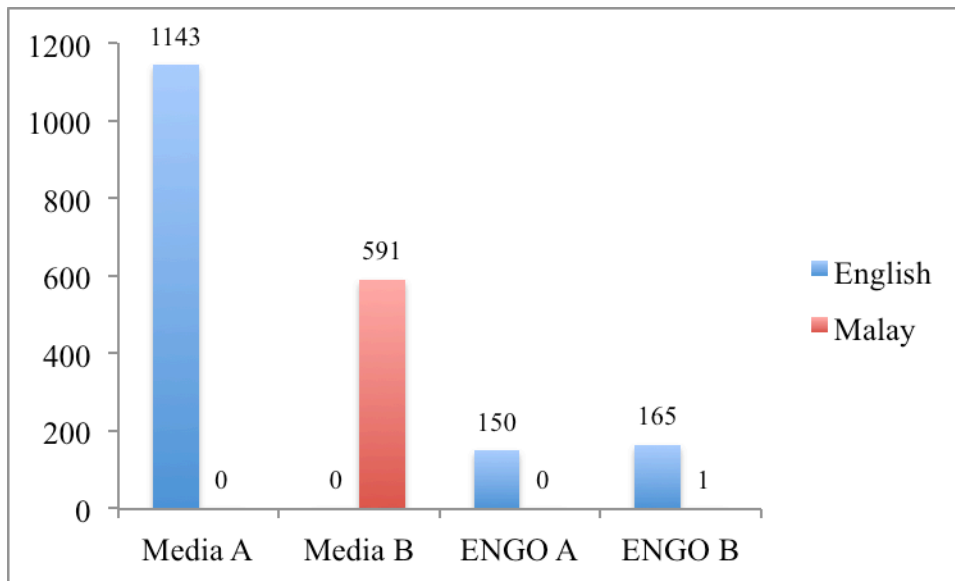


Figure 10.3: Languages used for environmental articles

Furthermore, as shown in Figure 10.4, Media A, Media B and ENGO A's environmental articles are more related to straight news (72.96% for Media A, 84.43% on Media B, 76.66% for ENGO A) but ENGO B has the highest number of feature articles (42.16%). On the other hand, environmental features the second highest type of publication for Media A (16.79%), Media B (12.01%) and ENGO A (12.66%), whereas direct news is the second most frequently reported genre for environmental articles in ENGO B's newsletters (39.75%). Media A, Media B, ENGO A and ENGO B all have a small percentage of environmental articles in other genres like letters to the editor, advertorials and interviews.

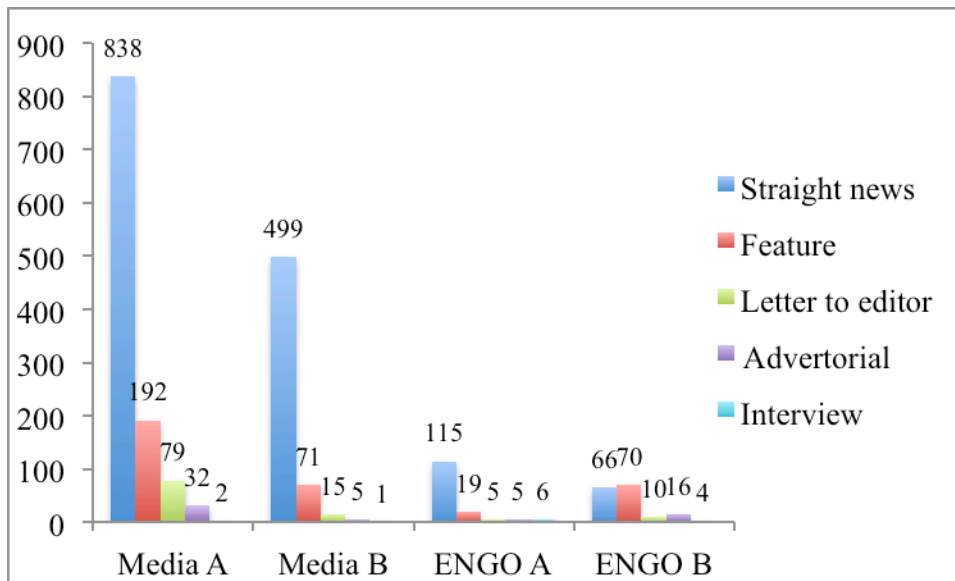


Figure 10.4: Genre of environmental articles

Moreover, the results of the quantitative content analysis also show that most environmental articles in Media A and Media B's newspapers are placed not on the front or back pages but in the intermediate pages (95.71% for Media A and 97.8% for Media B). However, Media A has more environmental articles on its front pages (4.19% for Media A compared to 2.03% for Media B). Only one environmental article in both Media A (0.08%) and B (0.16%) was placed on the back page of the newspaper. Unlike the media, all the environmental articles in both ENGOs' newsletters are published in the intermediate section (100%), since the back page of newsletters is usually for pictures and the news headlines. The details of the placement of the environmental articles in the Malaysian newspapers and ENGOs' newsletters are presented in Figure 10.5.

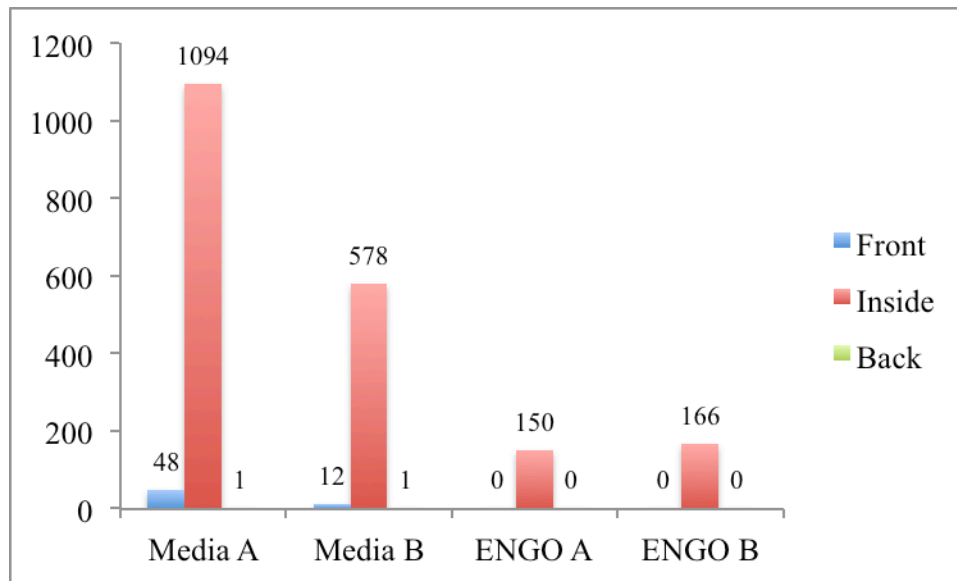


Figure 10.5: Placement of environmental articles

Most of the environmental articles in Media A and Media B's newspapers and ENGO B's newsletters are of medium length, which is around 6–15 paragraphs (57.83% for Media A, 64.29% for Media B and 68.07% for ENGO B) while most environmental articles in ENGO A's newsletter are considered to be short (69.33%), which is less than five paragraphs. Media A has the highest number of environmental articles that are long (16 paragraphs or more) (28.17%). These long environmental articles are usually the features, which require detailed explanations of certain environmental issues like sturgeon fish, landslides and eco-tourism. Figure 10.6 also shows that a number of environmental articles by both ENGOs A and B are long (7.33% for ENGO A and 15.66% for ENGO B), instead of medium and short passages.

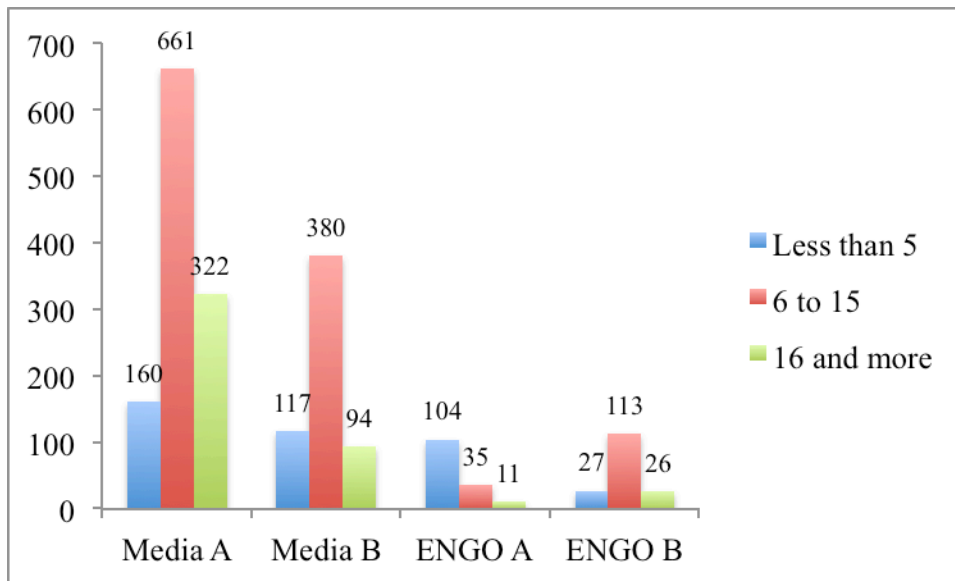


Figure 10.6: Number of paragraphs used in environmental articles

Additionally, as shown in Figure 10.7, the analysis also revealed that the majority of the environmental articles in Media A and Media B's newspapers (65.44% for Media A and 75.12% for Media B) and ENGO A and ENGO B's newsletters (97.33% for ENGO A and 90.36% for ENGO B) are about Malaysian or local stories. This is not unusual and is similar to the results obtained by the qualitative interview analysis. Some of the media and ENGO interviewees shared the importance of selecting environmental issues that are relevant, including environmental issues that are common in Malaysia (ID EJ4, EN9) or those that happen in a specific part Malaysia, such as Selangor (ID EN10) and are very close to the hearts of the Malaysian public (ID EJ10). Regarding the proximity value, the results of the quantitative analysis also prove that environmental stories related to Asian countries are ranked at number two, while environmental stories linked to Western countries are ranked as number three, followed by African stories in Media A and Media B's newspapers, and ENGOs A's newsletters. It shows that Asian environmental stories are usually reported in Malaysian newspapers, as these are closer to Malaysians than Western or African environmental stories. However, ENGO B showed the opposite trend, as they have more environmental articles about Western countries (4.21%) than Asian countries (1.20%).

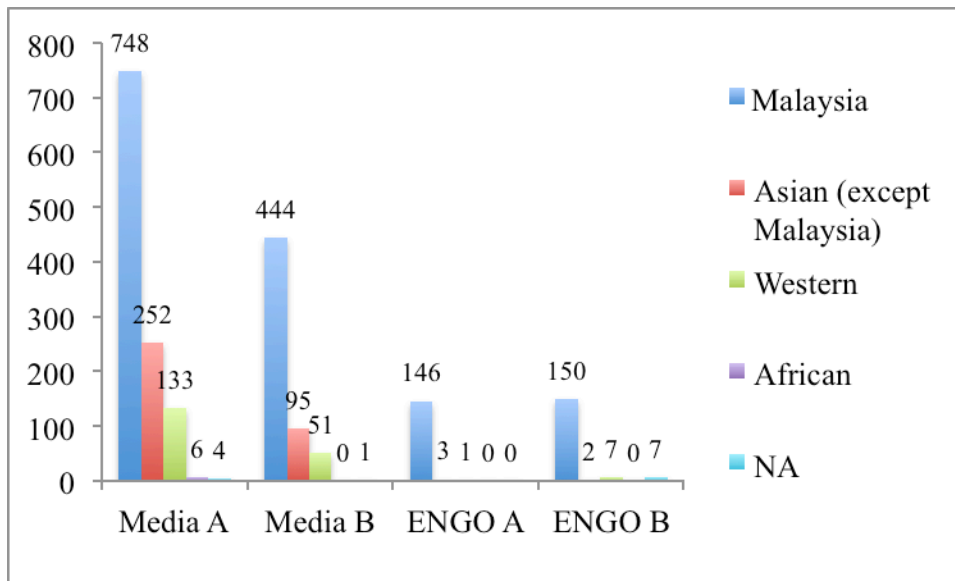


Figure 10.7: Geographical context of environmental articles

Lastly, in terms of the authors of environmental articles, the majority of the environmental articles in Media A and Media B's newspapers were written by their own journalists (32.80% for Media A and 29.44% for Media B), similar to the majority of the environmental articles in ENGO A and ENGO B's newsletters, which were written by their own staff (93.33% for ENGO A and 68.67% for ENGO B). Many of Media A and B's environmental articles do not have a byline (no author mentioned) (22.65% for Media A and 37.90% for Media B). It is therefore difficult to determine whether their own journalists wrote the articles. Another interesting finding from this study is that both Media A and B's newspapers actually contain more environmental articles that refer to international news sources like AFP (31.75% for Media A and 20.81% for Media B) rather than local news sources like *Bernama* (2.79% for Media A and 7.27% for Media B). For ENGOs, it is also interesting to find that a small number of environmental articles in ENGO B's newsletter (3.61%) were contributed by Malaysian journalists. The details of the authors of the environmental articles are presented in Figure 10.8.

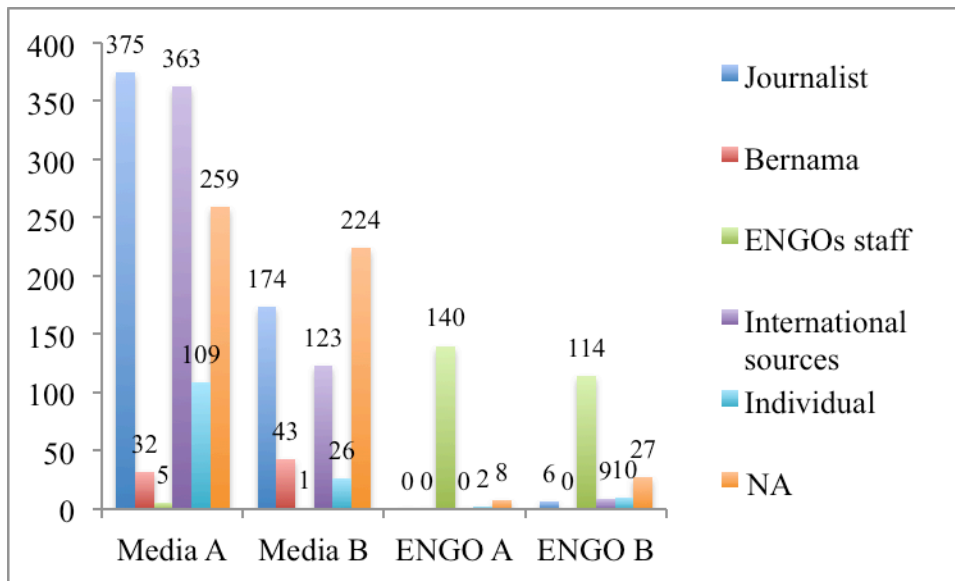


Figure 10.8: Authors of environmental articles

10.2.1.2 Statistical Results of Chi-Square Test

Similar to section 7.6.1.2 in Chapter 7 and section 8.5.1.2 in Chapter 8, a chi-square test was also conducted to evaluate the differences in the types of environmental information represented by Media A, Media B, ENGO A and ENGO B. The results of the chi-square test, as shown in Table 10.3, indicate that there is a significant difference among Media A, Media B, ENGO A, and ENGO B's topics; day, month and year of publication; language used; genre; length; placement; geographical context and author of environmental articles in newspapers and newsletters ($P < 0.05$). Undoubtedly, this is consistent with the result of the descriptive analysis above, where all four organisations have different types of environmental information in their newspapers and newsletters. Taking the types of topics represented in environmental articles, for example, the media have more coverage of environmental problems, while the ENGOs have more coverage of environmental efforts. Specifically, Media A had more on the topics of environmental management (5.86%), floods (6.73%) and wildlife (7.08%) while the topics of floods (18.27%), water crises (7.44%) and wildlife (6.09%) were the most highlighted by Media B. This is contrast to ENGO A, which mostly published environmental articles on the topics of wildlife (24.66%), marine protection and conservation (21.33%), and sustainable living (19.33%) in their newsletters. For ENGO B, the topics of eco-tourism (16.86%), sustainable living

(20.48%) and wildlife (13.25%) are mostly represented in their newsletters. The clear difference among the types of environmental topics represented by all four organisations could be due to the different background of the organisations; for example, like the NGOs usually published on the environmental topics that are related to their organisation's mission, vision and championed issues, while the media tend towards environmental issues that have a high news value like recent environmental issues happening locally and internationally. A summary of the chi-square test results is presented in Table 10.3 below. The discussion of the representation of environmental information among the Malaysian media and NGOs will be displayed in the next section.

Table 10.3: Chi-square test results

Components	Value	df	Asymp. Sig. (2-sided)
a) Differences in the topics used in environmental articles between all four organisations	1055.607	189	.000
(b) Differences in the day of publication between all four organisations	2068.278	21	.000
(c) Differences in the month of publication between all four organisations	2124.686	45	.000
(d) Differences in the year of publication between all four organisations	48.762	6	.000
(e) Differences in the language used in environmental articles between all four organisations	2045.160	3	.000
(e) Differences in the genre of environmental articles between all four organisations	198.357	12	.000
(e) Differences in the placement of environmental articles between all four organisations	18.355	6	0.005
(f) Differences in the length of environmental articles between all	290.558	6	.000

four organisations			
(g) Differences in the geographical context of environmental articles between all four organisations	158.757	12	.000
(h) Differences in the authors of environmental articles between all four organisations	1694.669	15	.000

*Significance at $P < 0.05$

10.2.2 Discussion: The Representation of Environmental Information in Malaysian Newspapers and ENGOS' Newsletters

In brief, in line with the theoretical debate on the representation of environmental information by the media and ENGOS in Section 3.5 in Chapter 3, this section sought to discuss the media and ENGOS' views on the characteristics of the environmental information represented in Malaysian newspapers and ENGOS' newsletters. Primarily, results of the quantitative content analysis of Malaysian media newspapers and ENGOS' newsletters provided many interesting findings regarding the characteristics of the environmental information represented by the Malaysian media and ENGOS. The analysis was done on the number of environmental articles per day, month and year, as well as the themes or topics of selection, placement, language, length, genre, geographical context and authors of the environmental articles. An analysis of a three-year period (2012–2014) revealed that it is plausible to state that the Malaysian media have a consistent number of environmental articles daily, but fewer on Sunday. In order to obtain a clear insight into this matter, I consulted one of the interviewees from Media A (EJ5) and another interviewee from Media B (EJ7). According to these interviewees, Sunday publications focus more on weekend reading issues, which are lighter. Besides this, it ought to be noted that government departments and ENGOS usually hold their press conferences on weekdays. Therefore, event reporting is low on Sunday, including environmental news reporting. Another apparent reason is that Sunday publications are more focused on advertisements (more than 60%). On the other hand, both Media A and Media B, along with ENGO B, had a consistent number of environmental articles for monthly publication. However, the coverage was less in October for Media A, in August

for Media B and in February for ENGO B. It ought to be recognised that ENGO A does not have a monthly newsletter but only one every three months; therefore a comparison with Media A, Media B, and ENGO B's publications is deemed to be irrelevant.

Additionally, the results of the quantitative content analysis also exhibited a discernable fluctuation with regard to the number of environmental articles published yearly in Media A and Media B's newspapers and ENGO B's newsletters; the number published by ENGO A dropped steadily from 2012 to 2014. Contrary to the results of this study, Nik Norma (2007) found the number of environmental articles published by Media A and Media B did not fluctuate but have dropped since 1996, 2000 and 2004. Indeed, Nik Norma and my study's findings proved that the number of environmental articles published in Malaysian newspapers is fairly unpredictable (they can fluctuate or drop accordingly) and changes year by year.

In terms of the language used in environmental articles, it was found that ENGO B is the only organisation in this study that uses multiple languages (Malay and English) in reporting environmental articles in its newsletters, while the other organisations only use a single language, either English or Malay. Invariably, language preference is strongly associated with the target audience (Menegatti & Rubini, 2013). For example, Media B always prioritises the Malay community, especially the village dwellers and therefore, Malay is more appropriate in its newspaper in order to ensure that the Malay community is able to read it. This is unlike Media A, which aims to cater to urban readers, who often use English in their daily life so therefore, English is preferred by Media A's newspaper.

Furthermore, the analysis shows that straight (news) articles were the most often reported environmental articles by Media A, Media B and ENGO A; for ENGO B, most of the articles were features. This was predicted by previous researchers like Mariah, Raihanah & Md. Salleh (2004) in a similar study of Media A and Media B's newspapers that also discovered that most environmental news in both newspapers tended to be direct news coverage. In fact, it is quite

common to see media coverage of direct environmental news compared to other genres like features, advertorials or interviews. On the other hand, it is noteworthy that 90% of the environmental articles by Media A and Media B were placed within the middle pages of the newspapers. Less than 5% of the articles were on the front pages, which show that environmental articles are not prominent in Malaysian newspapers. This is similar to Nik Norma's (2007) results, where only 4–5% of the environmental news was placed on the front page. Other researchers like Mariah, Raihanah & Md. Salleh (2004) and Hamidah et al. (2012) found similar results. Nik Norma conducted her analysis on environmental news coverage of four selected Malaysian newspapers, including Media A and Media B in 2004; after 10 years, the same analysis was conducted by myself on Media A and Media B's newspapers for a three-year period. It is disappointing to note that after 10 years, the coverage of environmental news on the front page is still lacking. In this vein, it is legitimate to conclude that there is no significant improvement in terms of the prominence of environmental news articles in the Malaysian media and this is in harmony with the discussion in Chapter 9, particularly, regarding the claims by some interviewees about how the Malaysian media gives less priority to environmental issues compared to other issues like entertainment and politics. Hence, environmental issues are rarely seen on the front pages.

Additionally, it is crucial to note that most environmental articles by Media A, Media B and ENGO B were of medium length (around 6 to 15 paragraphs), while most environmental articles in ENGO A were short (less than five paragraphs). Without doubt, short and precise articles are not necessarily bad, as the chances of reading the whole text is higher. As claimed by Knox (2007), readers usually need a short time scale (a few seconds or minutes) for short texts. Moreover, as expected, most environmental articles written either in Malaysian newspapers or ENGOs' newsletters were about local stories, consistent with the findings by Mariah, Raihanah & Md. Salleh (2004) and Nik Norma's (2007) that the Malaysian media have more coverage of local environmental issues. As expected, the analysis also shows that the journalists or ENGO staff members were the people who wrote and prepared most of the environmental articles in Malaysian newspapers and ENGOs' newsletters. I also conducted a chi-square

test to explore the different types of environmental information represented by Media A, Media B, ENGO A and ENGO B. The results of the chi-square test revealed that there is a significant difference between all four organisations' environmental information representations, influenced by the organisation's background and direction for environmental communication.

Besides a discussion of the general characteristics of the environmental information represented in Media A and Media B's newspapers, and ENGO A and ENGO B's newsletters that was retrieved from the results of the quantitative content analysis, I also sought to discuss the results of the qualitative interviews, along with a cross-check with the results of the quantitative content analysis. In brief, the results of the qualitative interviews identified four major themes regarding the types of environmental information represented by the Malaysian media and ENGOs in the newspapers and newsletters, encompassing environmental efforts, environmental problems, the least covered topics, and the factors that contributed to the selection of environmental information for publication in Malaysian newspapers and ENGOs' newsletters. As a whole, the results of the qualitative analysis revealed that the Malaysian media gave more coverage to environmental problems such as deforestation and pollution, instead of environmental efforts like environmental conservation and education. This was confirmed by the editor of Media B, EJ8: "Most of us [media] give attention to the negative impact on the environment..." However, this is not a surprise, as some media interviewees and ENGO interviewees also mentioned this phenomenon in Chapter 9 earlier, particularly about the Malaysian media's 'bad news is good news' culture that has impacted the tendency of Malaysian media to pick environmental problems over environmental efforts. In fact, the qualitative interview results are in harmony with the results of the quantitative content analysis, where, proportionally, more than 50% of 64 environmental topics represented in both Media A and Media B newspapers were about environmental problems.

In brief, it is widely accepted that the media in general have paid more attention to the coverage of environmental problems, as these are more dramatic compared to environmental effort, which is often a little dry and less attention-

grabbing. Past scholars like Barua (2010), in his analysis of selected Indian and international newspapers, discovered that the terms ‘human–elephant conflict’ or ‘man–elephant conflict’ were less common headlines in international newspapers compared to regional newspapers. Barua added that headlines such as ‘Wild, drunken elephants rampage’, which was more dramatic, had more international coverage. Indeed, journalists are sometimes stuck in the conflict between the role of serving society environmental information that is heavy and less interesting like climate change, and pursuing a story that is snappy and has an eye-catching headline (Gavin, Leonard-Milsom, & Montgomery, 2011). In fact, the public is also more attracted to dramatic information (Robinson & Levy, 1986) and the media, as profit-driven organisations, end up with more negative stories than positive ones (Faridah et al., 2011) in order to attract the readers (Leckner, 2012). Due to this dramatisation and sensationalism of the scientific information, the media have often received a lot of blame from other stakeholders (Bucchi & Mazzolini, 2003).

Likewise, several environmental problems have been stressed by some media interviewees as the topics that generally receive a lot of coverage in Media A and Media B’s newspapers, including environmental pollution and natural disaster. This is quite similar to the results of Craig’s (2008) survey of several New Zealand newspapers, which found that pollution was the topic that appeared most frequently after climate change. However, the results of the quantitative content analysis discovered a different trend, where pollution issues including air pollution, chemical pollution and water pollution did not appear frequently in both Media A and Media B’s newspapers. For example, within the three-year period of 2012 to 2014, only 11 (0.96%) environmental articles related to this topic were found in Media A’s newspapers and only two (0.34%) environmental articles associated with air pollution were found in Media B’s newspapers. This is in contrast to natural disaster issues, where the results of the quantitative content analysis and the qualitative interviews are in parallel and match each other. Most of the media interviewees revealed that natural disasters are the most common topics in their newspapers and the results of the content analysis showed that natural disasters, especially floods, are the most frequently reported in both Media A and Media B’s newspapers. This shows that some of the media interviewees

were aware of the representation of environmental information by the media they worked for.

Indeed, natural disasters, also known as sudden or unexpected events that cause loss of property and lives (Dorasamy et al., 2010; Wood & Wright, 2015), are the most popular environmental topics in Malaysian newspapers. A past study conducted by Hamidah et al. (2012) on Media A and Media B's newspapers in 2002, 2004 and 2006 yielded similar results to the present study: disasters are ranked number one among the environmental topics in both newspapers, with a quarter to one-third of all coverage. Interestingly, this does not only occur in Malaysia, but the coverage of natural disasters, especially floods, is also high in other countries. Yan & Bissell (2015), in their empirical research on the three most prominent newspapers in the US, found that between 2004 and 2014, floods were the most highly reported compared to other natural disasters like hurricanes, typhoons and earthquakes. Floods are the most common natural hazards in Malaysia and happen every year due to the increase in rainfall and the rising sea level (Aliagha et al., 2015). About 4.9 million Malaysians who live in flood-prone areas are affected (Mohit & Sellu, 2013; Wan Nur Tasnim, Nor Hidayati, & Mohammad Nazir, 2015), particularly on the east coast of Malaysia, which encompasses three states (Pahang, Terengganu and Kelantan), which are often badly hit by monsoon floods such as the recent 2014 floods (Tengku Siti Aisha et al., 2015). Therefore, it is not surprising to see that the Malaysian media give a lot of emphasis to floods in their newspapers, especially in reporting and updating information to the public who rely on them for the latest information (Fauziah et al., 2011).

Additionally, most of the ENGO interviewees mentioned the loss of biodiversity, including the loss of wildlife such as tapir, tiger, elephant, rhino and orangutan, which is widely discussed in their newsletters. This is consistent with the results of the quantitative content analysis of both ENGO A and ENGO B's newsletters, which found wildlife to be among the top three issues in both newsletters. This is because wildlife protection and conservation is part of ENGO A and ENGO B's mission. ENGO A, in its mission statement, clearly states that its aims are to stop natural degradation and to save the planet through

conservation activities. Meanwhile, ENGO B indicated its target of promoting the conservation of Malaysia's natural heritage. Thus, the loss of wildlife, especially flagship species like the tiger, orangutan, and rhino, always catch ENGO A and ENGO B's attention and are therefore discussed in their newsletters. The newsletter is an essential mechanism for the ENGOs to share information and to keep the readers, particularly their members, informed of their activities (Fernando, 1999; McKinney, 2015), which is quite similar to the function of newspapers as the medium of information. However, the ENGOs, unlike the media have more niche and specific environmental topics like wildlife, which is associated with their organisation's mission or vision, and also has a specific audience: their members, supporters and donors, not the masses.

Apart from that, there are also other environmental problems highlighted by both the media and ENGO interviewees as the most visible topics, either in the newspapers or ENGOs' newsletters. It was found that some media interviewees listed issues such as the nuclear power plant (Lynas), palm oil and dams as other environmental issues that often appear in the newspaper. However, the results of the quantitative content analysis of both Media A and Media B's newspapers showed that these issues were less covered, but other issues such as wildlife and water crises were among the top issues, besides natural disasters. In fact, both Media A and Media B also had much coverage of wildlife, which is a good sign that both ENGO A and ENGO B can seek more opportunity for coverage in both newspapers in future.

Meanwhile, the results of the interviews also revealed conservation as an environmental effort topic that is widely presented in newspapers and ENGOs' newsletters. Although the results of the quantitative analysis showed that conservation is not the most highlighted topic in Media A and Media B's newspapers, yet it is indeed one of the highly visible topics in ENGO A and ENGO B's newsletters, particularly the issues of marine protection and conservation. In fact, the coverage of conservation by Media A and Media B is considered to be average, encompassing topics like land conservation, water conservation, marine protection and conservation. Along this line, it is hoped that the Malaysian media will contemplate increasing the coverage of conservation, as

the media is the main channel for catching the attention of stakeholders like decision makers, interest groups, and society about the importance of environmental conservation (Barua, 2010). Media coverage of conservation, particularly conservation activities done by the ENGOS, indirectly helps society to know the ENGOS better, such as their leaders, what they do and want, and how they can change society (Andrews & Caren, 2010).

On the other hand, a comparison of the results of the quantitative content analysis among the Malaysian newspapers and ENGOS' newsletters clearly showed that ENGOS have more representation of environmental effort topics than environmental problems. Two of the most visible environmental effort topics in ENGO A's newsletters were sustainable living and marine protection and conservation, while the most frequent topics in ENGO B's newsletter were sustainable living and eco-tourism. Only Media A had one environmental effort topic (environmental management) as one of their most frequent topics, besides wildlife and floods. In fact, the top three environmental topics in Media B were environmental problems, including flood, wildlife and water crises. Importantly, from this outcome, it is legitimate to conclude that although both the Malaysian media and ENGOS shared a similar aim to inform and educate society about the environment, the types of environmental information represented by them were distinctive, as the media are more inclined towards environmental problems while the ENGOS have more interest in environmental effort topics.

Furthermore, the results of the qualitative interview also showed that the Malaysian media have given the least attention to heavy and complex environmental topics. EJ6 from Media A shared that topics like policy analysis, global warming, environmental economics and organic farming were the least presented in their newspapers. EJ9 from Media B added that the Malaysian media favour lighter environmental topics. Interestingly, these claims made by EJ6 and EJ9 were in line with the results of the quantitative content analysis of both Malaysian media newspapers, which found that heavy and complex environmental issues have less coverage. For example, in the three years of data collection, there was only one article on this topic in Media A's newspaper and none in Media B's newspaper. Less than eight articles about environmental

policies and laws were found in both Media A and B's newspapers. The interview data revealed the two main reasons for the low Malaysian media coverage of heavy environmental issues. According to some media interviewees, the first factor is that the top management (CEOs) prefer lighter material for publication in specific sections that are meant to entertain the readers. The second factor is that the media are also concerned about readers' low environmental knowledge. Therefore, it is better not to highlight too many heavy environmental topics to avoid the readers ignoring them. This certainly correlates with the discussion of the barriers in environmental communication in Chapter 9, particularly the struggle faced by the media and ENGOs in dealing with certain heavy and complex environmental issues such as climate change and global warming and, most importantly, the process of translating complex environmental information to a readable story that can be comprehend by all segments of society. In fact, Malaysian society lack environmental knowledge and it seems why the media neglect heavy and complex environmental topics and focus more on easier environmental topics like floods.

Moreover, the results of the qualitative interview also revealed that there are several essential factors that influence the selection of environmental topics for publication in the newspapers and ENGOs' newsletters. For most of the media interviewees, news values is the most important factor used to determine whether an environmental topic is suitable for publication or not, just like other stories, such as politics and economics. It is almost impossible for newspapers to place all the stories or events that happen every day in one newspaper that has limited available space (Chang et al., 2012; Schäfer, Ivanova, & Schmidt, 2014); thus news values (also known as newsworthiness or news criteria) are used by journalists or editors as a criteria or principles for deciding which stories are worthy of publication (Bednarek & Caple, 2014) and which events should be excluded (O'Neill & Harcup, 2009). Some media interviewees (EJ4, EJ5 and EJ11) confirmed that they definitely would pick up stories that have "high news value". News values are often associated with media and journalism but this study discovered news values are used by the ENGOs as well when selecting which environmental issues to insert or ignore for their newsletters. It was found that

four values (namely, timeliness, impact, proximity and human interest) are used as the criteria for selecting environmental information.

Among these four news values, timeliness is the most discussed by the majority of the interviewees. Quite simply, timeliness refers to the relevance of certain issues or events based on time: whether it has occurred recently, is still ongoing or is upcoming (Caple & Bednarek, 2015). In line with Caple & Bednarek's explanation of timeliness, some media and ENGO interviewees in this study used words like 'current' (ID EJ2, EJ9, EJ10), 'new' (ID EJ2), 'latest' (ID EJ11, EN10), 'recent' (ID EN3) to explain the importance of choosing environmental information that is timely for their publications. For instance, EN6 from ENGO A cited the example of World Sea Turtle Day event that was reported in their newsletters, so that their members could take note of what was happening at that particular event. This finding is also consistent with past researchers like Jauhariatul & Jamilah (2011), who found that one of the criteria used by some Malaysian ENGOs for selecting the environmental topics to be communicated on their official Facebook page was finding a current environmental topic which is easy to discuss. In fact, the results of the quantitative content analysis of newspapers also showed some current environmental issues such as the rare earth nuclear plant (Lynas) issue happening in 2012 in Malaysia also received vast coverage in both Media A and Media B's newspapers.

Besides timeliness, the impact of environmental stories, particularly the significance of certain issues or events based on the consequences or effects (Caple & Bednarek, 2015), whether they are big or serious or whether they need more attention for the government or public are other factors used by the media and ENGOs to consider topics for publication. EJ5 and EJ7 cited the example of the death of pygmy elephants and people dying due to river pollution as environmental issues with high impact news value that were selected for coverage. On one hand, spatial proximity, generally understood as the distance of events or issues from the audience (Bendix & Liebler, 1999; Jorge, 2008), was a vital value that was used by both the Malaysian media and ENGOs in selecting the environmental issues for publication. Proximity is often associated with local events or issues that happen near the audience (Johnstone & Mando, 2015), which

make the audiences close and part of the stories. Some interviewees (EJ3 and EJ4 from Media A) gave the example of how certain environmental issues like droughts were definitely selected for publication as they were common environmental problems affecting Malaysians. Indeed, environmental problems that are rarely experienced by Malaysians, such as heavy snow in Europe or tsunamis in India, would not often be picked up by the media or even ENGOs for their publications, as these have a low news value. This is proven by the results of the quantitative content analysis, where more than 60% of the environmental stories in Malaysian newspapers and more than 90% of environmental stories in Malaysian ENGOs' newsletters were local environmental issues compared to Asian, Western and African environmental issues. Lastly, only some media interviewees described human interest as another criterion for selecting environmental issues. Most media interviewees mentioned human interest in environmental stories that affect public life, such as the impact of oil spills on fishermen and the public living near coastal areas.

Besides the value of environmental information, it appears that the readers' journalists' or editors' interests can also influence the process of selecting environmental information for publication. Some interviewees revealed the need to match the readers' interest in certain environmental issues, as they are the ones who are going to read the newspapers or newsletters. Unlike the ENGOs (which operate as non-profit organisations), the media, as business organisations, are driven to generate profits. Thus they need to be careful of the readership and circulation of their newspapers. EJ7, who is the chief editor of Media B, explained that the media cannot be self-indulgent but must write issues that cater to the readers' interests or else the circulation will drop and even could lead to the risk of bankruptcy. The discussion about whether the media really cares for the readers' wants is still questionable. Scholars like Hardin (2005) discovered that in reality, many editors in his study still failed to discover what their readers' interests were and they are more likely to make hegemonic decisions as gatekeepers. A classic study conducted by Flegel & Chaffee (1971) ascertained that most of the journalists in their study were directed by their own opinions but the readers' views actually had less influence on them. These findings were in line with the claims made by some media interviewees in this study about how editors'

and journalists' interests also contributed to the selection of environmental issues, based on the personal preference of the journalists or editors as to which environmental issues they favour or are interested in for their publications. However some interviewees, like EJ6 from Media B, admitted that the selection of environmental issues according to personal taste is perhaps not good journalistic practice; although it is rampant in the real journalism world, it is rarely discussed in journalism studies.

As a final remark, the qualitative interviews also suggest that the background of the media and ENGOs could be another factor contributing to the selection of certain environmental topics for publication. Most Media B interviewees revealed that their news organisation's background focused on four national agenda: Islam, the King, Malay and the Malaysian constitution. These, in turn, have to an extent influenced the types of environmental issues presented in their newspapers. As a rule of thumb, the environmental issues associated with these four national agenda will be given priority for coverage, such as the Lynas and sturgeon fish issues, which are associated with the interests of the community, particularly the majority Malay, who live near the projects. On a similar note, ENGO A and ENGO B's interviewees also shared that their respective organisations' vision and mission as well as their championed issues also influenced the type of environmental issues portrayed in their newsletters. This is proven by the results of the quantitative content analysis of both ENGO A and ENGO B's newsletters. It was found that the topic of wildlife was one of the most widely covered topics in both ENGOs' newsletters. This is in line with one of the organisations' vision and mission in protecting and conserving wildlife, such as the rhino, elephant, and tiger, from extinction. Both ENGOs A and B also delivered more information regarding sustainable living, which was also in line with their mission to achieve a better planet. Consistent with the results of this study, Jauhariatul & Jamilah (2011) also discovered that ENGO B and other ENGOs like the Socio-Economic and Environmental Research Institute also prefer to communicate environmental messages that are associated with their organisation's mission and vision via Facebook. The summary of this chapter will be presented in the next section.

10.3 Summary

In brief, this chapter has discussed the fourth and the final research question of this study: *What are the types of environmental information represented by Malaysian media and ENGOs in environmental communication?* It is important to note that the findings of this study have filled a gap in the literature, particularly on the lack of research relating to the representation of environmental information in ENGOs' newsletters, especially among Malaysian and Asian ENGOs. To date, there are few studies in this area. Hence, the results of this study are able to provide clear insights into the characteristics of the environmental information represented by the Malaysian ENGOs in their newsletters, along with current updates of Malaysian media's representation of environmental information in their newspapers.

There are several interesting new key findings revealed in the present study. Firstly, the analysis found that both the media and the ENGOs used the same (news) values (timeliness, proximity and impact) as the key criteria in the selection of environmental information for publication. There are also other relevant factors that influence the selection of environmental information for publication. These are rarely discussed by previous researchers, such as the background of organisation and the interests of journalists or editors. Secondly, another striking finding from this study is about the progress of environmental news reporting among the media in Malaysia. Undoubtedly, the Malaysian media have not made much progress in their environmental news reporting practices and are still tied to the tradition of bad news as good news. Environmental topics are not given due prominence. In terms of the number of environmental articles, which were highlighted in the front page, less than 5% of all environmental articles in this study received coverage on the front page. After a gap of about 10 years from a similar study conducted in 2007 by Nik Norma, the fact remains that environmental news is not widely reported on the front page of Malaysian newspapers.

Thirdly, in terms of the types of environmental information, this study also showed that the ENGOs present more environmental effort issues in their

newsletters than the media, which mainly focus on highlighting more environmental problems in their newspapers. This proves that although both organisations are involved in environmental communication, yet the background of the organisation strongly influences the type of environmental information represented. ENGOs, as non-profit organisations, displayed more effort towards educating the public on environmental messages, which are more positive, such as sustainable living and eco-tourism. On the other hand, the media are focused on profits; thus, they seek environmental problems, which are more dramatic and are highly sensational. However, this does not mean that the media have no responsibility towards educating the public on the environment. It is hoped that the Malaysian media will consider changing their coverage, especially by providing a balance between the representation of environmental problems and environmental efforts. Indeed, the coverage of environmental effort topics such as conservation and sustainable living are undeniably important for public consumption, as they help to inform and educate the public about these issues so they become more environmentally aware in the future. The overall findings on the representation of environmental topics by the Malaysian media and ENGOs are presented in Figure 10.9 below. Similar to Chapters 7, 8, and 9, I have used three different colours: green to indicate the ENGOs, red to indicate the media and white for both the ENGOs and the media to show the similar and different themes between the Malaysian media and ENGOs. The conclusion of this study will be presented in the next chapter.

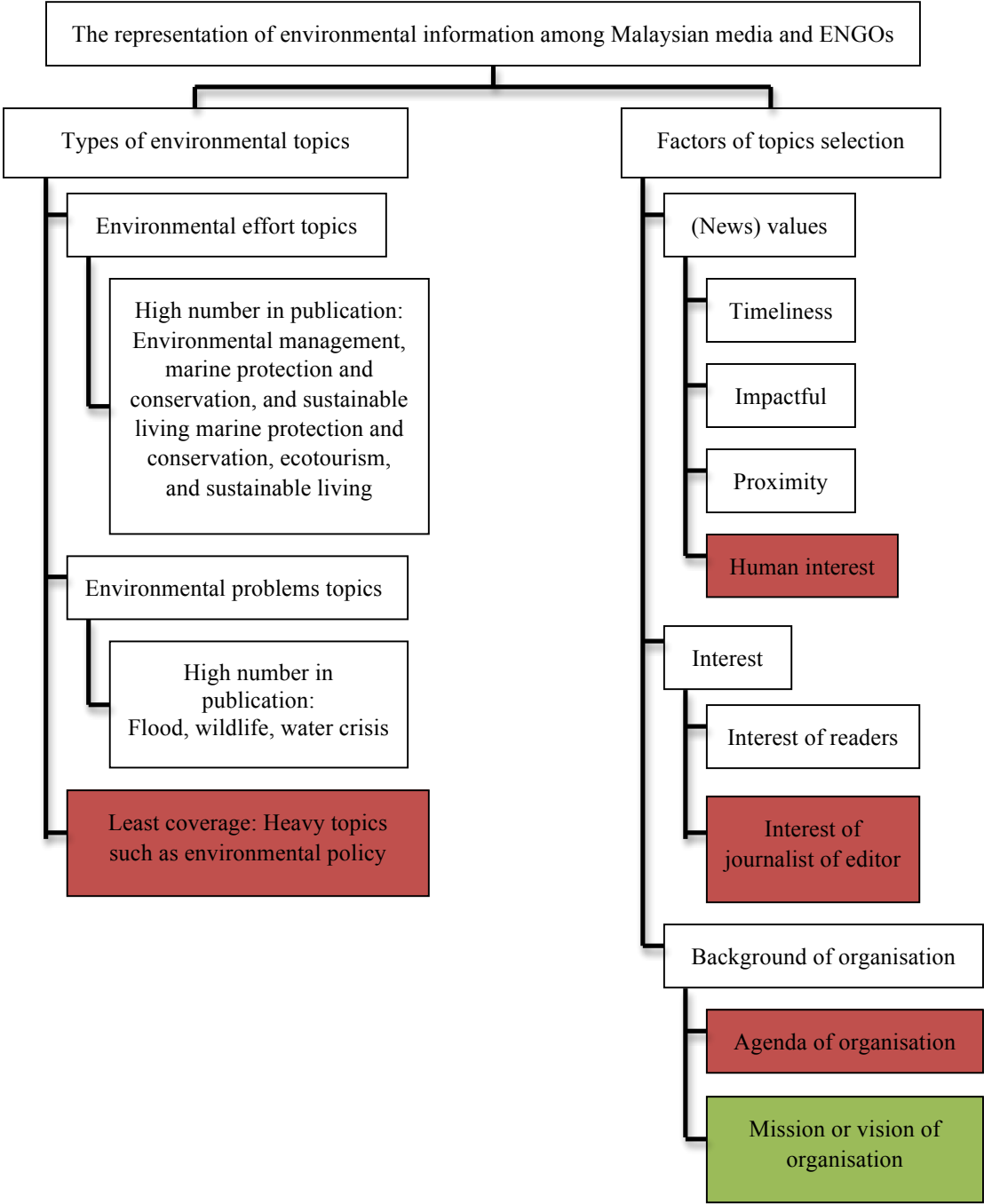


Figure 10.9: Summary of all themes and sub-themes of representation of environmental information among the Malaysian media and ENGOS

CHAPTER 11

CONCLUSION

11.1 Introduction

The ultimate aspiration of this study is to answer four main research questions regarding to the roles played by the Malaysian media and the ENGOs in environmental communication, the strategies they have taken, the barriers they face throughout the environmental communication process and the types of environmental information they have represented in their reports in newspapers and newsletters. All these research questions had been discussed in the previous chapters. Consequently, this chapter will summarise the key empirical findings and present a discussion about the contributions, implications and limitations of this study for the consideration of future researchers.

11.2 Summary of Key Empirical Findings

In brief, it can be observed that both the Malaysian media and ENGOs have played an important role in environmental communication in Malaysia. It is interesting to find that there are similarities between the roles of the media and the ENGOs in environmental communication, particularly the roles in environmental legitimacy, predominantly in creating trusts and relationships with the Malaysian public as well as sustaining their credibility in Malaysian society. This study has discovered a new finding, where the use of the legitimacy theory, which is a theory that is rarely applied to research on the media and ENGOs, actually discovered that the media, just like other for-profit organisations, have perceived legitimatisation in the eyes of society to be one of the most crucial aspects for the organisation. As a matter of fact, the benefits of communicating environmental messages have made both social actors to be perceived as ‘good’ and ‘proper’ organisations in the public’s eyes. Therefore, it is crucial for the Malaysian media and the ENGOs to maintain this legitimacy, as well as to close the legitimacy gap. For instance, the ENGOs need to be transparent about the funding they have received so that the public, particularly their members and donors, will always be

aware of how the funds are being managed and keep on trusting on the ENGOs. On the other hand, issues of illegitimacy have occurred, not because of improper actions such as dishonesty or corruption, but because the environment is an issue that is less prioritised by Malaysian society compared to other topics such as politics and consumerism.

Moreover, within the sphere of a democratic society, both the Malaysian media and the ENGOs shared a common understanding of their pivotal roles as watchdogs or ‘eyes and ears’ of society in ensuring the government’s integrity in handling environmental matters in Malaysia; for instance, the Malaysian media make regular use of the column sections in the newspapers to express their disagreement towards any wrongdoing conducted by the Malaysian government or other stakeholders without exposing their identity. Apart from that, both Malaysian media and ENGOs also agreed about their vital roles in mobilising the public sphere on environmental issues. As a result, both the Malaysian media and ENGOs have provided a platform for the public to discuss environmental problems such as the water crisis, the Lynas nuclear plant project and many more similar issues. Additionally, both the Malaysian media and ENGOs have played crucial roles in protesting against harmful environmental projects planned by the government or other stakeholders. However, it is interesting to discover that unlike their counterparts in the Western world, which are more aggressive in conducting protest rallies, both of these Malaysian social actors have preferred more ‘gentle’ ways to protest, such as petitions and writing environmental news articles. Perhaps both the media and ENGOs try to adhere to the local culture, which is more gentle and courteous. In the meantime, both Malaysian media and ENGOs have recognised themselves as ‘powerful’ groups in the country, as most of the environmental issues picked up by them succeed in grabbing the attention of the government and other stakeholders. As a matter of fact, the ENGOs are often invited by Malaysian government agencies to provide and share their ideas and suggestions in the development of environmental policy and laws in Malaysia.

On the other hand, one of most striking findings regarding the roles of the Malaysian media and ENGOs in democracy is the problem of the freedom to

write about or communicate environmental information and messages. Based on the responses, although some media interviewees have revealed that they have enjoyed some degree of freedom in environmental communication, some of the other interviewees are concerned that the Malaysian media have less freedom to retrieve certain environmental information, which might be considered as classified and labelled as 'secret' or 'restricted'. This is especially true for environmental issues linked to the government's controversial projects. Just like other countries around the globe, it is time for Malaysia to consider in having its own Freedom of Information laws to protect the rights of the Malaysian media and ENGOs to obtain environmental information in the future. On the contrary, although environmental issues are often to be factual and less controversial than political issues, the media still have to pay attention to how environmental issues associated with the government are being written. In other words, the media need to change their writing style to be less critical in order to avoid the article being banned from being published on the newspapers. For example, the media would use phrases such as 'the government could reconsider this project,' instead of saying 'this project is harmful and therefore the government should stop it.' Some of the ENGOs mentioned that they are concerned about their freedom as environmental communicators. It was mentioned that the ENGO communicators are usually expected to play cliché roles like writing press releases and do not they enjoy a similar degree of freedom to parties who play more outstanding roles, such as lobbyists. Hence, without a doubt, the restrictions faced by both the Malaysian media and ENGOs in environmental communication are in contrast to Habermas' democracy theory, in which it was stated that the media and NGOs should operate freely without any control.

Likewise, the Malaysian media and ENGOs also admitted that they are vital actors in shaping the public mind about environmental problems, which occur locally or globally. It is interesting to discover that among all of the tools used, pictures were labelled as the most important tool used in the process of shaping the public mind about the reality of environmental matters. This is because upon seeing the pictures accompanying environmental articles, readers will gain more trust of the environmental information delivered to them. Besides that, most importantly, pictures are powerful tools, as they present the visual

reality of environmental problems to the public. By seeing the severity of environmental problems, such as the sea turning black due to pollution in pictures, the readers will have more awareness and be willing to take an action to save the environment from destruction. The results of the contents of Malaysian media newspapers and ENGOs' newsletters also underscored both social actors' wide use of pictures in their environmental articles (more than 60%), such as ENGO B, which demonstrated a high use of cartoons and sketches compared with other social actors, which used more conventional pictures. Alongside pictures, words also play a crucial role in the process of social constructions of reality. The use of simple but strong words such as 'dangerous', 'destroy' and 'as little as' are pivotal in environmental articles to ensure that the readers understand the severity of environmental problems. In fact, this study discovered that words and pictures are very important in environmental communication, as they can arouse the feelings and emotions of the readers. Consequently, ENGOs have used more creative tools for social constructions of reality compared to the media. For example, realising that Malaysians are interested in entertainment, ENGO A had created a special turtle conservation song sung by a famous Malaysian singer, Asmidar, in order to catch the attention of the Malaysian public.

Meanwhile, in terms of the strategies used in environmental communication, the ENGOs seemed to have two more strategies than the media, namely lobbying and advocacy, while both social actors campaign and collaborate with other stakeholders. It is also noteworthy to indicate that unlike Western or some other Asian ENGOs, Malaysian ENGOs are not involved with grassroots lobbying or influencing policy by empowering the citizens; they are only involved with direct lobbying, which refers to influencing environmental policy through consultation with the policy makers, such as the successful lobbying of the Malaysian government to protect the Belum forest. Undoubtedly, lobbying is a not easy strategy for the ENGOs, as it is usually very time-consuming and involves many bureaucratic processes, especially when they need to deal with the policy makers. Another interesting yet unexpected finding is that, similar to the ENGOs, the media (particularly Media A) have also organised their own environmental campaign like the Green Day Campaign, which involved the public. In the meantime, for the ENGOs, the objective of their environmental

campaigns is not only to educate the public about environmental issues but also as a platform for collecting funding.

In terms of collaborating with other stakeholders, both the media and NGOs have different preferences as to the types of stakeholders they collaborate with. The NGOs, in particular, prefer to collaborate with various stakeholders such as corporate companies, as these companies provide the funds for their environmental projects as well as universities, which are hubs for research and information. Meanwhile, the media prefer to collaborate with the NGOs, as the NGOs are the most reliable sources for environmental information. The collaboration between the media and NGOs in environmental communication is good and it indicates a symbiotic relationship between these two, as the NGOs need the media as the channel for delivering environmental information to the public, whereas the media need the NGOs as the sources for environmental information. However, the current level of collaboration between media and NGOs in environmental communication is still at the medium (coordination) level. This is because both of them have different aspirations, particularly the NGOs, which are non-profit organisations, while the media need to gain a profit. On the other hand, it is a new discovery that not only the media but also the NGOs relied on sources as one of their strategies for environmental communication. These sources not only provide environmental information but have also been quoted in their environmental articles. On the other hand, unlike the media, which prefer external sources, the NGOs prefer to use internal sources such as their own team of scientists and researchers or member of their senior management. In this regard, in reality, based on the analysis on the contents of newspapers and the NGOs' newsletters, the media have mostly quoted government agencies as their sources, while the NGOs have mostly quoted other NGOs and laypeople as their sources. Most importantly, this study also discovered a new result regarding the factors of source selection, which is the relevancy of the sources to the environmental issues besides the other factors proposed by Gans (1980) like past suitability, productivity, reliability, trustworthiness and authoritativeness.

Nevertheless, there are massive barriers faced by both the Malaysian media and ENGOS in the process of environmental communication. It is worth noting that some of these barriers are faced only by the Malaysian media, like the barrier of not having a specific desk for environmental reporting, the barrier of media ownership, the problem of the newsroom culture of 'bad news is good news', and a few others. On the other hand, there are also certain barriers that are only encountered by the ENGOS, like the problem of having limited funding for environmental projects and the problem with the organisation's orientation, which is more passive compared to Western ENGOS. At the same time, it is novel to find that both the media and ENGOS share many similar barriers in environmental communication like the barrier of dealing with complex and heavy environmental information in issues such as global warming or climate change, the barrier of the lack of environmental knowledge due their staff having no environmental or science backgrounds, the negative impact of self-censorship and others. Most importantly, even when some barriers are only faced by the media, they will affect the ENGOS, as these social actors are interrelated with each other in the sphere called environmental communication. For example, the low priority given by the Malaysian media to environmental topics compared to other topics like politics has caused the level of coverage or the visibility of environmental issues in newspapers to be rather low. This has indirectly affected the ENGOS, as they need space in newspapers to publish some of their environmental articles.

Interestingly, among all of the barriers discussed by both the media and ENGO interviewees, the source barrier is a barrier rarely discussed by past scholars and this is a new discovery that needs to be highlighted in environmental communication studies. As mentioned before, sources are the vital people who provide environmental information to the media and ENGOS, and are often quoted by these social actors in their environmental articles. However, some sources, like academics, scientists and government officers, sometimes create problems for both the media and ENGOS. The most common problem is associated with their attitude problems like arrogance, being too defensive, dishonesty, having a hidden agenda, purposely delaying their responses, as well being very uncooperative, especially when the media approaches them for an interview or when the ENGOS ask for some important data for their research and publications. Furthermore,

some sources like government officers lack knowledge of environment issues, especially related to complex issues like climate change while some other sources like laypeople lack communication skills and therefore find it hard to describe and explain environmental problems to the media. All of these source barriers obviously affected the media and ENGOS' environmental communication work, especially because the media rely heavily on sources for their environmental news articles.

On the other hand, although the Malaysian media and ENGOS share some similarities in their roles, strategies and barriers in environmental communication, their ways of representing environmental information in newspapers and newsletters are slightly different. The ENGOS, for example, have given more attention to environmental effort topics like sustainable living, eco-tourism and conservation as the main topics published in their newsletters while the media are expected to provide more coverage of environmental problems like floods and water crises. Inherently, the reason behind the different focuses on environmental issues between the media and ENGOS are because the media, as profit-making organisations, strive to cover more controversial and dramatic environmental problems to attract readers while the ENGOS represent the environmental issues associated with their organisation's vision and mission, specifically to educate the public about the environment. Interestingly, this study found that the media and the ENGOS also shared certain similar criteria for selecting environmental issues for their newsletters especially the news values of proximity, timeliness and impact. Furthermore, other factors such as the background of the organisation and the interests of the journalists and editors have also influenced the selection of certain environmental issues over others.

Although both social actors seem to share quite a lot of similar roles, strategies and barriers in environmental communication, this is in contrast with the basic concept of social theory, where individuals usually act according to the institution or social system they belong to. Although both social actors have faced colossal barriers in environmental communication, most of them have taken these barriers in positive ways, especially with the support of the members and leaders of their organisations and are always positive in their work. Meanwhile, it would

be good for the Malaysian media to balance the coverage of environmental problems and environmental effort topics so they can help to educate Malaysian society about other issues like conservation. The failure to change the majority of Malaysians' mindset about the importance of the environment will hinder the development of environmental communication in Malaysia and it will progress far behind other countries, especially the West.

As a whole, it is safe to say that the environmental communication among the Malaysian media and NGOs in Malaysia is like a roller coaster ride where there are ups and downs during the ride (massive of good things and challenges during the process of environmental communication) before it stop at the final destination (delivering the environmental information). Based on all of the pivotal key empirical findings, I have come up with a proposed theoretical framework for environmental communication by the Malaysian media and NGOs in Malaysia, as displayed in Figure 11.1. It is worth noting that the different colours used in this theoretical framework have different meanings. Red signifies the new aspects discovered from the results of the qualitative interview and the quantitative content analysis, and these aspects have been added to the original proposed theoretical framework of this study (presented in Chapter 5). Meanwhile, yellow represents the aspects that are parts of the previous theoretical framework and blue indicates the information that is excluded in this study. Additionally, as can be observed from theoretical framework below, it is safe to conclude that environmental communication by the media and NGOs involves a long linear process which runs from the sources who provided the environmental information to the sender (media and NGOs) and end up in the public sphere, which I have named the 'ecology of environmental communication'. However, as mentioned at the beginning of study, this research only explored the domain of environmental information represented in newspapers and NGOs' newsletters, and does not touch on the public sphere. The explanation of the contributions and implications of this study will be offered in the next section.

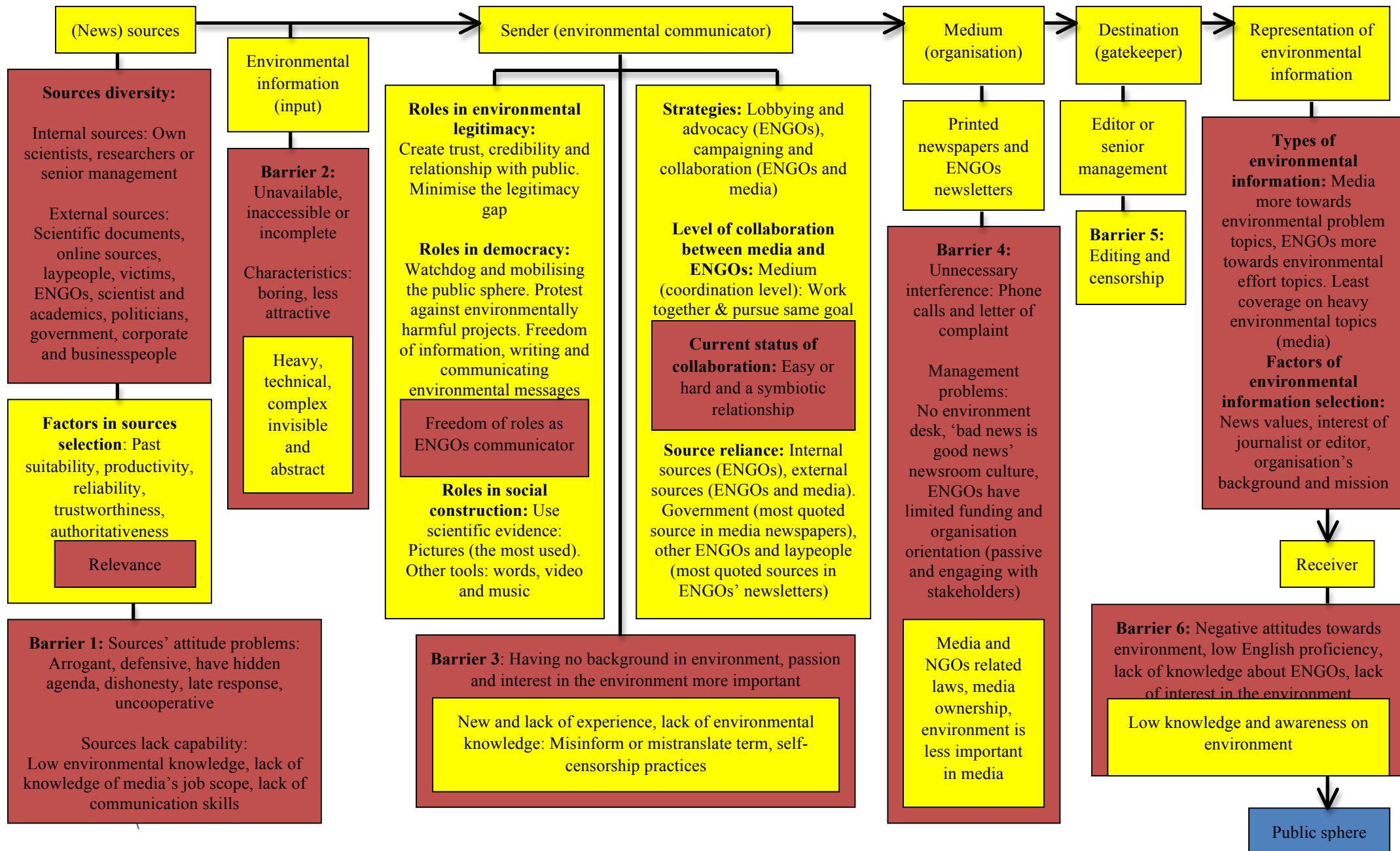


Figure 11.1: Theoretical framework of environmental communication among the media and ENGOS in Malaysia

11.3 Contributions and Implications

In general, this study has made two contributions, particularly in providing new theoretical and practical insights into the study of environmental communication in Malaysia. From the theoretical lens, this study is able to demonstrate the relevance of general communication theories, models or frameworks to environmental communication studies. As noted, multiple (meta-) theories, models, and frameworks particularly Shannon's (1948) communication process model, the Ventriloquist Model, legitimacy theory, Habermas' democracy theory, Hannigan's (2006) social construction theory, Phillips' (2005) funnel framework, Horwath & Morrison's (2007) levels of collaboration model, and Eisenberg's (2010) barriers of communication model, were applied and combined into the theoretical framework of this study. Consequently, even though Cox's (2013) environmental communication theory purely focused on environmental communication study, this study as a whole has shown that all these communication theories, models and frameworks are applicable to environmental communication studies related to the social actors like the media and ENGOS. Undoubtedly, based on the results of this study, there are several additional insights that can be added to these past theories, models or frameworks, as thoroughly discussed in Chapter 7 to Chapter 10 and as presented in Figure 11.1. Therefore, future researchers can adapt the proposed theoretical framework of this study, whether as a whole or partially; for instance, analysing the roles of the media and ENGOS in environmental communication.

Additionally, this study also demonstrates that not all Western theories, models or frameworks can perfectly fit into (Southeast) Asian countries, particularly Malaysia, due to the strong differences in their political, economical and social backgrounds. For instance, Habermas' ultimate Democracy Theory, which emphasises on freedom of media and NGOs, does not fit into the Malaysia context, where the media are still strictly controlled by the ownership system and certain media laws that indirectly impact the ENGOS, who are highly dependent on the media as the channel of environmental communication. In the meantime, this creates a small conflict as to the relevance of the control on media freedom, as some believe that the control on media is pivotal to ensure that the media do not

go beyond the limits and threaten the racial harmony in Malaysia, as has already occurred in neighbouring countries such as Indonesia and the Philippines. Thus, there is always a conflict between the questions of **“To what extent should the Malaysian media gain their freedom?”** and **“Are they ready for the absolute freedom like the West?”** and even **“Does absolute freedom as described by Habermas really exist in this world or this is just a myth?”** Considering that all the unique conditions of Malaysia, which is different from Western countries, particularly the fact that Malaysia itself is not really a fully democratic country, but a country which practises semi-democracy, perhaps it is important for Malaysia to have its own version of a semi-democracy theory that suits the local context.

On other side of the coin, from the practical standpoint, this study also provides a practical guide for the development of environmental communication by the media and the ENGOs in Malaysia. Firstly, it is very obvious that the Malaysian government, as the policy makers, rank at the top of the hierarchy of environmental communication in Malaysia. Therefore, it would be good if the government can give more encouragement for environmental communication in Malaysia, particularly in giving more space and freedom to the media and ENGOs to freely communicate about environmental issues so that both of these social actors can play their roles as watchdogs, not only for the government but also to other stakeholders without bias or hesitation. Moreover, by realising that the level of environmental knowledge, awareness and practices among Malaysians is still low, it would be good if the Malaysian government can possibly strengthen environmental education in Malaysia. For instance, even today, there are still no specific subjects on the environment taught in local schools and environmental knowledge is always taught within other subject such as science and geography. In this regard, the mentality and mindset of the society can be changed through proper environmental education.

Furthermore, the media and ENGOs should play more roles in the development of environmental communication in Malaysia. Media, for example, could consider having specific environmental desks for environmental news reporting. Again, the environment should be the priority of the Malaysian media

and, at the same time, they should give more space for environmental issues. Meanwhile, for ENGOs, it is always best if they engage closely with other stakeholders like government agencies, but this should not be the reason for their passiveness; the ENGOs should be proactive in communicating environmental messages to society. Most importantly, the environmental communicators in ENGOs should also be given more chances to expand their roles into areas such as lobbying, instead of just writing press releases or newsletters. In fact, considering that both the media and ENGO practitioners showed a lack of knowledge of environmental issues, both the media and ENGOs should consider organising more workshops or training sessions for their staff in the future.

Furthermore, environmental communicators, in particularly the media and ENGOs, should also be aware of certain problems such as the lack of knowledge of the environment. Thus, as the transmitters of environmental communication, all media and ENGOs should be a well equipped with vast amount of knowledge of the environment to avoid misinformation or mistranslation of environmental terms. In other words, someone with a lack of environmental knowledge cannot be a good environmental communicator who can educate the society about the environment. Most importantly, other bad practices such as self-censorship should be avoided by both the media and ENGOs, and they should be always transparent with their environmental information, as the public has the right to receive legitimate and reliable information.

Apparently, other stakeholders such as corporate companies can also contribute to the development of environmental communication in Malaysia, particularly by deciding future funding allocations given to the Malaysian ENGOs. As often repeated in this study, Malaysian ENGOs face serious financial problems, as they have limited funding to proceed with certain projects such as conservation; therefore, it would be good if other stakeholders like corporate companies or even the government could support their financial needs for the sake of environmental protection. In fact, it is something new to discover that despite the ENGOs' extensive use of their newsletters as one of the pivotal tools in environmental communication, most of them have an inadequate budget to expand the newsletters to the next level, as illustrated by ENGO B, which aimed

to hire staff who were capable of producing a Malay version of their newsletters in order to cater to more readers, especially those who are not fluent in English, but has no budget for this. Concerning this problem, it would also be good if there is more funding from donors to support the publication of the ENGOS' newsletters. Furthermore, other stakeholders like academics, scientists and laypeople are undeniably vital sources of environmental information, especially for the media, and therefore, it will be better if they could cooperate with the media and ENGOS when these social actors approach them for environmental communication.

Finally, it is now time for Malaysian society as a whole to change their mindset, especially on the way they perceive environmental issues as being less important issues in their lives. Thus, parents at home for example, should start to educate children about the importance of protecting the environment, as the environment should not be the least important issue but part and parcel of life in Malaysia. Consequently, if people keep taking environmental issues as less important, the environmental communication efforts, especially by the Malaysian media and ENGOS, will be less efficient and less useful. Hence, cohesive support from all levels of society to the media and ENGOS will be very crucial to improve the quality of environmental communication in Malaysia in the near future. The explanation of the limitations and recommendations of this study will be presented in the next section.

11.4 Limitations and Recommendations

There are several limitations of this study that can be taken into account by future researchers. Firstly, this study only focused on the investigation of media and ENGOS in environmental communication in Malaysia and therefore, the results of this study are only limited to a comparison between the Malaysian media and ENGOS. Hence, it is recommended that future researchers consider expanding the geographical location for this study, such as between Malaysia and other Asian countries, which share quite similar media backgrounds and ENGOS' presence such as Indonesia, Singapore, Brunei and Thailand, as it will be interesting to explore the similarities and differences in the environmental communication of

(Southeast) Asian media and ENGOs. In fact, future researchers can also come up with an interesting framework for environmental communication among the media and ENGOs in the (Southeast) Asian region. Furthermore, would it also be interesting for future researchers to consider expanding the study to one between Malaysia and some Western countries like Germany, the UK or the US, so that the gap in environmental communications between developed and developing or emerging countries like Malaysia can be explored.

Secondly, this study's investigation was only limited to the environmental information available in the printed version of Malaysian newspapers and ENGOs' newsletters. Considering the power of social media and websites, especially in the rapid delivery of environmental information without geographical boundaries, it is suggested that future researchers conduct an analysis of environmental information on the social media sites of the Malaysian media and ENGOs such as on their Facebook or Twitter accounts as well as on their official websites. This is because although the functions of social media, websites and traditional media are clearly different, it is still interesting to analyse the differences, similarities or even the gap between the representations of environmental information on print, as represented by the results of this study with those on social media and websites.

Thirdly, this study only involved the media and ENGOs as the two most active environmental communicators in Malaysia as its main subject. However, based on the results of this study, I have discovered that other stakeholders such as scientists, government agencies and academics also have a significant role in environmental communication, particularly as the sources for environmental information. Therefore, it will be interesting for future researchers to study the roles, strategies and barriers of other stakeholders in environmental communication, and compare the results with this study. Inherently, each stakeholder is expected to have his/her own different roles, strategies and barriers. Just like this study, some of them might also share similar views, which would be vital for the development of environmental communication in Malaysia.

The comprehensive overview of this study, as seen in Figure 11.1 above (the theoretical framework) shows that this study has only explored the representation of environmental information in newspapers and ENGOs' newsletters. That said, future studies should proceed with next step by continuing the journey of this study to examine the public sphere on environment issues in Malaysia so that we can find out whether the environmental information represented by the media and ENGOs are parallel with the interests of the mass public.

Finally, as mentioned in chapter 6 earlier, the sequential mixed methods approach was adopted for this study where the semi-structured in-depth interview was the core method while the quantitative content analysis was the second method that serves to cross check the selected segment of the interview results. In all, this approach had effectively assisted in answering all the stated research questions and the sub-questions of this study. However, there were few limitations in term of the application of mixed methods approach in this study that need to be highlighted. First, qualitative interview requires data interpretation, whilst the quantitative content analysis is more emphasised on measurement, particularly on the usage of number and statistic. Thus, it is quite challenging for the researcher to make comparison between two different types of data and to triangulate them. Second, it is acknowledged that having two different methods also flooded the researcher with large amount data from both interview and quantitative content analysis. Therefore, it was a little bit challenging for the researcher to manage and selected the data that can be presented as the findings of this study. Third, the limitation in conducting mixed methods is related to the time-consumed, especially in the process of collecting and analysing two different types of data, including the interview and environmental articles from newspapers and ENGOs newsletters. This is in line with the claim made past researchers like Kwok (2012) and Williams & Shepherd (2015), which claimed that mixed methods approach can be a disadvantage as it requires more time compared to single method. Considering these three limitations of the mixed methods approach, it will be great for future researchers to comprehend both qualitative and quantitative methods, and most importantly pay a great attention on data and time management before they select this approach for the study.

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Appendix A
(Email for interview's request)

Dear XXX,

Thanks for your time reading this email.

My name is Mohamad Saifudin Bin Mohamad Saleh. I am a PhD student in Leuphana University of Lüneburg, Germany. I am funded by Universiti Sains Malaysia (USM) under the Academic Staff Training Scheme (ASSIST) and the Higher Ministry of Education, Malaysia.

My doctoral research is entitled “Environmental Communication among the Media and the Environmental Non-Governmental Organisations (ENGOS) in Malaysia: A Roller Coaster Ride?”

For the purpose of my doctoral research, I would like to conduct a face-to-face interview with journalists and ENGOS who are experience in writing environmental stories. The interview session will take up around 40 to 90 minutes.

During the interview, I would like to ask several questions regarding the roles, strategies and barriers in the process of environmental communication by the media and ENGOS.

Therefore, I would like to invite you to attend the interview session with me. I suggest conducting the interview on XXX. Please let me know whether you are available on this date or not. If not, you can suggest any preferred date within July to September 2014.

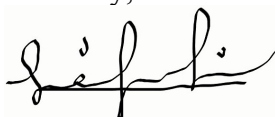
In addition, I have herewith attached my PhD supervisor's supporting letter for your kind perusal.

If you need any other information from me, please contact me without hesitation.

I am looking forward to hearing from you soon and I will be thankful for your fruitful feedback.

Thank you for your assistance.

Sincerely,



Mohamad Saifudin Bin Mohamad Saleh
PhD Student
Institute of Sustainability Governance (INSUGO),
Faculty of Sustainability,
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Tel: +49(0)15757503204

Appendix B
(Supervisor's supporting letter for
interview)



Leuphana Universität Lüneburg · Fakultät
Nachhaltigkeit · 21335 Lüneburg

Prof. Dr. Harald
Heinrichs

To whom it may concern

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11. Juni 2014

Support for data collection

To whom it may concern,

Hereby I confirm, that Mohamad Saifudin Bin Mohamad Saleh is doing his PhD at the Faculty for Sustainability, Leuphana University of Lüneburg. He is conducting a research entitled "Environmental communication among the media and the environmental NGOs in Malaysia" under my supervision. As part of our structured PhD-program, all students are required to collecting key data for the PhD dissertation. Thus, I hope you can give cooperation to my PhD student for his data collection and your cooperation will be highly appreciated.

If you have any questions about his research project or any related issues, please feel free to contact me.

Sincerely,

Yours


Harald Heinrichs



Leuphana Universität Lüneburg
Institut für Umweltkommunikation
Prof. Dr. Harald Heinrichs
Scharnhorststraße 1
21335 Lüneburg

Appendix C

(List of interview questions)

(For Media A and Media B)

Topics	Lists of questions	Additional questions	Theoretical models & concepts
1. Roles in environmental communication	1. Could you please describe your understanding of the role of environmental journalists?	Can you give example of the role of environmental journalists that you know?	General
	2. In your personal view, does environmental journalists' role differ from other journalists?	If yes / no, why?	General
	3. Who decide on what task you should do? Yourself or top management, like editor?	If editor, how they decide the roles? Is there any discussion about the roles?	General
	4. What role do you think the media has played in environmental communication?	Is the media role in environmental communication are more as an informers or educators?	Democracy Theory
	5. What do you think of the freedom of media in playing its role?	Why democracy is important to you?	Democracy Theory
	6. As an environmental journalist, do you free to write your own environmental stories?	How do you or your editor select the news?	Democracy Theory
	7. Do you think environmental communication will create trust and	How would you describe the trust and relationship between media	Environmental legitimacy Theory

	relationship between media and public?	and public?	
	8. What do you think of the important role of environmental journalists in constructing the reality of environmental problems to the public?	How important? Please explain.	Social construction Theory
	9. Do you think language and images play an important role in constructing the environmental messages to public?	How useful the language and images in environmental communication?	Social construction Theory
2. Strategies in environmental communication	1. Do you think media have specific strategy in communicating environmental issues?	What kind strategy that you use in conveying environmental issues to public?	General
	2. Do you think environmental journalists depending on their news sources for reporting?	How important news sources to you?	Sources reliance
	3. Who is your common primary news source in environmental reporting?	Do you think environmental NGO is one of important news sources? Why?	Sources reliance
	4. How do you select your news sources?	What kind of sources' criteria you looking for	Sources reliance
	5. How would you describe your relationship with environmental NGOs?	Good or bad, professional or friend? Has this relationship changed over the past few years?	Level of Collaboration

	6. Do you see environmental NGOs as a good partner in environmental communication?	Why is good or bad?	Level of Collaboration
	7. Do you think collaboration with environmental NGOs is a good strategy in communicating environmental news?	Why collaboration is importance to you?	Level of Collaboration
	8. Please describe the level of collaboration with environmental NGOs: Communication – the least Cooperation, Coordination, Coalition, and Integration – the most	Which one of those collaboration is the most preferable and why?	Level of Collaboration
	9. In all, how do you feel about your collaboration with environmental NGOs?	Hard, easy? Why?	Level of Collaboration
3. Barriers in environmental NGOs	1. Have you faced any barriers in communicating environmental messages?	What kind of barriers have you faced?	General
	2. Do you think that lack of knowledge or experience in environmental issues can be one of the barriers for environmental journalists?	Why?	Sender barrier
	3. How would you	Do you usually do	Sender barriers

	describe on self-censorship in environmental communication?	self-censorship in your environmental news reporting?	
	4. Environmental messages usually contained a lot of technical language, does it hard for you to write and communicate it to the public?	If yes, please give an example of technical language that you think is hard to explain?	Environmental information barriers
	5. Have you faced interferences from any government agencies or corporate sectors while reporting in environmental news?	How?	Medium barriers
	6. What do you think of media laws in environmental communication?	Are these laws affecting the environmental communication?	Medium barriers
	7. How would you comment on the media ownership in Malaysia?	Does media ownership affect the environmental communication?	Medium barriers
	8. The nature of Malaysian newspaper has low visibility of environmental issues coverage than other issues, what would you comment on this?	Why this phenomenon happened?	Medium barriers
	9. Do you think it should be more environmental news in local newspaper in future?	Why do we need to increase / not increase the number of environmental news?	Medium barriers
	10. Is editing process affected your writing?	Yes or No, Why?	Destination barriers

	11. Malaysian's environmental literacy and knowledge are generally low about environmental issues; does it matter for environmental journalists?	Why it is matter to you?	Receiver barriers
	12. Does all these barriers affect the quality of environmental reporting?	How can it affect your working quality?	General
	13. How do you cope with all these barriers?	Does your organisation help you in coping to the barriers?	General
4. Conclusion of interview	1. Are there any other things you want to add? OR 2. Do you have any comment on how to improve the environmental communication in Malaysia?	NA	General

(For ENGO A and ENGO B)

Topics	Lists of questions	Additional questions	Theoretical models & concepts
1. Roles in environmental communication	1. Could you please describe your understanding of the role of ENGOs?	Can you give example of the role of ENGOs that you know?	General
	2. In your personal view, does ENGOs' role differ	If yes / no, why?	General

	from other NGOs?		
	3. Who decide on what task you should do? Yourself or top management?	If decided by the senior management, how they decide the roles? Is there any discussion about the roles?	General
	4. What role do you think the ENGOS have played in environmental communication?	Why? Is the ENGOS' role in environmental communication are more as an informers or educators?	Democracy Theory
	5. What do you think of the freedom of ENGOS in playing its role?	Why democracy is important to you?	Democracy Theory
	6. As an ENGOS, do you free to write your own environmental stories?	How do you or your editor select the stories for your newsletters?	Democracy Theory
	7. Do you think environmental communication will create trust and relationship between ENGOS and public?	How would you describe the trust and relationship between environmental NGOs and public?	Environmental legitimacy Theory
	8. Do you think that ENGOS play an important role in constructing the reality of environmental problems to the public?	How important? Please explain	Social construction Theory
	9. Do you think language and images play an important role in constructing the	How useful the language and images in environmental communication?	Social construction Theory

	environmental messages to public?		
2. Strategies in environmental communication			
2. Strategies in environmental communication	1. Do you think ENGOs have specific strategy in communicating environmental issues?	What kind strategy that you use in conveying environmental issues to public?	General
	2. Between lobbying, campaigning and collaboration with other stakeholders, which strategies have been used the most?	Why?	Funnel framework
	3. Do you have sources in your environmental stories? How do you select your sources	What kind of sources' criteria you looking for	Sources reliance
	4. Do you think ENGOs depending on their sources for communicating environmental issues?	How important the sources to you?	Sources reliance
	5. Who is your common primary source?	Why?	Sources reliance
	6. How would you describe your relationship with media?	Good or bad, professional or friend? Has this relationship changed over the past few years?	Level of Collaboration
	7. Do you see media as a good partner?	Why?	Level of collaboration
	8. Do you think collaboration with media is a good strategy in communicating	Why collaboration is importance to you?	Level of Collaboration

	environmental information?		
	9. Please describe the level of collaboration with media: Communication – the least Cooperation, Coordination, Coalition, and Integration – the most	Which one of those collaboration is the most preferable and why?	Level of Collaboration
	10. In all, how do you feel about your collaboration with media?	Hard, easy? Why?	Level of Collaboration
3. Barriers in environmental communication	1. Have you faced any barriers in communicating environmental messages?	What kind of barriers have you faced?	General
	2. Do you think the fact that lack of knowledge or experience in environmental issues can be one of the barriers for ENGOs?	Why?	Sender barrier
	3. How would you describe on self-censorship in environmental communication?	Do you usually do self-censorship in communicating environmental information? Why?	Sender barriers
	4. Environmental messages usually contained a lot of technical language, does it hard for you to write and communicate it to the public?	If yes, please give an example of technical language that you think is hard to explain?	Environmental information barriers
	5. Have you faced	How?	Medium barriers

	interferences from any government agencies or corporate sectors while communicating in environmental issues to public?		
	6. What do you think of NGOs-media laws?	Are these laws affecting the environmental communication?	Medium barriers
	7. The nature of Malaysian newspaper has low visibility of environmental issues coverage than other issues, what would you comment on this?	Why this phenomenon happened?	Medium barriers
	8. Do you think it should be more environmental news in local newspaper in future?	Why do we need to increase / not increase the number of environmental news?	Medium barriers
	9. Usually Malaysian NGOs has problem with its funding, how would comment on this?	Is this funding issue affect your environmental communication activities?	Medium barriers
	10. Is editing process affected your writing?	Yes or No, Why?	Destination barriers
	11. Malaysian's environmental literacy and knowledge are generally low about environmental issues; does it matter for	Why it is matter to you?	Receiver barriers

	environmental NGOs?		
	12. Does all these barriers affect the quality of environmental reporting?	How can it affect your working quality?	General
	13. How do you cope with all these barriers?	Does your organisation help you in coping to the barriers?	General
4. Conclusion of interview	1. Are there any other things you want to add? OR 2. Do you have any comment on how to improve the environmental communication in Malaysia?	NA	General

Appendix D

(Coding sheet for content analysis on newspapers and ENGOS' newsletters)

1. Organisation	1. Media A	2. Media B	3. ENGO A	4. ENGO B
2. Day	1. Monday	2. Tuesday	3. Wednesday	4. Thursday
	5. Friday	6. Saturday	7. Sunday	8. NA
3. Month	1. January	2. February	3. March	4. April
	5. May	6. June	7. July	8. August
	9. September	10. October	11. November	12. December
	13. NA			
4. Year	1. 2012	2. 2013	3. 2014	
5. Language	1. Malay	2. English		
6. Genre of articles	1. Straight news event	2. Feature	3. Letter to editors	4. Advertorial
	5. Interviews			
7. Placement of articles	1. Front page	2. Inside page	3. Back page	4. NA
8. Length of articles	1. Less than 5 paragraph	2. 6-15 paragraph	3. 16 and more paragraph	
9. Geographical context of articles	1. Malaysia	2. Asian countries except Malaysia	3. Western countries	4. African countries
	5. NA			
10. Author	1. Staff Reporter	2. Bernama	3. Staff ENGOS	4. International source
	5. Individual	6. NA		
11. Main themes:	1. Agriculture	2. Biomass	3. Deforestation	4. Forest fire
	5. Forest protection	6. (National) parks	7. (Endangered) plant	8. Urban greening
	9. Hill development	10. Development impact	11. Lightning	12. Snow

	13. Storm	14. Typhoon	15. Rainfall	16. Cloud seeding
	17. Climate change	18. Global warming	19. Haze	20. El-Nino
	21. Drought	22. Volcano	23. Wildlife	24. Open burning
	25. Tourism	26. Eco-tourism	27. Landslide	28. Soil movement
	29. Environmental management	30. Earthquake	31. Tsunami	32. Flood
	33. (Flash) flood	34. Marine fisheries	35. Oil spill	36. Energy
	37. Air pollution	38. Water pollution	39. Chemical pollution	40. Underwater tunnel
	41. Water crisis	42. Water rationing	43. Water resources	44. Water conservation
	45. Dam	46. Marine life	47. Marine protection / conservation	48. Marine education
	49. Carbon emission	50. Nuclear reactor	51. Rare earth (Lynas)	52. Earth hour
	53. Mining	54. Recycling	55. Environmental policies / laws	56. Sustainable living
	57. Wetland	58. Land conservation	59. Clogged drain	60. Waste management
	61. Waste disposal	62. Transportation	63. Equinox	64. Wave
	65. NA			
12. Does news or articles content sources	1. Yes	2. No		
13. Number of sources	1. One	2. Two	3. More than two	4. NA
14. Main sources	1. Government	2. Politician	3. Scientist	4. Academic
	5. Lay people	6. ENGOS	7. Victim	8. Business people
	9. Actor	10. International news agencies	11. NA	12. Unnamed source
	13. Society club	14. Local news agencies	15. Student	

15. Secondary sources	1. Government	2. Politician	3. Scientist	4. Academic
	5. Lay people	6. ENGOS	7. Victim	8. Business people
	9. Actor	10. International news agencies	11. NA	12. Unnamed source
	13. Society club	14. Local news agencies	15. Student	
16. Types of politician sources most quoted in articles	1. Prime minister	2. Minister of Ministry of Natural Resources and Environment - NRE	3. Other minister	4. Opposition
	5. NA	6. MP (Member of Parliament)		
17. Images?	1. Yes	2. No		
18. Number of images	1. One	2. Two	3. More than two	4. NA
19. Form of images	1. Picture	2. Diagram	3. Graph	4. Table
	5. Sketches / Cartoon	6. Multiple	7. NA	
20. Type of images	1. Image of person	2. Image of nature	3. Image of industry	4. Image of technology
	5. Image of building	6. Image of thing	7. Multiple images	8. Illustration
	9. NA			
21. Connectivity the images with the articles	1. Yes	2. No	3. NA	

Appendix E

(Codebook)

Codebook for environmental coverage on Malaysian newspapers (Media A and Media B) and Malaysian ENGOs' newsletters (ENGO A and ENGO B) from 2012 to 2014.

Introduction

This codebook serves as a guideline for the coders to select the environmental coverage of Media A and Media B's newspapers and ENGO A and ENGO B's newsletters. There are several important definitions that are clearly explained in following section including environmental news, sources, authors, placement of article, source of article and environmental themes, which will help the coders during the coding process. Thus, the coders must study this codebook and use it as much as possible during the coding process. It is hoped that this codebook will be able to increase the efficiency of the content analysis coding process.

Environmental article

"Environment" in the context of this study can be understood as the components surrounding and touching human life, including air, water, soil, animals, etc. Thus, an environmental article can be understood as an article in a newspaper or newsletter that mainly focuses the environmental issues like pollution, climate change, global warming, etc. that are related to human life. It is also important to note that within the context of this study, environmental, science and sustainable development news is acceptable in the same context as long as the science or sustainability issues like ozone depletion, climate change, biology, animals, etc. are related to the environment and not related to other topics like health, economics or society. Thus, coders must only select news that is purely environmentally oriented.

V1–V5: Basic codes

Basic codes do not require any specific definition, as coders should be able to justify the meanings of the codes by themselves. Basic codes are used for article

identification: which organisation published the article; day, month and year of publication and language used in the article as follows:

V1. Organisation

1. Media A
2. Media B
3. ENGO A
4. ENGO B

V2. Day

1. Monday
2. Tuesday
3. Wednesday
4. Thursday
5. Friday
6. Saturday
7. Sunday
8. NA

V3. Month

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December
13. NA

V4. Year

1. 2012
2. 2013
3. 2014

V5. Language

1. Malay
2. English

V6. Genre of articles

In this section, coders must be able to identify the genre of the articles: 1. Straight news event, 2. Feature, 3. Letters to the editors, 4. Advertorials, 5. Interviews. A straight news event means the article is about reporting on a news event, like the landslide in Penang. News usually reports recent events and are very short in length, whereas a feature story is more lengthy and has an exclusive focus on one environmental topic. A feature story is also not usually about a recent event and provides much more information to the readers, such as a feature on “What is a tsunami and how does it occur?” “Letters to the editor” is a column where readers can send their opinions or articles to newspapers. On the other hand, advertorials can be understood as large advertisements in the form of editorial content and non-advertisement. Lastly, interviews are articles that focus on an interview session with a certain figure like an environmentalist or scientist, such as an article that promotes a recent successful project by scientists from the university.

V7. Placement of articles

Placement means the position of an article within the newspapers and whether it is located on 1. The front page, 2. An inside page or, 3. The back page.

V8. Length of articles

Length means how long the article is. A paragraph must contain at least two to three sentences. Coders must be able to determine whether the articles are: 1. Less than 5 paragraphs, 2. 6–15 paragraphs, or 3. 16 or more paragraphs.

V9. Geographical context of articles

Geographical context means the location an article reports or refers: 1. Malaysia, 2. Asian countries except Malaysia 3. Western countries, 4. African countries, or 5. Not mentioned at all. It is important to emphasise that Western countries include all the European countries.

V10. Author of articles

Author means the person who wrote the news and can usually easily be found at the top of the article (byline) or at the end of the article. There are six categories of authors including: 1. Staff reporter, 2. Bernama, 3. ENGOs staff, 4. International source (including AFP, Reuters and etc.), 5. Individual (including readers, academics, scientists, etc), 6. Not mentioned.

V11. Main themes of articles

In this section, the coders must identify the themes of the environmental articles. Themes mean the topics or subject matter of the entire article. There are 64 themes provided by the researcher including: 1. Agriculture: the practice of farming, including the activity of raising crops and cultivating land. 2. Biomass: material from animals or plants like dead trees used for fuel or energy. 3. Deforestation: the activity of clearing the forest via burning or logging. 4. Forest fire (also known as wildfire or brush fire): the activity of burning the forest, contributing to a serious haze. 5. Forest protection: Preservation of the forest from human destruction like logging. 6. National parks: Malaysia has a mass of protected national parks like Endau-Rompin National Parks to preserve plant and animal species. 7. Endangered plants: plants that are likely to be extinct in future like Rafflesia. 8. Urban greening: the activity of greening the city, e.g. through tree planting. 9. Hill development: developments like housing developments in the hill area. 10. Development impact: developments like industrial or infrastructural projects that can have a negative impact on the environment. 11. Lightning: An electrical discharge from the clouds that usually produces a bright light or flash with electricity. 12. Snow: small white ice crystals. 13. Storm: a wide atmospheric disturbance that includes strong wind, rain and/or snow. 14. Typhoon: a tropical storm forming over warm ocean water. 15. Rainfall: the fall of rain (water) from the sky. 16. Cloud seeding: weather modification to cause rain. 17. Climate

change: long-term changes in the global climate. 18. Global warming: an increase in recent global temperature patterns due to the greenhouse effect. 19. Haze: dust and smoke that affect visibility. 20. El Niño: a flow of unusually warm water. 21. Drought: low rainfall causing a shortage of water resources. 22. Volcano: an eruption of lava, rock or fragments from the surface of the earth (mountain). 23. Wildlife: animals (endangered) that need to be saved from extinction including elephant, black shrew, Sumatran rhinoceros, Malayan tapir, mouse deer and orangutan. 24. Open burning: burning of unwanted materials like trash, paper or trees. 25. Tourism: travelling locally or internationally for recreation and leisure purposes. 26. Eco-tourism: travelling to a natural environment and supporting conservation activities. 27. Landslide (also known as a landslip): ground movement of rock and earth. 28. Soil movement: a mass movement like cracking in soil. 29. Environmental management: the act of managing the environment such as the protection of parks in residential areas. 30. Earthquake: a condition where the ground shakes because of seismic activity (movement of tectonic plates), often bringing massive destruction. 31. Tsunami: a huge wave from the sea causing massive destruction, often associated with earthquakes. 32. Flood: a condition of an enormous amount of water beyond normal limits that affects human life. 33. Flash flood: a sudden flood after heavy rain due to bad ground cover or soil condition. 34. Marine fisheries: marine fishing activities by fishermen, which are subject to the Fisheries Act 1985 (Act 317). 35. Oil spill: the release of petroleum into ocean water, which causes water pollution and damages the harmony of the ecosystem. 36. Energy: energy usage and management in Malaysia such as solar energy, where energy resources came from the sun. 37. Air pollution: reported on the Air Pollutant Index or (in Malay) Indeks Pencemaran Udara. 38. Water pollution: ocean or river pollution. 39. Chemical pollution: toxic pollution such as chlorinated hydrocarbon pesticides, polychlorinated biphenyls, metals like mercury etc. from industry. 40. Underwater tunnel: a tunnel that is constructed under the sea. 41. Water crisis: a shortage of water resources. 42. Water rationing: the process of controlling the usage of water resources like limiting water use to five litres per person. 43. Water resources: a clean raw water supply for public consumption including agricultural, industrial and domestic use. 44. Water conservation: preservation of surface water and groundwater from pollution. 45. Dam: a body of water blocked by a wall for water supply and

generating electricity. 46. Marine life: creatures like animals and plants that live in the ocean. 47. Marine protection and conservation: the preservation of marine life from human and natural destruction. 48. Marine education: the act of educating the public about the importance of marine life protection. 49. Carbon emissions: an explanation of carbon (CO₂) emissions. 50. Nuclear reactor: a system to control nuclear energy. 51. Rare earth (Lynas): the project of rare earth extraction conducted by the Australian mining company Lynas. 52. Earth Hour: the worldwide activity of shutting down electricity for an hour. 53. Mining (sand): the activity of extracting sand from the land or the beaches. 54. Recycling: the process of changing waste to fresh new useful material. 55. Environmental policies/laws: environmental laws that have been introduced in Malaysia for environmental protection like the Environmental Quality Act of 1974. 56. Sustainable living: a sustainable lifestyle, e.g. reducing the use of natural resources. 57. Wetland: land covered by water. 58. Land conservation: preservation of land from human destruction. 59. Clogged drain: a slow, smelly drain due to irresponsible waste disposal. 60. Waste management: monitoring or control of waste by stakeholders like the government. 61. Waste disposal: garbage disposal that can harm the environment. 62. Transportation: any kind of transportation (e.g. bus) associated with the environment (pollution). 63. Equinox: related to the astronomic occasion when the sun crosses the Earth's equator, and day and night are equal. 64. Wave: an explanation on waves' impact on the environment, particularly coastal erosion. 65. NA: Not mentioned.

V12. Sources used on articles

For this section, coders must identify whether the news articles in newspapers or articles in ENGOs' newsletters contained sources or not.

V13. Number of sources on articles

On this part, coders must identify how many sources are represented in the newspaper articles or ENGOs' newsletter articles: 1. One, 2. Two, 3. More than two or 4. NA (not mentioned).

V14–15. Main and secondary sources on articles

Main source means the first person quoted or the person most quoted in the newspapers or ENGOS' newsletters. The secondary source means a person who has been quoted after the main sources. Thus, in this section, the coders must identify the main and secondary sources in newspaper and ENGOS' newsletter articles. There are numerous types of sources listed by the researcher including: 1. Government: the governance of the country or state with authority like the Ministry. 2. Politicians: a person involved in politics like the Prime Minister, Minister, Opposition leader, etc. 3. Scientist: a person who is an expert in science and is involved in scientific research either at a public university or a private institute. 4. Academics: scholars at university or lecturers. 5. Laypeople: public, 6. ENGOS: environmental NGOs like WWF, MNS, SAM, etc. 7. Victim: a person affected by the incident such as landslide victims. 8. Businesspeople: people who are involved in business and trade like Tan Sri Vincent Tan Chee Yioun, Berjaya Corp's founder. 9. Actor: a singer, actor or actress, like Leonardo DiCaprio. 10. International news agencies: AFP, Reuters, etc. 11. NA: not mentioned in the article. 12. Unnamed source: a source without a name. 13. Society club: other clubs besides ENGOS such as consumer clubs. 14. Local news agencies: news agencies in Malaysia like Bernama. 15. Student: a school or university student.

V16. Politician sources on articles

This section requires the coders to identify which types of politician from the government sector are mostly quoted in newspaper and ENGOS' newsletter articles. Politicians from the government sector include: 1. Prime Minister, 2. Minister of Natural Resources and Environment, 3. Other Minister, 4. Government staff, 5. NA (not mentioned on the article), 6. Member of Parliament.

V17. Images used on articles

On this section, coders must identify whether there are images represented in newspaper and ENGOS' newsletter articles or not.

V18. Number of images on articles

In this part, coders must count the number of images represented in newspaper and ENGOs' newsletter articles: 1. One, 2. Two, 3. More than two, or 4. NA (not mentioned).

V19. Form of images on articles

In this section, coders must be able to justify whether the image is represented as: 1. Picture (photograph); 2. Diagram: two- or three-dimensional geometric symbolic representation of information used to simplify the information; 3. Graph: plot on paper; 4. Table; 5. Sketches/Cartoons; 6. Multiple: a combination of various forms of images like graphs and tables; 7. NA (not mentioned in the article).

V20. Type of images on articles

On this section, coders must differentiate the types of images presented in newspaper and ENGOs' newsletter articles: 1. Image of a person, 2. Image of nature, 3. Image of industry, 4. Image of technology, 5. Image of a building, 6. Image of a thing, 7. Multiple images (a combination of multiple types of images like humans and nature), 8. Illustration (drawing or sketches), 9. NA (not mentioned in the article).

V21. Connectivity of the images to the text

In this part, coders are required to identify whether the images used in the article are related to the content of the articles or not.