



## The Strategy of WALHI JATIM to Mitigate the Environmental Crisis through 'School of Ecology' in East Java

Abdul Basir Donny Polanunu\*, Aurora Aziza More

Indonesia International Studies Academic Utilization Community (IISAUC)

### Article Info

#### Article history:

Received July 15, 2020

Revised December 19, 2022

Accepted December 20, 2022

Available online December 20, 2022

#### Cite:

Polanunu et al. (2022). The Strategy of WALHI JATIM to Mitigate the Environmental Crisis through School of Ecology in East Java. *Global-Local Interaction: Journal of International Relations*, 2(2).

\* Corresponding author.

Corresponding Author

E-mail address:

abbasdonny@gmail.com

### Abstract

*This article explains how WALHI JATIM is working with the community to reach one of the Sustainable Development Goals (SDGs). An intermestic approach with a network model will help explain that this is a way for the people involved to take responsibility for achieving common goals. The shift in the Sustainable Development Goals agenda's focus, which calls for more people to be involved, makes the participants more diverse. This is because the ratifying state agreed to work toward universal goals for sustainable development. One of the targets for this goal is how to deal with climate change. People's lives are becoming more and more troubled by the fact that the needs of human life aren't always met by what nature has to offer. People's lives are not the only thing affected by the unrest in Indonesia. It is also clear that people are doing things that hurt the health of the environment. Conditions in the environment that haven't yet reached national standards have finally sparked community or group movements, with the argument that people are worried about the crisis of important environmental aspects and want to see the environment improve. When you look at what the community did, one of the more interesting things was what WALHI JATIM did, which was to start an School of Ecology as its first action.*

*Keywords: Climate Change, East Java, WALHI JATIM*

### Introduction

Due to an increasing population and a planet that is rapidly changing, there are not enough resources to maintain a stable ecosystem. To provide for the needs of its citizens, the state continues to exploit and develop natural resources. If this discussion continues without a balance between preservation and use, it will gradually destabilize the world order. In truth, natural wealth can be utilized, but humans also have a duty to continue caring for and promoting the planet's natural health. 2015 will mark the beginning of the Sustainable Development Goals, a global initiative to achieve this equilibrium (SDGs). The Sustainable Development Goals (SDGs) have established a global standard for achieving sustainable development. In addition to the Sustainable Development Goals, countries throughout the world have committed to hold an annual summit called the Paris Agreement to discuss climate change. The Paris Agreement is intended to serve as a forum for countries to discuss and agree upon ways to enhance the climate and establish healthy ecosystems (Gusman & Waluyo, 2014).

The SDGs and the Paris Agreement are joined by the Addis Ababa Action Agenda and the Sendai Framework. The Addis Ababa Action Agenda addresses how to finance development in underdeveloped nations, whereas the Sendai Framework outlines how to deal with global disasters in a sustainable manner until 2030. The United Nations devised a

plan titled "Transforming Our New World: The 2030 Agenda for SDGs," which is equivalent to global negotiations that unite nations. In the SDG agreement, the nature of development differs slightly from that of the MDG agreement. This agenda appears to involve a greater number of actors, including civil society, international organizations, non-governmental organizations, and even individuals. This is because the intent of this agreement was to have a broad and extensive impact (Said & Budiati, 2016).

One of the objectives of the SDG agreement is to address the effects of climate change and its application. It is evident that we must take a new approach to solving environmental issues. The endeavor in question should be able to transform an exploitative habit into one that stimulates consistent action to safeguard the environment. People, according to Miriam Budiardjo, must be strongly and fundamentally encouraged to develop social sensitivity, which will also effect self-awareness when doing certain activities, so that these things are done based on one's own wants and not due to external pressure (Budiardjo, 2008). Concurrently, this concept demonstrates that a convincing approach alone is insufficient to initiate a significant shift; it also requires built-in encouragement. Similarly, if individuals choose to alter the manner in which they handle the environment, they must be self-aware in order for the steps they take to effect change to go smoothly.

In truth, numerous individuals have attempted to resolve this issue. As with government or non-government organizations, for example: (1) The government proposes a tax on the environment (a "green tax") for all actions that continue to use a substance that emits harmful carbon dioxide; (2) the government's idea regarding economic growth efforts that are balanced with environmental improvements in the waters aspect, namely the blue economy policy model. As its fundamental strategy, the blue economy pursues a number of objectives, including ecological health, economic development aimed at promoting human wellbeing, and efficient management of aquatic resources (ocean governance). The blue economy mirrors the workings of nature in its implementation, notably through preserving natural work systems, which should serve to enrich marine ecosystems. So that it is clear that, ideally, the blue economy is a government system's endeavor to achieve a balance in meeting commitments, notably increasing economic intensity without diminishing natural health, but must also try to preserve natural health (Sutardjo, 2012); and (3) Greenpeace Indonesia, a non-governmental organization engaged in the field of environmental protection, holds demonstrations to demonstrate how non-government organizations are fighting to protect the environment. Campaigning and public protests preceding the event demanded that the Ministry of Environment and Forestry address Jakarta's air pollution issue. Standing in front of the Ministry of Environment and Forestry while wearing a costume that resembles a body with black lungs from air pollution, the voices are offered (Ruhiat et al., 2019).

The facts, however, demonstrate that these actions have not produced proportional outcomes. In recent years, Indonesia has not been able to achieve the index standards that indicate the quality of its environment.

According to the Ministry of Environment and Forestry's data, there are a number of levels of acquisition that reveal that, in fact, the entire country of Indonesia, and particularly the East Java region, has a fairly good environmental index, while others do not yet meet the standards for environmental health index, including: *First*, the Air Quality Index, which has a value of 87%. Several variables, including as transportation, cities, and industrial zones, were examined in each province's evaluation, which yielded the results. This purchase was also

modified to adhere to the European Union (EU) program's Comparing Urban Air Quality Index standard. Currently, the air quality in East Java has been evaluated at 85% (Corcoran et al., 2010). *Second*, component is the Water Quality Index. This index examines the amount of pollution in river water to determine whether the water is suitable for life. In 2017, the water quality index for Indonesia reached 58%, 1.07 points lower than in 2016. This evaluation is influenced by the weather, the emphasis on water pollution, and the amount of water consumed. The water quality in East Java has been tested at 37%.

*Third*, in 2017, the Land Cover Quality Index had a value of 56%, down 0.95 percentage points from the previous year. Land cover is an area that transforms into a closed place that can be utilized for conservation or rehabilitation. The land cover index is computed using the variables land cover, forest performance, soil cover conditions, water body conservation, and habitat conditions. East Java similarly receives a 52% based on these factors (Sekretaris Jenderal Kementerian Lingkungan Hidup dan Kehutanan, 2018). *Fourth*, Calculating the average quality of the Air Quality Index (AQI), Water Quality Index (WQI), and Land Cover Quality Index yields a result of 66% for the Environmental Quality Index (LCQI). These three measures quantify variables that affect the environmental quality on Indonesian soil (Prasetio et al., 2018). With the same review flow and East Java included, the average number is 66%.

In terms of water quality and the amount of land cover, it is evident that Indonesia remains in the unfavorable category based on the available statistics. Consequently, an effective effort is required to find a solution to Indonesia's and, as an example, East Java's challenges.

Referring to such conventional procedures, the actual outcome has not altered significantly. In terms of national ranking, Indonesia's environmental quality index is still below the minimum requirement. In addition, the score is low in East Java, particularly the water quality index. But recently, a way of doing things has emerged that makes sense if it is believed that it could be used as an alternate method for addressing environmental concerns. The WALHI JATIM (WALHI for the Environment) provided this alternative in the form of a "School of Ecology" that teaches about the environment in its entirety. The objective of this ecological school is to produce cadres who are sensitive to circumstances of poverty and environmental harm using a logical approach (Walhi Jatim, 2019). Moreover, the Wahana Lingkungan Hidup Indonesia-Jawa Timur (WALHI JATIM), a non-governmental organization, has evolved into a community movement that strives to resolve numerous environmental issues. Therefore, the options they provided originated from organizations with expertise in environmental issues.

It is evident, based on what has been stated so far, that individuals must be urged to take genuine action to alleviate environmental problems; persuasion alone is insufficient. Several environmental indicators are poor, which also suggests that nature protection must be conducted correctly. Due to their logical approach to education, eco-friendly schools can garner a great deal of public support. As Budiardjo stated, each individual must have a strong willingness to act; if this is the case, the desired changes can be implemented.

### **Intermestic Approach: The Network Model (*Network*)**

The Network Model is based on the intermestic approach, which examines the relationship between international relations science and government science. Each of these studies addresses a unique topic, such as the impact of international and domestic influences

on policy changes. Other models, such as the International Approach, the Domestic Approach, and the Transnational Approach, serve as inspiration for the Intermestic Approach (Kurniawati, 2013). There are two factors that drive and influence the process of policy change from a methodological standpoint. The first is the existence of powerful actors' interests, which provides them the potential to create structural and material venues in the policy-making process. Second, software where ideas, typically in the form of concepts, norms, beliefs, and discourses, play a significant part in the policies that will be formulated by decision makers. Each of the three approaches—the domestic approach, the international approach, and the transnational approach—can be identified at various levels of analysis, depending on the model. The domestic strategy consists of the institutionalist (authority) model, the pluralist model, the system model, the individual model, and the coalition advocacy model. In addition, the international approach encompasses models of external pressure, global preference (institutional neoliberal), and structuralist (globalist) models. The network model, intellectual network model, constructivist model, and deliberative model are the final components of the transnational approach (Barry, 2014). The international method focuses primarily on its primary objective, which is to connect domestic and international approaches so that the effect of international ideas or standards can be utilized as a learning process that is linked through networks and policy changes.

**Table 1:** Table of Position of Transnational Approach

Model Variables	Actor/Level of analysis	Policy Change Process	Influential factors
<i>Network</i>	Domestic and International Actor	The political process: Conflict, bargaining and cooperation	Network interests
Intellectual Network	Domestic and International Actors	Cognitive Process: learning or hegemony	Knowledge/ideas
Constructivist	Domestic and International Actors	Cognitive processes: acceptance or rejection	International Norm
Deliberative	Domestic and International Actors	Social Process	<i>Discourse and counter discourse</i>

**Sumber:** Dyah Estu Kurniawati. (2013). Intermestic Approaches to Policy Change: A Methodological Review.

The network model (network) focuses more on the relational and informational aspects of the policy change process. This paradigm is predicated on the notion that actors are interdependent and require resources from other parties to achieve their objectives. The network consists of two players connected by fundamental networks such as shared resources, interests, norms, and values. The first actor is the state, which has the authority to create policies and has complete control over policies that are handed down to the regional level. The second actor is a non-state actor referred to as a "state-centered society" that has a role in supporting or opposing a policy change in order to implement a different policy,

which includes INGOs (International Non-Governmental Organizations), political parties, and interest groups.

Formal and informal patterns of links and contacts within a network (network) drive and affect policy change. This procedure is international in scope. Silke Adam and Hanspeter Kriesi (2007) created a typology to explain the complexity of networks based on the type of interaction and power distribution in a network. So that power can be concentrated or distributed, and network interactions can be based on conflict, negotiation, or cooperation. The advantage of this network model is that it can demonstrate how a country interacts with individuals in a pluralistic modern world where the consequences of globalization are intensifying, particularly in Indonesia and other countries that have signed the SDGs (Corcoran et al., 2010).

Based on this case study, INGO (International Non-Governmental Organization) players operate as transmitters to connect SDG-ratifying countries worldwide. As stated previously, the state level is crucial and has complete authority over the policymaking and modification processes. However, if actors lack a common basis on which to connect, it will be difficult to identify shared interests. On the basis of shared resources, similar interests, and shared norms and values, it is necessary to establish a common foundation for the international community's well-being. With the SDGs, which are a continuation of the MDGs as an international standard, it is hoped that they would assist and become a goal for countries that agree to solve global problems in the areas of economy, environment, security, politics, socio-culture, and health, among others. This rule also affects the formulation and adoption of policies at the state level, particularly in Indonesia with regard to environmental issues. Indonesia faces pressing economic, political, and security concerns, but environmental issues are equally significant (Darsono, 2015). At the regional level, such as in East Java, there is the Walhi (Wahana for the Environment) organization, which focuses on environmental issues and specific East Java regions. In accordance with the thirteenth goal of the Sustainable Development Goals, which is to combat climate change and its impacts, the WALHI JATIM is viewed as a fantastic solution to combat the environmental disaster. WALHI JATIM is attempting to establish an ecological school in the hopes that it will educate people about the environment and raise the surrounding community's awareness of the current environmental problem so that everyone can prosper. Consequently, the purpose of this study is to examine WALHI JATIM's plan for mitigating environmental and climate change in East Java as part of the government's intention to do similar activities more efficiently.

## Discussions

The discussion will focus on adopting concepts from the Sustainable Development Goals agenda, which will then be connected to Walhi's attempts to resolve environmental issues through the School of Ecology he founded. WALHI JATIM is a movement dedicated to addressing environmental issues in East Java. It derives its name from a series of explanations highlighting the significance of resolving environmental issues in Indonesia, particularly in East Java. As hypothesized by scholars, this is a plausible explanation for how WALHI JATIM is employing educational mediation to address the environmental situation.

In general, WALHI JATIM focuses on environmental concerns and particular regions in East Java. This issue may be examined from three perspectives: how global concepts interact, how



the WALHI JATIM organizes itself to address environmental issues in general, and how it concentrates on education mediation under the term "School of Ecology".

### **Interaction of Ideas in Conducting Environmental Mitigation Through Education**

The global community (countries and other international communities) has now reached a consensus on the SDGs as a means to solve global problems. The SDGs can be viewed as a global agreement whose policy standards must be followed by countries that ratify them in order to find a solution that benefits the entire planet. Since Indonesia is a member of the network, it must use the SDGs to continue its growth and development. The SDGs agreement between Indonesia and other nations resembles a model of the world community as a network of interconnected nations. The members of this model are required to collaborate in order to achieve the agreed-upon life goals. This occurs because the network model is founded on the interests of the network or its constituents. Referring to this list of explanations, the government is the predominant actor, followed by INGOs, NGOs, and the business sector. So that, when it comes to attaining the SDGs, the parties participating are diverse and independent of the nation.

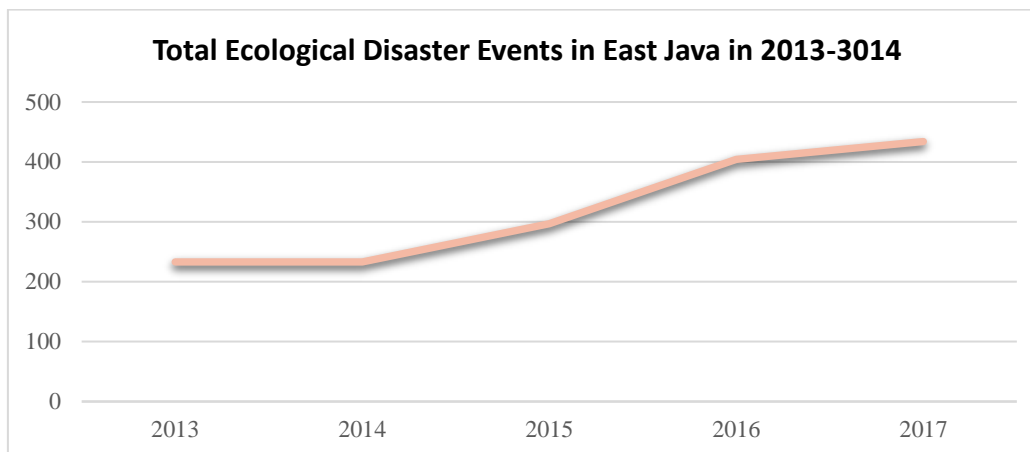
Referring to the paper titled "Goals of Sustainable Development in Indonesia" from the Central Bureau of Statistics, the procedures that the interested parties took to embrace the concept will be described in greater detail. In the document written by Ali Said and his pals, it is stated that the SDGs should be implemented everywhere. This means that sustainable development must be implemented holistically. As a result, Ali Said and his pals assist with development by providing instructions on how to fulfill the indicators for each objective so that they can be attained in accordance with what is desired. If you place the issue inside the context of this document, the target will become point 13, which addresses climate change.

There are multiple indications that must be met by stakeholders in the thirteenth objective. These include enhancing climate change resistance and adaptability, incorporating anticipatory activities into structured policies, and enhancing the quality of human resources regarding the significance of climate change consequences (Said & Budiati, 2016). Participants must meet the availability of resources to lower the risk of any disaster for the first indication. The second indication expands on this by incorporating existing resources into a strategy or policy such that they can have a significant impact. This endeavor is aided by the third indication, which consists of teaching future generations about the significance of ecology on various levels. Because it places a heavy emphasis on human resources, point 13's sustainable development may be continuously built upon. Then, based on these metrics, non-governmental organizations, international non-governmental organizations (INGOs), and the corporate sector should be able to contribute completely to this goal.

### **WALHI JATIM Concentration in Handling Environmental Problems**

WALHI JATIM has been working on environmental improvement issues in East Java for a long time. As an example, the WALHI JATIM released a data recap in its year-end notes that shows that there were many ecological disasters every year from 2013 to 2017.

**Diagram 1:** Total Ecological Disaster Events in East Java in 2013-2014



**Source:** The 2nd WALHI JATIM School of Ecology Team (2018)

The data revealed that East Java experienced 233 ecological disasters in both 2013 and 2014. In 2015, there were 297 ecological disasters, then 404 disasters in 2016, and reached the peak at 434 in 2017. This increasing of disaster numbers means the result of illegal logging and human carelessness to harm the environment. Therefore, many force majeure caused by ecological calamities such as floods, landslides, and droughts occur, despite their hazard to human life.

It is impossible to blame a single party for the environmental issues in Indonesia, particularly in East Java. There are linkages between the community, government, and businesses, which all play a role. WALHI JATIM, an actress who shares this concern, asserts that diverse groups must find a method to collaborate and raise awareness about plastic pollution in the ocean. Keeping in mind the risks and losses associated with plastic trash, which is harmful to the environment and can spread to other locations, and the fact that the problem is generated by the interactions of numerous people. Regarding environmental issues, the government also plays a significant role. This is because the government has greater ability to ensure that a policy is implemented. Therefore, it will be difficult to build a sustainable environment if the government cannot complete waste management legislation.

In this conversation, Walhi from East Java represents a non-governmental player active in environmental crisis management. WALHI JATIM takes the environmental crisis seriously, attempting to communicate, negotiate, and demonstrate the significance of preserving living space. Walhi, as a member of the people, consistently backs the government's initiatives. This is a political entity, and Walhi's function is to suppress policies in accordance with the people's values and desires.

In general, WALHI JATIM follows regular steps to deal with environmental problems, such as:

1. **Making up Reports**, At this point, what was done was for WALHI JATIM to collect several complaints from the public about environmental problems that were happening within a certain time.
2. **Problem Assessment**, In this second stage, WALHI JATIM starts to process the reports that have already been sent in. The process starts with figuring out how important environmental problems are so that the right direction can be taken.
3. **Problem Analysis**, Then, at this point, the report that has been evaluated and the brief review are followed up by looking at what kind of handling is possible.

Obviously, this review process uses a theoretical approach and systematic calculations to come up with useful solutions.

4. **Recommendation**, At the end of these stages, recommendations for how to proceed are released on the official website or through other channels. This recommendation also has the effect of putting more pressure on people who are responsible for solving environmental problems in their region to work together.

These four phases are regular operating procedure for WALHI JATIM when addressing environmental issues. Currently, WALHI JATIM has a more precise response to the environmental crisis affecting Indonesia and East Java in particular. The solution is the School of Ecology, which focuses on educational mediation for problem resolution (Putra, 2016).

### **School of Ecology**

The School of Ecology was established at Surabaya, in 2016, bringing this its third year of operation. In 2017, they started as an environmental education course, then developed into seven crisis zones based on the challenges in 2018. Malang and Surabaya have seen the most recent construction of Urban School of Ecologies. These two locations were selected due to their spatial compatibility with the Walhi formula for initiating urban-based movements. This is because Malang and Surabaya lack space, have a large number of young people, and are close to one another (W. E. Setiawan, personal communication, November 17, 2019).

Such elements should serve as the basis for civil society movements, particularly the environmental movement, to recognize and strengthen the notion that change cannot be achieved alone and cannot succeed without the participation of the people. Therefore, the environmental movement must reach out to as many people as possible to garner support for its goals and reclaim capital's dominance over life's supplies.

The environmental movement must also develop a novel approach to fundamental formulation. Obviously, the most crucial action to take is to reinstate critical ecology education so that volunteers can learn to comprehend the issue in their region. The primary objective of the ecological school is to train volunteers who will join Walhi's advocacy work to assist people in metropolitan areas, particularly Surabaya and Malang, in retaining control of their own resources and protecting the environment independently (WALHI JATIM, 2019). This School of Ecology also instructs volunteers to recognize socio-ecological issues. This is communicated to pupils using the following techniques: (1) **Academic Guidance**, providing motivation in a logical way by holding a discussion about what can be done if everyone works together to deal with the reality of poverty and damage to the environment; (2) **Psychological motivation**, giving people energy and the belief that they have a big role to play and are able to respond to crisis situations; (3) **Consistency**, motivating and encouraging regular meetings as one way of doing evaluations; and (4) **Small Group Formation**, motivating to build an institution as a way to bring networks and ideas together and also to grow them.

WALHI JATIM thinks that by doing so, the new generation that graduates from the School of Ecology would be able to collaborate and share information to assist solve environmental issues. In addition, this step will significantly increase community awareness in order for the subsequent activities to be effective. Because persuasive acts are unlikely to have a significant impact on this attempt. Instead, a group with sufficient knowledge, values, and mentality is required to convey the message.



## Conclusions

The state of the environment in East Java continues to cause challenges for the local population. This issue must be resolved immediately since Indonesia and its various societal components influence the formation of a global consensus that binds common interests. Agenda for the 2030 Sustainable Development Goals contained the agreement. The SDGs include objectives for addressing climate change and environmental degradation in general. Those who believe they are to blame for the environmental harm are striving harder than ever to repair it. WALHI JATIM is a type of community organization that actively addresses environmental concerns in East Java. WALHI JATIM, an environmental community organisation, is attempting to improve the environment in East Java by establishing an ecological school. The implementation of initiatives through the education channel in WALHI JATIM is becoming steadily more robust and effective. It is believed that this will operate proportionally if efforts to educate the community are matched by knowledge dimensionation and the establishment of a comprehensive network. In conclusion, it is crucial to reiterate that WALHI JATIM's efforts to enhance the environment in East Java through an ecological school demonstrate that prospective initiatives that seek to have a significant impact must begin with the fundamentals. Because persuasion alone is insufficient to resolve the expanding number of major environmental issues, we must employ other methods. This action is also consistent with national protocols for accepting SDGs concepts so that they can be implemented in a manner that benefits the nation. Therefore, if human resources are strengthened from the bottom up, people will continue to be aware of environmental issues throughout their lives, and the directions for addressing environmental problems will also be implemented properly, since everyone already wants to solve environmental problems together (Mangunjaya, 2015).

## References

- Barry, J. (2014). *Green Political Theory* (4 ed). Political Ideologies: An Introduction. [https://pureadmin.qub.ac.uk/ws/portalfiles/portal/5420698/Green\\_Political\\_Theory\\_John\\_Barry.pdf](https://pureadmin.qub.ac.uk/ws/portalfiles/portal/5420698/Green_Political_Theory_John_Barry.pdf)
- Budiardjo, M. (2008). *Dasar-Dasar Ilmu Politik*. PT. Gramedia Pustaka Utama.
- Corcoran, E., Nellemann, C., Baker, E., Bos, R., Osborn, D., & Savelli, H. (2010). *Sick Water?: The Central Role of Wastewater Management in Sustainable Development: A Rapid Response Assessment*. UNEP (United Nations Environment Programme). [https://www.susana.org/\\_resources/documents/default/3-2236-22-1428912362.pdf](https://www.susana.org/_resources/documents/default/3-2236-22-1428912362.pdf)
- Darsono, F. (2015). Koalisi Ornop Pasca Orde Baru: Studi tentang Jaringan Walhi dalam Kampanye Isu Hutan. *Masyarakat: Jurnal Sosiologi*, 27–48.
- Gusman, D., & Waluyo, T. J. (2014). Peran Greenpeace dalam Penanganan Kerusakan Lingkungan (Polusi Udara dan Air) di China. *Jurnal Online Mahasiswa Universitas Riau*, 1(1), 1–15. <https://jom.unri.ac.id/index.php/JOMFSIP/article/view/2363>
- Kurniawati, D. E. (2013). Pendekatan Intermestik Dalam Proses Perubahan Kebijakan: Sebuah Review Metodologis. *Jurnal Studi Hubungan Internasional*, 2(2), 154–167. <https://onsearch.id/Record/IOS2010.article-1519>
- Mangunjaya, F. (2015). *Mempertahankan Keseimbangan: Perubahan Iklim, Keanekaragaman Hayati, Pembangunan Berkelanjutan, dan Etika Agama*. Yayasan Pustaka Obor Indonesia. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=917809>
- Prasetio, A., Oktaviani, Z., & Mayangsari, I. D. (2018). Komunikasi Organisasi Walhi Jabar Dalam Gerakan Sosial Save Babakan Siliwangi. *LINIMASA: Jurnal Ilmu Komunikasi*, 1(1), 60–67. <https://journal.unpas.ac.id/index.php/linimasa/article/view/829/457>



- Putra, P. F. (2016). Pembentukan Karakter Peduli Lingkungan Dalam Organisasi Greenpeace Regional Yogyakarta. *Jurnal Spektrum Analisis Kebijakan Pendidikan*, 5(2), 137–148. [https://journal.student.uny.ac.id/index.php/sakp/article/view/5195#:~:text=2\)%20Pembentukan%20karakter%20peduli%20lingkungan,Day%20Action%2C%20Bersih%20Pantai%2C%20Hari](https://journal.student.uny.ac.id/index.php/sakp/article/view/5195#:~:text=2)%20Pembentukan%20karakter%20peduli%20lingkungan,Day%20Action%2C%20Bersih%20Pantai%2C%20Hari)
- Ruhat, F., Heryadi, D., & Akim, A. (2019). Strategi NGO Lingkungan Dalam Menangani Polusi Udara di Jakarta (Greenpeace Indonesia). *AJIS: Andalas Journal of International Studies*, 8(1), 16–30. <http://ajis.fisip.unand.ac.id/index.php/ajis/article/view/163>
- Said, A., & Budiati, I. (2016). *Potret Awal Tujuan Pembangunan Berkelanjutan (Sustainable Development Goals) di Indonesia*. Badan Pusat Statistik Indonesia. <https://filantropi.or.id/pubs/uploads/files/3%20BPS%20Potret%20Awal%20TPB%20di%20Indonesia.pdf>
- Sekretaris Jenderal Kementerian Lingkungan Hidup dan Kehutanan. (2018). *Indeks Kualitas Lingkungan Hidup Indonesia 2017*. KEMENTERIAN LINGKUNGAN HIDUP DAN KEHUTANAN. <https://www.menlhk.go.id/uploads/site/post/1540951259.pdf>
- Setiawan, W. E. (2019, November 17). *Wawancara Tentang Upaya Walhi Jawa Timur* [Personal communication].
- Sutardjo, S. C. (2012). *Kebijakan Ekonomi Kelautan Dengan Model Ekonomi Biru*. KEMENTERIAN KELAUTAN DAN PERIKANAN SEKRETARIAT JENDERALSATUAN KERJA DEWAN KELAUTANINDONESIA. [https://www.academia.edu/9568965/Lap\\_Kebijakan\\_Ekonomi\\_Kelautan\\_dengan\\_Model\\_Ekonomi\\_Biru](https://www.academia.edu/9568965/Lap_Kebijakan_Ekonomi_Kelautan_dengan_Model_Ekonomi_Biru)
- Walhi Jatim. (2019). Sekolah Ekologi Perkotaan Walhi Jatim. *Walhi Jatim*. <http://walhijatim.or.id/2019/10/sekolah-ekologi-perkotaan-walhi-jatim/>