

Eco-Apartheid: Unpacking Environmental Injustice and its Impact on Human Rights

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Abstract

This study comprehensively examines how existing environmental policies often exacerbate social inequality and neglect the rights of vulnerable communities, particularly minorities, indigenous peoples, and those living below the poverty line. This study adopts a library research method, exploring the concept of eco-apartheid and its implications for human rights through an integrated literature review, combined with a content analysis approach. The results of this study confirm that eco-apartheid reflects structural injustices that violate human rights, particularly the right to a clean and healthy environment. Land grabbing, exploitation of natural resources, and urban segregation widen ecological and social inequalities, which are exacerbated by weak law enforcement and the dominance of corporate interests. The right to a decent and healthy environment has been recognised in international law proceedings, such as UN Resolution No. 76/300 of 2022, the 1972 Stockholm Declaration, and the 1992 Rio Declaration. In the ASEAN region, exclusive development has marginalised poor communities and reinforced eco-apartheid, necessitating a new legal paradigm that places the environment as a subject of human rights protection, with the application of various principles of precaution and vigilance, transparent policy reform, and protection for environmental defenders. Ecologically, just legal excellence is critical for eliminating eco-apartheid and guaranteeing every individual's right to a safe, fair, and sustainable environment.

Keywords: *Eco-Apartheid, Human Rights, Inequality, Exploitation, Ecology*

I. INTRODUCTION

Eco-apartheid is a term that is increasingly used in discussions about environmental injustice and human rights. This term refers to segregation in an ecological context, where populations that are economically, politically, and socially more vulnerable become victims of environmental injustice. This phenomenon often occurs in areas where poverty, marginalisation, and lack of access to sustainable resources are common, creating to a massive gap between those who have access to and control over a healthy environment, and those who are marginalised and forced to live in substandard conditions. In this context, environmental injustice is not only an ecological issue, but also a profound human rights issue.¹

As global awareness of climate change and environmental degradation increases, debates on environmental justice have also intensified. While many policies and initiatives are being pursued to tackle these issues, the reality is that injustices related to the environment are often rooted in deep social, political, and economic structures. Eco-apartheid illustrates how these structures systematically create a divide between those who benefit from sound environmental management, and those who suffer from environmental degradation.² This situation impacts physical health, and deprives people of fundamental human rights, such as clean water, healthy air, and suitable land.

This phenomenon becomes even more apparent when we consider how various forms of environmental degradation, such as pollution, deforestation, and destructive mining, often occur in areas inhabited by socio-economically disadvantaged communities. In developing countries, indigenous and rural communities are usually the primary victims of development policies that ignore environmental impacts. They often lack representation in decisions that affect their lives, while actors with greater economic and political influence disproportionately benefit from the exploitation of natural resources. In this context, eco-apartheid is not only a local issue, but also a global one involving widespread injustice between rich and poor countries.

This injustice is evident in the distribution of natural resources and the disproportionate impact of climate change. Developing countries contribute the least to greenhouse gas emissions, yet they are the most affected by climate change. Floods, droughts and other natural disasters are becoming more frequent in these regions, forcing millions of people to flee their homes and

1 Francesco Francioni, “International human rights in an environmental horizon” (2010) 21:1 Eur J Int Law 51–52, online: <<https://academic.oup.com/ejil/article/21/1/41/363366>>.

2 Martin Calisto Friant, Walter J V Vermeulen & Roberta Salomone, “A typology of circular economy discourses: Navigating the diverse visions of a contested paradigm” (2020) 161 Resour Conserv Recycl 104917; Davor Petrić, “Environmental justice in the European Union: A critical reassessment” (2019) 15:1 Croat Yearb Eur law policy 215–267.

abandon their livelihoods. In many cases, the populations most adversely affected are those already experiencing social and economic marginalization, including women, children, and indigenous communities. Developing countries' inability to adapt to these changes is often exacerbated by a lack of access to the technology and resources needed to mitigate the effects of climate change. Meanwhile, developed countries, which have the wealth and political power to reduce the impact of climate change, often fail to fulfil their commitments to comply with international law on emissions reduction and financial support for developing countries.

In the context of human rights, eco-apartheid violates several human rights recognised by international human rights instruments, such as the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights. The right to a healthy environment is often considered part of the broader right to an adequate standard of living, which includes access to adequate housing, clean water, and sanitation. The failure of states to fulfil these rights for all citizens constitutes a violation of their international obligations. In this context, states are responsible for ensuring that their environmental policies do not disadvantage citizens, and that all social groups can benefit from a healthy environment. Failure to do so leads to new forms of discrimination based on social class, race, ethnicity and economic status.

A literature review of the eco-apartheid phenomenon consistently highlights the relationship between environmental injustice and human rights. Various academic studies and reports by international agencies, including the UN and non-governmental organizations, have documented how the impacts of climate change and environmental degradation disproportionately affect marginalized communities in both developing and developed countries. Research by Kojola and Pellow highlights that pollution and environmental degradation are often more severe in areas inhabited by low-income and minority communities.³ The study shows a strong link between social and economic inequality and vulnerability to environmental risks.

Research demonstrates that climate change is exacerbating existing environmental injustices, and developing countries, especially in Africa, Asia, and Latin America, are experiencing more significant impacts from climate disasters such as floods, droughts, and rising temperatures, even though they contribute far less to greenhouse gas emissions.⁴ This suggests a global climate

3 Erik Kojola & David N Pellow, "New directions in environmental justice studies: examining the state and violence" (2021) 30:1-2 Env Polit 100-118, online: <<https://www.tandfonline.com/doi/abs/10.1080/09644016.2020.1836898>>.

4 Ella Sandrine Parsons et al, "Climate change and inequality" (2024) Pediatr Res 1-8, online: <<https://www.nature.com/articles/s41390-024-03153-z>>; Jennifer E Givens, Xiaorui Huang & Andrew KJorgenson, "Ecologically unequal exchange: A theory of global environmental injustice" (2019) 13:5

imbalance, where developed countries have greater capacity to adapt to and mitigate the impacts of climate change. In contrast, developing countries lack the infrastructure, technology, and funding to protect their citizens from these threats.

Another study by Tschakert et al. explores the concept of multispecies justice, highlighting how eco-apartheid affects humans and other living things.⁵ The study argues that natural resource exploitation and habitat destruction are social injustice issues and violate the rights of ecosystems and other species that co-exist with humans. This broadens the eco-apartheid perspective to a more holistic dimension, recognizing that environmental degradation creates impacts extending beyond human justice to encompass broader ecological dimensions.

Several studies also demonstrate that air pollution, which is primarily caused by industrial and transport activities, is often higher in areas inhabited by minority and low-income groups.⁶ The health impacts of air pollution are severe, especially for children, the elderly, and those with pre-existing health conditions. These studies show that access to clean air is an essential human right but is often overlooked in public policy. This unequal distribution of air pollution reflects another form of eco-apartheid, where the wealthier and more powerful in society can avoid adverse environmental impacts, while marginalized populations disproportionately bear the burden.

Research shows that eco-apartheid is a complex and multidimensional problem requiring an interdisciplinary and transnational approach. The biggest challenge in addressing eco-apartheid is integrating social and environmental justice into public policy at all levels of government, from local to global. Adopting a social justice and human rights-based approach can help to address ecological injustices and restore the rights of marginalized communities. Thus, the main objective of this study is to uncover and analyze how ecological injustices occurring in various parts of the world lead to human rights violations. It also aims to identify the factors that cause environmental injustice, including the social, economic, and political dynamics that underlie the phenomenon.

Sociol Compass e12693, online: <<https://compass.onlinelibrary.wiley.com/doi/abs/10.1111/soc4.12693>>; Farhana Sultana, "Climate change, COVID-19, and the co-production of injustices: a feminist reading of overlapping crises" (2021) 22:4 Soc Cult Geogr 447-460.

5 Petra Tschakert et al, "Multispecies justice: Climate-just futures with, for and beyond humans" (2021) 12:2 Wiley Interdiscip Rev Clim Chang e699.

6 Gregory C Pratt et al, "Traffic, air pollution, minority and socio-economic status: addressing inequities in exposure and risk" (2015) 12:5 Int J Environ Res Public Health 5355-5372; Shuai Shao, Liwen Liu & Zhihua Tian, "Does the environmental inequality matter? A literature review" (2022) 44:9 Environ Geochem Health 3133-3156.

This study has significant implications from both theoretical and practical perspectives and aims to contribute to the growing literature on the relationship between human rights and the environment. While literature on environmental justice already exists, studies focusing on eco-apartheid are relatively limited. By examining this phenomenon, this study advances understanding of how environmental injustice is a new form of discrimination often overlooked in human rights discourse. Moreover, it offers a new analytical framework for understanding how ecological injustice occurs in the context of global capitalism, a dimension underemphasized by previous studies.

At a practical level, this study is significant in its potential to inform the development and refinement of environmental policies. Presently, many policies at both national and international levels do not account for their differential impacts on vulnerable populations. By providing robust empirical data and in-depth analyses, this study can provide a basis for designing more inclusive and equitable policies. For example, it can encourage policymakers to pay attention to the distribution of environmental impacts and ensure that the voices of the most affected communities are heard in decision-making. In addition, the importance of this study also lies in its contribution to the discussion on climate change and intergenerational equity. The impacts of climate change are not confined to the present generation, but will impose substantial burdens on future generations as well.

This study adopts a library research method, exploring the concept of eco-apartheid and its implications for human rights through an integrated literature review combined with a content analysis approach. This method analyzes relevant literature, documents, and other written sources, such as books, journal articles, research reports, and environmental policies related to the issue of environmental injustice and human rights. Through this approach, the study aims to connect existing theoretical concepts with empirical evidence and develop a more comprehensive framework for understanding the relationship between environmental injustice, power and human rights violations.

One of the main theories used in this study is critical discourse analysis, which serves to explore how language and discourse are used by certain actors in social structures to maintain or challenge unequal power relations. This theory, popularised by thinkers such as Norman Fairclough and Teun A. van Dijk,⁷ provides a framework for exploring how dominating discourses in environmental literature often reflect and reinforce structural injustices. This analysis examines the narratives used by various global actors, such as multinational corporations, governments, and international organisations, in natural

7 Teun A Van Dijk, “Critical discourse analysis” (2015) *Handb discourse Anal* 466–485; Teun A Van Dijk, “Structures of discourse and structures of power” in *Commun Yearb* 12 (Routledge, 2012) 18; Norman Fairclough, “Critical discourse analysis and critical policy studies” (2013) 7:2 *Crit policy Stud* 177–197; Norman Fairclough, “Critical discourse analysis” in *Routledge Handb discourse Anal* (Routledge, 2023) 11.

resource management policies and practices.

For example, the sustainable development narrative is often used to justify exploiting natural resources in developing countries, where environmentally destructive development projects are carried out at the expense of local communities who lack the political or economic power to resist. Using a critical discourse analysis approach, this study explores how this discourse systematically ignores or marginalises the interests of the most affected communities while prioritising the economic benefits global elites enjoy. A deeper analysis reveals how eco-apartheid is maintained through language representations that justify environmental exploitation by normalising the inequalities inherent in the distribution of ecological impacts.

II. THE CONCEPT AND MANIFESTATION OF ECO-APARTHEID

The concept of eco-apartheid represents a discourse of power that operates through language, policy, and social representations that normalise inequality and injustice towards the environment and conceal the underlying structures of domination.⁸ This phenomenon reflects ecological inequality and the ideological mechanisms regulating who has the right to enjoy sustainability and who must be sacrificed for progress.⁹ The language used in development policies and sustainability narratives often functions as a tool of legitimisation for various practices of ecological exploitation wrapped in technocratic terminology. In this context, eco-apartheid becomes an instrument of domination that not only distributes resources and risks unfairly but also creates a collective understanding of what is considered normal and legitimate in the relationship between humans and the environment.

Eco-apartheid demonstrates how racist and exclusionary social and economic structures create the distribution of ecological risk, as described by Antwi Akom.¹⁰ The dominant discourse on modernity and progress has positioned poor and minority groups as backward entities, so that their presence in polluted or hazardous areas is considered a natural consequence, rather than the result of discriminatory rules. Van Dijk explains that these mechanisms allow political and economic elites to define widely accepted social meanings, so ideological power works through their control over knowledge and representation.¹¹ Technocratic language in public regulatory protocols, especially in

8 Kai Heron, “Capitalist catastrophism and eco-apartheid” (2024) 153 Geoforum 103874, online: <<https://www.sciencedirect.com/science/article/pii/S0016718523002002>>.

9 Suud Sarim Karimullah, “Humanitarian Ecology: Balancing Human Needs and Environmental Preservation in Islamic Law” (2024) 26:2 Asy-Syari’ah 97–116.

10 Antwi Akom, “Eco-apartheid: Linking environmental health to educational outcomes” (2011) 113:4 Teach Coll Rec 831–859, online: <<https://journals.sagepub.com/doi/abs/10.1177/016146811111300404>>.

11 Teun A van Dijk, “Discourse, opinions and ideologies” (1995) 2:2 Curr issues Lang Soc 115–145, online: <<https://www.tandfonline.com/doi/abs/10.1080/13520529509615438>>; Teun A Van Dijk, “Principles of critical discourse analysis” (1993) 4:2 Discourse Soc 249–283.

developing countries, sidelines local experience and knowledge, replacing it with narratives of modernity and national progress and exacerbating ecological inequality.

Melissa Checker also describes the same phenomenon through the concept of green gentrification, in which environmental preservation rhetoric is used to improve urban spaces for the benefit of the upper middle class.¹² In Southeast Asia, green city or innovative city projects often result in the eviction of poor communities that have historically resided in the area. The policy language used to justify these actions usually emphasises efficiency, aesthetics, and order with neutral terminology, but is actually laden with highly exclusive ideological content. In this way, poor communities are constructed as obstacles to cleanliness or sources of disorder in urban planning. At the same time, ecological responsibility is shifted from socio-economic structures to the most vulnerable individuals. Eco-apartheid operates through these symbolic mechanisms, producing material and discursive power and determining who is worthy of enjoying healthy ecological space and who is not.

From a legal and human rights perspective, Elinor Buys and Bridget Lewis explain that legal language is crucial in maintaining ecological inequality.¹³ Although constitutions and various international legal instruments such as the Universal Declaration of Human Rights, the 1972 Stockholm Declaration, and the 1992 Rio Declaration guarantee the right to a clean and healthy environment, their implementation is often formalistic. In practice, the law emphasises compensation over restoration, and the concept of sustainable development usually becomes a tool of manipulation to legitimise exploitative actions. Fairclough asserts that legal and policy discourses reflect reality and produce social realities that reinforce the dominance of those in power.¹⁴ States and corporations use legal language to legitimise their power in order to engage in ecological exploitation, defining what is economically valid and what is excluded from the category of social justice.

The historical roots of eco-apartheid can also be traced back to the anthropocentric worldview criticised by Lynn White,¹⁵ which positions humans as rulers over nature. This view gave birth to the ideology of modernity, which views nature as an economic object and indigenous peoples as obstacles to progress. This view can be understood through critical discourse analysis as a form of discourse colonisation, namely the colonisation of ecological meaning through the language of development and modernisation. Global capitalism, rooted in colonialism, extends this discourse of exploitation to the worldwide

12 Melissa Checker, "Eco-apartheid and global greenwaves: African diasporic environmental justice movements" in *New Soc movements African Diaspora Challenging Glob apartheid* (Springer, 2009) 263.

13 Elinor Buys & Bridget Lewis, "Environmental protection through European and African human rights frameworks" (2022) 26:6 Int J Hum Rights 949-977, online: <<https://www.tandfonline.com/doi/full/10.1080/13642987.2021.1986011>>.

14 Isabela Fairclough & Norman Fairclough, *Political discourse analysis: A method for advanced students* (Routledge, 2013); Fairclough, *supra* note 7.

15 Lynn White, "The historical roots of our ecological crisis" in *This Sacred Earth* (Routledge, 2003) 192.

sphere, creating unequal power relations between the Global North and the Global South.¹⁶ Language such as resource utilisation, production efficiency, or green transformation is not semantically neutral, as it only serves to conceal practices of ecological exploitation that maintain dependence and subordination.

In the Global South, including Southeast Asia, concrete forms of ecological apartheid are evident in spatial planning and industrial development policies. Poor communities are often designated as locations for chemical industries, mining, and industrial waste disposal under the guise of economic growth zones.¹⁷ However, in reality, these terms ignore the reality of pollution and environmental damage that threaten the lives of local communities. When communities resist these actions, they are labelled as anti-development or irrational, a form of symbolic violence that erases the political and legal legitimacy of oppressed communities. In this sense, eco-apartheid is not only the result of economic policies but also a product of discourses that regulate the boundaries of decency, rationality, and morality in the public sphere.

In urban areas, eco-apartheid manifestation can be seen in the context of access to clean water and sanitation. Many cities in developing countries face water crises, where private companies or political elites often control limited water resources. As a result, the urban poor residing in informal settlements usually lack access to clean water and proper sanitation systems. This leads to serious health problems, such as the spread of infectious diseases and deaths from lack of clean water. On the other hand, wealthier communities living in the city's affluent neighbourhoods often have unfettered access to clean water, reinforcing social and economic inequality. In this sense, eco-apartheid places already vulnerable groups in poor living conditions and deprives them of their right to a healthy environment.

This environmental injustice is also evident in the unequal distribution of international aid in response to natural disasters and the impacts of climate change. Developed countries that pledge financial support to developing countries often do not fulfil their commitments, or the promised funds only reach a handful of political elites in recipient countries. This creates a more profound sense of injustice, where those needing assistance are marginalised from distributing resources essential to survival. The manifestation of this injustice further reinforces patterns of eco-apartheid, where vulnerable groups are systematically excluded from global decision-making and resource allocation.

A critical element in understanding manifestations of eco-apartheid is intersectionality, or the idea that different social identities such as race, class, gender, and ethnicity interact to create increasingly complex layers of injustice. In many countries, women, especially from indigenous or minority groups, experience more significant

16 Suyuti Dahlan Rifa'i et al, "Deconstructing Colonial Law Through Critical Race Theory in Indonesian Regulations" (2025) 1:1 *J Pelita Raya* 46–60.

17 Florin-Constantin Mihai et al, "Plastic pollution, waste management issues, and circular economy opportunities in rural communities" (2021) 14:1 *Sustainability* 20.

impacts from environmental injustice.¹⁸ In many cases, women are responsible for natural resource management at the household level, such as collecting water, firewood and food.¹⁹ When the environment is damaged by deforestation, pollution or climate change, women's workloads often increase, and they must travel longer distances in search of clean water or firewood. However, while they are usually the most affected by environmental degradation, women are often excluded from decision-making processes related to natural resource management.

Another manifestation of eco-apartheid can be seen in the context of environmental education. In many developing countries, access to quality environmental education is minimal, especially for communities living in rural or remote areas. Effective environmental education is essential for raising public awareness about conserving natural resources and adapting to climate change. However, due to structural injustices, many children from the most vulnerable communities do not have access to proper environmental education. As a result, they are not only cut off from knowledge that can help them face ecological challenges but also deprived of opportunities to participate in decision-making processes that affect the future of their neighbourhoods.

Eco-apartheid also manifests itself in the context of global energy policy, where the transition to renewable energy often marginalises vulnerable groups. Renewable energy industries, such as solar and wind power, require rare minerals extracted from territories inhabited by indigenous peoples or poor communities in developing countries. Mining for these materials often causes severe environmental damage, such as water and air pollution, land degradation and biodiversity loss. Local communities usually do not benefit from these energy projects but bear high social and environmental costs. This creates a new form of eco-apartheid, where the groups that need access to clean energy the most are increasingly marginalised by the very industries that are supposed to support environmental sustainability.

In the ASEAN context, eco-apartheid also manifests itself in various forms of environmental injustice experienced by vulnerable communities in member states. ASEAN countries, which cover a wide range of geographical, cultural and economic diversity, face increasing ecological challenges due to rapid urbanisation, industrialisation and climate change. The manifestation of eco-apartheid in the region reflects the intertwined dynamics of injustice between the rich and powerful and the poor and marginalised. Across ASEAN countries, indigenous communities, ethnic minorities and rural communities are often the primary victims of natural resource exploitation and environmental degradation. At the same time, elite groups maintain privileged access to a healthy environment and sustainable resources.

18 Ihyani Malik et al, "Gender Analysis in the Islamic Law-Based Ecofeminism Movement for Ecosystem Protection" (2025) 15:1 *El-Mashlahah* 101–124.

19 Sarahana Shrestha, Cortni Borgerson & Be Jean Rodolph Rasolofoniaina, "Gender roles in natural resource use in Madagascar" (2024) 20:1 *Ecosyst People* 2344850, online: <<https://www.tandfonline.com/doi/full/10.1080/26395916.2024.2344850>>.

One of the most striking examples of the manifestation of eco-apartheid in ASEAN can be found in Indonesia, particularly in the regions of Papua and Kalimantan. In Papua, the exploitation of natural resources, particularly copper and gold mines operated by multinational corporations such as PT Freeport Indonesia, has caused devastating environmental impacts for indigenous Papuans.²⁰ These mining activities cause significant damage to local ecosystems, including water pollution, soil degradation, and biodiversity loss. Indigenous communities who depend on nature for their livelihoods, such as farming and hunting, face enormous challenges as their environment continues to be destroyed. Further exacerbating the issue, indigenous peoples are often not involved in the decision-making processes related to these projects, and rarely receive economic benefits from the exploitation of natural resources on their lands. In this context, eco-apartheid in Papua is not only a matter of environmental injustice, but also involves human rights violations where indigenous peoples are deprived of their rights to the land and natural resources they have managed for centuries.

In Kalimantan, the practice of land grabbing and mass deforestation for oil palm plantations is also a clear example of eco-apartheid. Oil palm plantations in Borneo have expanded rapidly in recent decades, fuelled by global demand for palm oil.²¹ However, the expansion of these plantations is often at the expense of tropical rainforests, which are home to many endangered species and are a source of livelihood for indigenous Dayak people and other rural groups.²² In addition to land loss, local communities are also exposed to air pollution from forest burning for plantation development, which generates a hazardous haze with serious public health implications. This pollution also crosses national boundaries, creating widespread health problems in neighbouring countries such as Malaysia and Singapore. While palm oil companies and large landowners benefit significantly from this expansion, local communities lose access to the natural resources that sustain them. The eco-apartheid in Kalimantan reflects the extreme power imbalance between large corporations and indigenous communities who have little or no control over their land.

The practice of forced land grabbing in Cambodia also reflects a tangible form of eco-apartheid developing in Southeast Asia, where the relationship between economic development, political power, and social inequality is intertwined in a framework of unfair exploitation of natural resources for vulnerable and poor communities. In recent decades, various large-scale industrial and tourism development projects have drastically

20 Martha Widdi Nurfaiza, "Transnational Corporations and West Papua: A Friend or Foe for Indigenous People of This Region?" (2019) Mix Methods Cross Discip Res Towar Cultiv Eco-systemic Living 205-210, online: <https://link.springer.com/chapter/10.1007/978-3-030-04993-5_8>.

21 Denis J Murphy, Kirstie Goggin & R Russell M Paterson, "Oil palm in the 2020s and beyond: challenges and solutions" (2021) 2 CABI Agric Biosci 1-22, online: <<https://link.springer.com/article/10.1186/s43170-021-00058-3>>.

22 Mohammed Alamgir et al, "High-risk infrastructure projects pose imminent threats to forests in Indonesian Borneo" (2019) 9:1 Sci Rep 140, online: <<https://www.nature.com/articles/s41598-018-36594-8>>.

altered the living spaces of rural communities. To attract foreign investment and accelerate economic growth, the government often grants large-scale land concessions to various domestic and international companies without regard for the rights of communities that have inhabited these areas for centuries.

This process has altered land ownership structures and created a new socio-ecological hierarchy due to control over nature being concentrated in the hands of a small political and economic elite. Affected rural communities in Cambodia often experience forced eviction, with little or no compensation for the loss of their land and livelihoods.²³ In coastal areas, for example, land critical to the livelihood of traditional fishing communities has been taken over to build luxury resorts for foreign tourists. This change in land use has deprived communities of access to the sea, which was historically their primary source of economy, culture and identity. As a result, they have lost their ecological space and social and cultural position in an economic system that now prioritises international capital interests.

The ecological impact of this land grabbing is significant. Deforestation, coastal pollution, and agricultural land degradation have resulted from this massive and unsustainable transformation. The environment that previously supported the livelihoods of local communities has now been transformed into a commercial landscape that no longer supports these activities. The economic benefits of these projects are concentrated in the hands of a handful of investors and officials involved in the power network. Meanwhile, local communities bear the burden of ecological damage, loss of resources, and deepening poverty. The context of Cambodia reveals the exclusive face of neoliberal capitalism operating under the rhetoric of modernisation and economic growth.

Malaysia also faces manifestations of eco-apartheid, particularly forest exploitation and land grabbing in areas inhabited by indigenous Orang Asli communities. The forests of peninsular Malaysia, home to many indigenous communities, have been cleared for commercial purposes, including agriculture, logging and infrastructure development. Such land grabs frequently occur without consultation with indigenous communities and without the provision of compensation. Indigenous peoples living within forests have long relied on these ecosystems for the necessities of life, such as food, water, and natural medicines. However, when deforestation occurs, they are forced to vacate and lose access to these natural resources. Eco-apartheid in Malaysia demonstrates how environmental injustice directly affects indigenous communities, who often have no voice in decision-making regarding the management of their natural resources.

23 Vanessa Lamb et al, "Gendered eviction, protest and recovery: a feminist political ecology engagement with land grabbing in rural Cambodia" in *Gend Gener Southeast Asian Agrar Transform* (Routledge, 2019) 113.

Thailand also provides a clear example of eco-apartheid occurring in the form of unequal access to clean water. In rural and remote areas inhabited by ethnic minority communities, particularly in northern Thailand, access to clean water is limited.²⁴ This water crisis is exacerbated by irrigation projects and the construction of large dams primarily intended to support commercial agriculture in low-lying areas. These projects often divert water from upstream areas, leading to degraded water quality and reduced access to clean water for communities living in mountainous regions. In addition, the construction of large dams often causes flooding that destroys farmland and damages local crop systems. Communities affected by these policies usually do not receive adequate compensation or assistance from the government, reinforcing the injustice they face in accessing vital natural resources.

Vietnam, one of the fastest-growing ASEAN countries, is also facing problems related to eco-apartheid. Rapid economic growth has triggered massive urbanisation, especially in major cities such as Hanoi and Ho Chi Minh City. However, this urbanisation has also created an enormous gap between wealthier city dwellers and poorer urban communities residing in informal settlements. In these settlements, access to a healthy environment is severely limited. Accumulated waste and polluted water and air pollution are daily problems that these populations face. Meanwhile, wealthier residents in the city centre have access to better sanitation services and live in cleaner areas. The manifestation of eco-apartheid in Vietnam's major cities shows how environmental injustice can occur in the context of urbanisation, where economic disparities between different populations create stark ecological segregation.

In the Philippines, eco-apartheid is evident in the context of natural resource exploitation in the Mindanao region, where mining for gold and other minerals has caused severe environmental damage to local indigenous communities. In Mindanao, mineral-rich lands have been targeted by large domestic and international mining companies, who conduct mining operations without considering the long-term impacts on the local environment and the communities living there. Water pollution from mining waste, deforestation and soil erosion are some of the issues experienced by local communities, who often lack access to the legal mechanisms necessary to hold the responsible companies accountable. The manifestation of eco-apartheid in the Philippines shows that access to environmental justice is severely limited for socially and economically vulnerable groups, further deepening structural injustices in the country.

The above examples illustrate that eco-apartheid in the ASEAN region is a highly complex issue, where social, economic and environmental injustices are intertwined and reinforce each other. Vulnerable communities, especially indigenous peoples, ethnic minority groups, and the urban poor, continue to face enormous challenges in accessing natural resources essential for their survival. Meanwhile, more powerful political and economic elites enjoy the benefits of natural resource exploitation, often at the expense

24 Gerard Clarke, "From ethnocide to ethnodelopment? Ethnic minorities and indigenous peoples in Southeast Asia" (2001) 22:3 *Third World Q* 429–433.

of marginalized groups.

Eco-apartheid is not only a local issue, but also reflects broader global dynamics where developed countries and multinational corporations exploit natural resources in developing countries without considering the environmental and social impacts on local communities. Addressing eco-apartheid in ASEAN, therefore, requires a holistic approach, which not only focuses on mitigating environmental impacts but also ensures that the most affected groups are actively involved in decision-making regarding natural resource management and sustainable development.

Many governments in ASEAN countries are caught in a dilemma between economic growth and environmental conservation. On the one hand, they want to encourage foreign investment and accelerate development. On the other hand, these policies often ignore the long-term impacts on the environment and local communities. In this context, eco-apartheid is maintained by economic and political structures that prioritise short-term gains over the sustainable well-being of communities. Policies often focus on resource exploitation to boost economic growth, particularly in mining, forestry and commercial plantations.

In some ASEAN countries, governments actively promote large infrastructure projects including the construction of highways, dams and hydropower plants that directly impact the environment and local communities. In Laos, for example, the construction of dams for hydropower generation on the Mekong River has created severe environmental problems.²⁵ Not only do these dams disrupt river ecosystems that are the lifeblood of thousands of local fishermen, but they also cause flooding that damages farmland and settlements. For many local communities who depend on the Mekong River as a primary source of water and food, these projects have exacerbated environmental and social injustices, as they are forced to leave their lands without adequate compensation or the opportunity to be involved in decision-making processes.

Another example of eco-apartheid in ASEAN can be seen in Myanmar, where the management of natural resources by the state and foreign corporations has created a vast disparity between the ruling political elite and indigenous communities living in rural and remote areas. Resource exploitation in northern Myanmar, particularly in the gemstone- and mineral-rich Kachin region, has led to severe environmental damage and the marginalisation of local communities.

Jade mining, for example, has led to soil degradation, deforestation, and water pollution, which directly impacts the health and well-being of communities living around mine sites. In addition, protracted armed conflicts between local ethnic groups and the Myanmar military are often linked to the struggle for control over these natural resources, creating an ongoing cycle of injustice and violence.²⁶ In these situations, eco-apartheid not

25 Pham Ngoc Bao, Bijon Kumar Mitra & Tetsuo Kuyama, “Integrated approach for sustainable hydropower development in the Mekong River basin” (2017) 7 Environ Nat Resour Res 60.

26 Anthony Ware & Costas Laoutides, “Myanmar’s ‘Rohingya’ conflict: Misconceptions and complexity”

only takes the form of environmental injustice but is also linked to political and ethnic marginalisation that exacerbates people's vulnerability to environmental degradation.

This issue is seen in the inequitable distribution of urban space and access to a healthy environment in rapidly urbanising countries like the Philippines and Indonesia. In large cities like Jakarta, for example, regular flooding due to poor drainage and inadequate water management disproportionately affects the poorer sections of society residing in informal settlements. While affluent neighbourhoods in these big cities are usually protected by better infrastructure, poor communities living along riverbanks or flood-prone areas do not have the same protection. In this case, eco-apartheid manifests itself in the form of segregation of urban space, where those with economic and political power benefit from greater protection against environmental risks, while marginalized populations disproportionately bear the consequences of inadequate urban infrastructure and environmental governance.

The issue of air pollution in major ASEAN cities is also part of the eco-apartheid phenomenon. In cities such as Bangkok, Manila, and Kuala Lumpur, high levels of air pollution are primarily caused by motor vehicle emissions, industry, and waste burning.²⁷ Low-income populations living in suburbs or industrial areas directly exposed to this pollution often experience serious health problems, such as respiratory diseases, yet seldom have access to adequate healthcare services. On the other hand, wealthier groups can live in greener, cleaner neighbourhoods with access to quality healthcare. This illustrates how inequities in health and well-being, shaped by unequal access to a healthy environment, reflect broader patterns of social inequality.

Various efforts have been made to address this issue at the ASEAN level, such as the ASEAN Agreement on Transboundary Haze Pollution, which aims to tackle transboundary haze pollution caused by forest and land fires. However, its effectiveness has been minimal due to weak law enforcement mechanisms and a lack of commitment from the political elites of member countries. Economic competition among ASEAN countries often creates a dilemma between economic growth and environmental protection. Countries such as Indonesia, Malaysia and Thailand prioritise foreign investment and resource-based exports over sustainable ecological management. This reflects the development paradox in Southeast Asia, where regional economic integration has outpaced environmental and social policy integration.

(2019) 50:1 *Asian Aff (Lond)* 60–79.

27 Siti Haslina Mohd Shafie & Mastura Mahmud, "Urban air pollutant from motor vehicle emissions in Kuala Lumpur, Malaysia" (2020) 20:12 *Aerosol Air Qual Res* 2793–2804; Daiju Narita et al, "Pollution characteristics and policy actions on fine particulate matter in a growing Asian economy: The case of Bangkok Metropolitan Region" (2019) 10:5 *Atmosphere (Basel)* 227; Simona Kecorius et al, "Aerosol particle mixing state, refractory particle number size distributions and emission factors in a polluted urban environment: Case study of Metro Manila, Philippines" (2017) 170 *Atmos Environ* 169–183.

Eco-apartheid in the ASEAN region cannot be viewed solely as an environmental issue, but also as an urgent human rights issue. Inequality of access to a clean and healthy environment reveals the structural discrimination experienced by certain community groups based on their social, political, ethnic, and economic status. While the affluent enjoy the benefits of natural resource exploitation, poor communities and indigenous peoples bear the ecological burden of air, water and soil pollution and the loss of healthy living spaces. Therefore, environmental law enforcement and justice must be understood as an integral part of the struggle for human rights and substantive democracy in the region.

III. THE IMPACT OF ECO-APARTHEID ON HUMAN RIGHTS

Environmental injustice, or eco-apartheid in Southeast Asia, is a multidimensional phenomenon that reveals the close relationship between natural resource exploitation, social marginalisation, and human rights violations. This phenomenon exposes inequalities in access to ecological resources and shows how development policies oriented towards economic growth perpetuate structural poverty and social injustice in various ASEAN member countries.

Access to a clean, healthy, and sustainable environment is considered a prerequisite for the rights to life, health, and welfare, as implicitly stated in Article 25 of the Universal Declaration of Human Rights (UDHR) and explicitly recognised in several international instruments such as the International Covenant on Economic, Social and Cultural Rights (ICESCR). However, in practice, these rights are often ignored by countries in the region that are trapped in an exploitative and unsustainable development paradigm for the sake of economic growth.

Highly exploitative development models in many ASEAN countries, including Indonesia, the Philippines, Cambodia, and Vietnam, are the leading causes of violations of the right to a clean and healthy environment. Nickel, copper and gold mining, driven by foreign investment in rural areas, is often carried out without regard for ecological sustainability and without involving indigenous peoples in the decision-making process.²⁸ As a result, water and air pollution have damaged ecosystems and destroyed the livelihoods of communities that depend on agriculture and fisheries.

28 Nur Insani & Suud Sarim Karimullah, "Justice for Nature: Integrating Environmental Concerns into Legal Systems for Adequate Environmental Protection" (2023) 12:1 J Huk dan Peradil 129-158.

Various cases in Sulawesi and Mindanao show how mining waste pollutes rivers, causing a decline in drinking water quality and crop yields.²⁹ Poor communities bear a heavier economic burden because they are forced to buy clean water and necessities at relatively high prices. This situation shows how poverty and environmental degradation reinforce each other in a cycle of ecological injustice for poor and indigenous communities.

In urban areas, eco-apartheid creates segregation between socio-economic classes. Major cities such as Jakarta, Manila, and Bangkok are spaces of contrast between affluent neighbourhoods with access to healthy environments and modern infrastructure, and poor communities situated on the banks of polluted rivers or in areas prone to natural disasters. Air pollution from motor vehicles and labour-intensive industrial factories exacerbates the health of low-income communities, who lack access to adequate and appropriate health facilities.

As respiratory illnesses and medical costs rise, poor communities lose their productive capacity, worsening their economic conditions and deepening chronic social inequality. In this context, eco-apartheid is not only a physical phenomenon but also a manifestation of structural injustice rooted in the global capitalist economic system.

Most rural communities in Laos, Myanmar, and Cambodia continue to struggle to obtain safe drinking water. When natural water sources are polluted by industrial or intensive agricultural waste, communities have no choice but to buy expensive water or use polluted water, which threatens their health. The long-term impact is an increase in waterborne diseases such as diarrhea, dysentery, and cholera. This situation demonstrates how violating various rights to a clean and healthy environment directly affects the rights to health, education, and work recognised in international legal instruments.

Ecological injustice also erodes the right to food, guaranteed in Article 11 of the ICESCR. Extreme climate change, which has caused droughts in southern Vietnam and annual flooding in the Mekong Delta, has destroyed the livelihoods of local farming communities. Farmers who do not have the funds to invest in environmentally friendly technologies ultimately lose their source of income and fall into poverty.³⁰ In Indonesia and Thailand, the expansion of oil palm and rubber plantations has exacerbated deforestation, threatened biodiversity, and caused agrarian conflicts that often result in the criminalisation of indigenous peoples. Within the framework of human rights law, denial of access to land, water, and clean air violates economic rights. It denies the

29 Angelo Mark P Walag, Oliva P Canencia & Beth Ann Fiedler, "Water Quality: Mindanao Island of the Philippines" (2018) Transl Natl policy to Improv Environ Cond impacting public Heal through community Plan 219-253, online: <https://link.springer.com/chapter/10.1007/978-3-319-75361-4_12>.

30 Jules N Pretty, James I L Morison & Rachel E Hine, "Reducing food poverty by increasing agricultural sustainability in developing countries" (2003) 95:1 Agric Ecosyst Environ 220-224.

existential right of humans as ecological beings who depend on nature for survival.

Eco-apartheid deepens social and political inequality because the distribution of environmental risk is never class-neutral. The wealthy can protect themselves through technology, policies, and access to green spaces, while the poor must bear the brunt of ecological disasters without adequate protection. When floods hit Jakarta or Bangkok, affluent neighbourhoods are usually safe because they are protected by modern infrastructure, while informal settlements are submerged for weeks without assistance. This shows how state policies often prioritise specific economic and political interests, while the principles of social justice enshrined in constitutions and international legal instruments are consistently ignored. This unfair distribution of ecological burdens makes poverty not only a consequence of economic inequality, but also a direct consequence of environmental injustice institutionalised in the development system.

The issue of climate displacement, fuelled by climate change and environmental degradation, is also one of the severe impacts of eco-apartheid on human rights. Millions of people are forced to leave their homes and seek refuge elsewhere when their neighbourhoods become uninhabitable due to rising sea levels, extreme droughts, or increasingly frequent storms. These climate refugees often face discrimination and exclusion when seeking housing or resettlement opportunities in other countries. Strict immigration policies in many developed countries exacerbate this situation, creating a humanitarian crisis where climate refugees are left without safe options. In this context, their right to international protection and secure shelter is often ignored, and they live in precarious conditions.

The development of legal regulations in the ASEAN region related to the environment and human rights shows the varied efforts of each member state in addressing the impacts of eco-apartheid. While some countries have adopted laws and policies to protect the environment and the rights of affected communities, their implementation still faces many obstacles. There is a significant disparity in enforcement capacity within the ASEAN region between countries with solid legal infrastructure and those still struggling to implement environmental protections effectively.

One example of an ASEAN law relevant to the context of eco-apartheid is Malaysia's Environmental Quality Act 1974, which forms the primary basis of the country's environmental policy. The act aims to control and regulate environmental pollution in Malaysia, including air, water and land pollution. However, although Malaysia has a relatively robust legal framework for environmental issues, enforcement remains a challenge. Pollution cases involving large companies, especially in the mining and oil palm plantation sectors, often go unpunished. As a result, affected communities, especially those living in rural areas or comprising indigenous peoples, continue to face the risk of pollution that damages their health and deprives them of their right to a healthy environment.

In the Philippines, The Philippine Clean Air Act of 1999 and The Philippine Clean Water Act of 2004 are essential laws in the country's efforts to address air and water pollution issues.³¹ Both laws provide a legal framework to protect the environment from the impacts of industrial pollution and urbanisation. However, as in Malaysia, a key challenge is inconsistent enforcement, especially when the perpetrators of pollution are large corporations with political and economic clout. In many areas of the Philippines, local communities around industrial areas face severe air and water pollution problems, but their access to environmental justice is limited. Companies involved in pollution often escape legal liability, while local communities bear the brunt of ecological damage without proper compensation.

Indonesia, a country with a large geographical area and abundant biodiversity, also faces significant challenges in environmental law enforcement. Law No. 32/2009 on Environmental Protection and Management is the main instrument used to regulate environmental issues in Indonesia.³² The law covers the protection of natural resources, pollution management, and law enforcement against environmental offences. However, the implementation of this law is often constrained by powerful economic interests, especially in the plantation and mining sectors. In areas such as Kalimantan and Sumatra, the destruction of forests for oil palm plantations and coal mines has caused tremendous environmental damage and created tensions between indigenous communities and the multinational companies that control the land. Eco-apartheid in Indonesia can be observed in disparities in access to natural resources, with Indigenous communities often losing their land without proper compensation. At the same time, large corporations continue to profit from resource exploitation.

Thailand has a relatively more established legal approach to environmental protection through the Enhancement and Conservation of National Environmental Quality Act 1992.³³ This act provides a comprehensive legal framework to protect environmental quality in Thailand, including regulations related to pollution and the conservation of natural resources. However, the main challenge in Thailand lies in the conflict between environmental policy and economic development interests, especially in the context of rapid industrialisation and urbanisation.

In areas such as the border regions of Myanmar and Cambodia, land grabs for large-scale infrastructure and agricultural development projects often lead to forced evictions of local communities, violating their right to adequate housing. In addition, industrial pollution in urban areas such as Bangkok creates inequities in access to clean air and a healthy environment, with poor communities living in informal settlements facing greater

31 Walag, Canencia & Fiedler, *supra* note 29.

32 Hery Agus Susanto & Daniel Susilo, "Legal Supervision And Enforcement In Environmental Law Under The Law Number 32 Year 2009 On Environmental And Protection Management" (2017) 10:1 *Yurisdiksi J Wacana Huk dan Sains* 11-14.

33 Suvaluck Satumanatpan et al, "Enhancing management effectiveness of environmental protected areas, Thailand" (2014) 89 *Ocean Coast Manag* 1-10, online: <<https://www.sciencedirect.com/science/article/abs/pii/S0964569113003037>>.

exposure to pollution than residents living in more affluent areas.

Although it has experienced rapid economic growth in recent decades, Vietnam faces significant challenges in protecting environment and human rights. The Law on Environmental Protection issued in 2014 introduced various measures to improve environmental quality, but a lack of resources and corruption often limits implementation. In some rural areas, the construction of large infrastructure projects such as dams and hydropower plants usually leads to forced evictions and loss of access to natural resources for local communities.³⁴ Eco-apartheid in Vietnam is evident in the disparity between communities with access to resources and government support and marginalised communities who continue to be disadvantaged by non-inclusive development policies.

Myanmar, a country undergoing a difficult political transition, also faces significant problems related to environmental degradation and human rights. The National Environmental Policy published in 2019 is a first step towards establishing an environmental legal framework in the country. However, ongoing armed conflict in many parts of Myanmar, particularly in the Kachin and Shan regions, exacerbate existing ecological injustices. Local communities in areas with an abundance of natural resources such as gemstones, gold and tin are often caught between the military's and multinational corporations' interests. These conflicts cause severe environmental damage but also serious violations of human rights, including the rights to health, housing, and participation in decision-making regarding their natural resources.

In Laos, the legal framework for environmental protection is relatively new and underdeveloped. The Environmental Protection Law issued in 2013 attempts to manage the negative impacts of significant infrastructure developments, particularly dams and hydropower projects, that are top priorities for the government. However, these projects are often implemented with little consideration for the rights of affected local communities. Forced evictions and relocation of people living around project sites are usually carried out without adequate compensation or support for socio-economic integration in their new place.³⁵ In addition, the environmental impacts of these projects, such as damage to the Mekong River ecosystem, affect thousands of people who depend on the river for their livelihoods, exacerbating environmental injustice and creating a new form of eco-apartheid.

The case of Cambodia, which faces significant problems related to land grabbing, also demonstrates how weak enforcement of environmental laws can exacerbate human rights violations. The Land Law 2001 and the Environmental Protection and Natural

34 Khin Nilar Swe et al, "Floods, Land Loss, and Gendered Vulnerability: Assessing the Social Impacts of Small Hydropower in Vietnam" (2025) Environ Dev 101312, online: <<https://www.sciencedirect.com/science/article/pii/S2211464525001782>>.

35 Saleh Ahmed & Paige Liquin, "Socio-ecological challenges of hydroelectric dams among ethnic minorities in northern Laos" (2023) 46 Environ Dev 100864, online: <<https://www.sciencedirect.com/science/article/abs/pii/S2211464523000647>>.

Resource Management Law 1996 are two important laws governing environmental issues and land rights in Cambodia.³⁶ However, land grabs involving powerful economic and political actors have caused thousands of families to lose access to the land and natural resources they depend on. Development projects funded by foreign investment often ignore the rights of local communities, and existing legal mechanisms do not provide adequate protection against forced evictions and land grabbing. Eco-apartheid in Cambodia is evident in the inability of the rural poor to resist large economic forces that exploit natural resources without considering the long-term impact on the environment and their lives.

Regionally, ASEAN has taken steps to address some environmental issues through collective frameworks, such as the ASEAN Agreement on Transboundary Haze Pollution, which was agreed upon in 2002. This agreement was a response to the problem of haze caused by forest and land burning in some member states, particularly Indonesia, which often affected neighbouring countries such as Malaysia, Singapore and Thailand. While the agreement demonstrates good intentions to address transboundary pollution issues, its implementation has been hampered by the lack of a robust enforcement mechanism and varying political commitment among member states. Haze pollution remains a severe problem that reflects eco-apartheid on a regional scale, where local communities living around the affected areas suffer more than more affluent groups in urban areas.

Legal regulations in the ASEAN region related to the environment and human rights show that despite significant efforts to protect the environment, many countries still face considerable challenges in implementation. Eco-apartheid continues as a result of weak law enforcement, powerful economic interests, and the inability of governments to engage local communities in decision-making that affects their environment. To address these issues, ASEAN countries must increase their commitment to fair law enforcement, strengthen environmental dispute resolution mechanisms, and ensure sustainable environmental policies fully protect the rights of affected communities.

IV. STRATEGIES FOR OVERCOMING ECO-APARTHEID

Addressing eco-apartheid through a human rights approach is an international legal obligation that requires states and corporations to comply with the principle of *jus cogens*.³⁷ In the current modern legal structure, human rights cannot be understood separately from environmental issues, but rather as rights inherent to the survival of humans and ecosystems. This view aligns with developments in international law following the Stockholm Declaration on the Human Environment (1972) and the Rio

36 Thanakvaro Thyl De Lopez, "Natural resource exploitation in Cambodia: An examination of use, appropriation, and exclusion" (2002) 11:4 *J Environ Dev* 355–379.

37 Carmen G Gonzalez, "Environmental justice and international environmental law" in *Routledge Handb Int Environ law* (Routledge, 2012) 107.

Declaration on Environment and Development (1992), which emphasise that the right to a healthy environment is a prerequisite for realising other fundamental rights.

Excessive exploitation that causes environmental damage, resulting in social, economic and health suffering, is not only an ecological problem, but also a systematic violation of human rights as stipulated in the Universal Declaration of Human Rights (UDHR, 1948) and the International Covenant on Economic, Social and Cultural Rights (ICESCR, 1966), particularly Articles 11 and 12, which guarantee the right to an adequate standard of living and the highest attainable standard of health. Normatively, the principle of non-discrimination, which is a fundamental principle of international human rights law, provides a strong legal basis for opposing the practice of eco-apartheid.

Article 2 of the UDHR and Article 2 of the ICCPR explicitly affirm that everyone is entitled to all rights and freedoms without discrimination, including based on social status, race, or economic condition. However, the practice of eco-apartheid shows how environmental discrimination occurs systematically against poor communities, indigenous peoples, or minority groups who are often the targets of development policies that positions them in areas at high risk of industrial pollution and climate change.

The principle of environmental justice, which developed from the human rights movement in the United States, has now gained legal legitimacy in international forums through the UN Special Rapporteur on Human Rights and the Environment, who states that ecological inequality is a new form of discrimination that violates the principles of international law. This ecological discrimination disregards the individual's right to live in a healthy and clean environment. It negates the principle of substantive equality, which recognises different socio-economic conditions and demands affirmative action to achieve true justice.

The right to participate in environmental decision-making is a fundamental right fully guaranteed by international law. The Aarhus Convention (1998) explicitly recognises three procedural ecological rights, namely access to information, public participation in decision-making, and access to justice, all rooted in the principle of participatory democracy.³⁸ A state can be said to have failed if it does not provide transparent and inclusive mechanisms for environmental management and violates its legal obligations under Article 25 of the ICCPR regarding the right to participate in public governance.

In the context of eco-apartheid, the neglect of the participation of affected communities results in double victimisation, which not only deprives them of their right to a healthy and decent environment, but also their right to determine the direction of development that affects the survival of the entire community. Therefore, participation is not only a form of administrative legitimacy, but also a manifestation of the right to

³⁸ Marjan Peeters, "Judicial Enforcement of Environmental Democracy: a Critical Analysis of Case Law on Access to Environmental Information in the European Union" (2020) 4:1 Chinese J Environ Law 13–43.

self-determination, as guaranteed in Article 1 of the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR). The principle of access to justice is a fundamental element in ensuring the effectiveness of human rights protection in the environmental sphere. Without fair, independent, transparent and accountable legal mechanisms, any claims of ecological violations will end in impunity.

In some countries, structural barriers such as litigation costs, corruption, and low legal capacity of communities mean that environmental violations are never processed fairly and judiciously.³⁹ Based on the United Nations Basic Principles and Guidelines on the Right to Remedy and Reparation for Victims of Gross Violations of International Human Rights Law (2005), states have an obligation to ensure that every victim of human rights violations has the right to an effective remedy, including reparation, compensation, and restitution. In the context of eco-apartheid, access to justice does not only mean providing financial compensation, but also restoring communities' rights to land, water, and resources that have been taken away. This mechanism can be realised by establishing environmental courts, ecological ombudsmen, or independent institutions with binding authority to enforce ecological justice substantially.

A human rights-based approach to eco-apartheid is not only reactive to violations that have already occurred, but also transformative to the legal and political structures that perpetuate ecological inequality. This approach links the principles of law, sustainability, and social justice within a comprehensive legal ethics framework. Through the integration of human rights and environmental law, the development paradigm shifts from anthropocentric to ecocentric, a perspective that affirms that the protection of human dignity cannot be achieved without protecting the earth as the typical home of all humankind. From this perspective, eco-apartheid is understood not only as a legal violation against individuals but also as a form of collective crime against humanity.

To create such a paradigm, legal and policy mechanisms at the regional level, such as those implemented in ASEAN countries, must be geared towards strengthening the integration of human rights and environmental protection.⁴⁰ However, the effectiveness of legal systems in the ASEAN region still varies. Some countries, such as Malaysia with its Environmental Quality Act and the Philippines with its Clean Air Act and Clean Water Act, already have strong legal instruments. However, the implementation of these laws and regulations is often ineffective due to weak law enforcement.

Weak law enforcement is caused by the influence of political and economic elites and large corporations, which can efficiently manipulate policies to avoid responsibility for the environmental damage they cause. As a result, the principles of ecological justice and the protection of human rights are often neglected in favour of short-term economic

39 John E Bonine, "Removing Barriers to Justice in Environmental Litigation" (2021) 1 Rutgers Int'l L Hum Rts J 100.

40 Suyahman Suyahman, Suud Sarim Karimullah & Muh Akbar Fhad Syahril, "Intersectionality in Social Justice: Unpacking the Complexity of Oppression" (2025) 7:1 Jambura Law Rev 275-308.

development interests. Therefore, structural legal reform is essential to ensure that human rights and ecological justice principles are fully integrated into public policy and the national legal system.

These reforms should include increasing the capacity of law enforcement agencies to ensure that they can effectively enforce environmental laws. In addition, improvements are needed in ecological grievance and dispute resolution mechanisms so that affected communities can more easily access justice. The government should also enact more inclusive policies where the rights of marginalised communities are specifically recognised and protected in environmental laws. For example, laws protecting indigenous peoples' rights to land and natural resources should be strengthened to prevent arbitrary land grabs by companies seeking to exploit natural resources.

V. CONCLUSION

Eco-apartheid is a form of environmental injustice rooted in structural inequalities in the economic, social, political, legal and cultural spheres, which directly violate various fundamental principles of human rights. In the context of international law, the right to a decent, clean and healthy environment has been recognised as an integral part of human rights, as stated in UN General Assembly Resolution No. 76/300 of 2022 and various other human rights instruments such as the 1972 Stockholm Declaration and the 1992 Rio Declaration. However, in several developing countries in the ASEAN region, marginalised communities are victims of natural resource exploitation and exclusive development policies, which exacerbate violations of fundamental human rights such as clean water, clean air, and public participation in environmental decision-making. Weak ecological law enforcement, overlapping regulations, and the significant dominance of corporate interests reveal an imbalance of power that leads to the legal marginalisation of the most affected communities.

To overcome eco-apartheid, a new legal paradigm is needed that places the environment as a subject of human rights protection, not merely an object of development. States have an international legal obligation to protect, respect, and fulfil the right to a healthy environment per the principle of due diligence in human rights law and the principle of precaution in international environmental law. Policy reforms must strengthen national legal instruments, increase transparency, and guarantee access to justice for victims of environmental damage. Sustainable solutions such as renewable energy, ecological agriculture, and accountable resource management must be implemented alongside protections for environmental defenders as part of the state's obligation to guarantee freedom of expression and public participation. By complying with the law and various principles of ecological justice, eco-apartheid can be eliminated, and every community can be assured the same right to live in a decent, clean, safe and sustainable environment as a concrete manifestation of human dignity.

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