

The Role of Social Studies Learning in Developing Ecocentrism Attitudes of JHS Students in Pontianak

Riama Al Hidayah^{1*}, Enok Maryani ¹, Dadang Sundawa¹, Neiny Ratmaningsih¹

¹Universitas Pendidikan Indonesia, Bandung

riama@upi.edu, enokmaryani@upi.edu, dadangsundawa@upi.edu, neiny@upi.edu

corresponding author: riama@upi.edu

ABSTRACT

This study investigates the integration of ecocentrism into the social studies curriculum at SMPN 1 Pontianak City, highlighting the critical role of education in fostering students' environmental awareness. The backdrop of increasing environmental crises, driven by anthropocentric perspectives, necessitates a shift towards ecocentric values that recognize the intrinsic worth of all life forms. Employing a qualitative methodology, including literature reviews and in-depth interviews with educators and students, the research reveals that students exhibit significant environmental consciousness, as evidenced by their proactive efforts to maintain cleanliness and ecological balance in the school environment. Findings indicate that the school's educational approach effectively instils ecocentric principles, promoting a holistic understanding of human-nature interdependence. Furthermore, the curriculum's emphasis on environmental issues cultivates positive attitudes towards sustainability, suggesting that social studies education can serve as a powerful tool for nurturing responsible future citizens. The implications of this research underscore the necessity for educational institutions to prioritise ecological ethics, thereby contributing to the broader discourse on sustainable development and environmental stewardship.

Keywords: *ecocentrism, ecological ethics, environmental awareness, social studies*

Submitted	Accepted	Published
04 December 2025	21 January 2026	30 January 2026

Citation	:	Al Hidayah, R., Maryani, E., Sundawa, D., & Ratmaningsih, N. (2026). The Role of Social Studies Learning in Developing Ecocentrism Attitudes of JHS Students in Pontianak. <i>Jurnal PAJAR (Pendidikan dan Pengajaran)</i> , 10(1), 74-84. DOI: http://dx.doi.org/10.33578/pjr.v10i1.403 .
----------	---	---

INTRODUCTION

Nowadays, we often see many natural disasters caused by human activities, such as landslides, floods, air pollution, and forest fires. This cannot be separated from the attitude of humans, who are increasingly indifferent to environmental conditions that are actually important and must be maintained. Today's global environmental crisis stems from fundamental philosophical errors in human understanding of themselves, nature, and the place of humans within the entire ecosystem. In turn, this mistaken perspective gives rise to harmful behaviour towards nature. Humans mistakenly view nature and mistakenly place themselves in the context of the universe as a whole. This is the beginning of all the environmental disasters we are experiencing today.

Naess (in Sukarna, 2021) explaining three fundamental theories that occur in human interaction with the natural environment, namely: 1) Anthropocentric theory, is a theory that views humans as the center of the natural system, where humans and their interests are considered the most decisive in the order of ecosystems and in the policies taken in relation to nature, either directly or indirectly. The highest value is humans, and only humans have value and receive attention. 2) The theory of Biocentrism is a theory that is based on the morality of the nobility of life, either in humans or in other creatures. Consequently, the universe is a moral community in which every life, both human and nonhuman, has equal moral value. Therefore, the life of any creature deserves serious consideration in every moral decision and action, regardless of whether it is of value to man or not. 3) The theory of Ecocentrism is a continuation of the biocentric theory of environmental ethics. In moral and philosophical debates, different worldviews determine how we assign value to human and nonhuman entities. Anthropocentrism places humans at the centre of moral concern,

viewing the natural world primarily as a resource for human benefit. This paradigm has dominated Western thought since the modern era, projecting humanity as the primary agent of value and moral reasoning. By contrast, ecocentrism expands moral consideration to ecosystems as a whole, emphasising the intrinsic worth of all living and nonliving components of nature (Frantz et al., 2025). Washington et al. (2024) added that ecocentrism is an important path to achieving ecological justice and social justice in environmental conservation. Moral support for the entire ecological system aligns with ecocentric principles.

Today's environmental crisis can be overcome by shifting from an anthropocentric human perspective and behaviour to an ecological perspective (Naess in Ohoiwutun, 2022). In the context of environmental management, the mistake of a human perspective that considers itself not part of nature or the entire ecosystem leads humans to fail to realise that ecological damage resulting from environmental management overly dependent on human interests (anthropocentric) ultimately affects humans themselves. Environmental crises are often attributed to human behaviour influenced by anthropocentric philosophical perspectives or values. The pattern of behaviour that is exploitative, destructive, and indifferent to nature is considered rooted in a perspective that attaches only importance to human interests and fails to consider the future impact on the environment.

Indonesian forests are often called the lungs of the world, as they contribute oxygen for the survival of living things, absorb carbon dioxide, a harmful gas, and produce oxygen gas needed by humans (Shafitri et al., 2018). Forests are natural resources that play an important role in life, both economically, socially, culturally, and environmentally (Widodo & Sidik, 2020). The most important environmental problems that emerged were identified as five, including land damage from deforestation and land-use changes for plantations (Akhmaddhian, 2016). In Indonesia, deforestation and land-use changes for plantations are driven mainly by large-scale oil palm plantation clearings. The palm oil industry plays a role in the largest foreign exchange producer in Indonesia, which can absorb a large number of workers, so that the area of oil palm plantations continues to increase significantly (Purba & Sipayung, 2017). Oil palm plantations play a strategic role in supporting the national economy, but they also have negative impacts that can cause environmental damage and social conflicts (Ngadi & Noveria, 2018). It is estimated that 57% of deforestation in Indonesia is caused by land conversion to oil palm plantations (Ariana in Wahyuni & Suranto, 2021).

When discussing the environment and population, Joshua Goldstein pointed out problems with the concept of Sustainable Development, which sees economic growth as the primary focus, with environmental sustainability pursued to ensure that growth can be sustained (Pevehouse & Goldstein, 2016). To maintain the environment, it can be pursued through various activities carried out by educational institutions, the community, and individuals, both personally and socially, as well as institutionally. The involvement of educational institutions in being pioneers in maintaining, preserving, and even developing the environment into a green, clean, beautiful, fertile, productive, and helpful environment. In line with the integration formulated by the Ministry of Education and Culture, Sapriya (2017) reveals how important social studies are for preparing for global education. The global education in question covers various issues, such as (1) ecological systems, (2) technology, (3) environmental issues, and (4) development issues. In particular, the focus on environmental issues concerns the consequences of human exploitation of natural resources, the rapid growth of the world's population, and consumerism, which have led to a global ecological crisis. Problems and issues require solutions realized by the community. All of them can transcend regional boundaries and are expected to give rise to a common concern. The use of the physical or non-physical environment in social studies is an important agenda that must be realized as the primary step in students' response to the ecological crisis. Therefore, social studies learning should not forget the environment and society as its objects. Ecology in the social environment studies specifically how they interact in the environment.

Understanding the balance between human interaction with their natural environment, which produces ecological wisdom and gives rise to the understanding of ecocentrism within the view of *Deep Ecology* (DE). Deep ecology appears to be a form of spiritual experience linked to profound sensations in

nature. Its proponents seek an emotional connection with nature, which can lead to feelings of awe or excitement (Guczalska, 2023). Ecocentrism focuses more on ecosystem balance, energy flow, and the processes taking place within them. It does not emphasize personal experience or spiritual aspects. Compared with ecocentrism, deep ecology seems to offer a more inspiring proposition (and thus perhaps more appealing). Basically, the ecocentric view argues that ecosystems are important not only for the benefits they provide to humans and other animals, but also for their own sake. In other words, ecocentrism rejects anthropocentrism, or the idea that all values are linked to human interests. Ecocentrism offers a framework for reimagining humanity's relationship with nature that promotes ecological balance, biodiversity conservation, and long-term sustainability. By recognizing the intrinsic value of nonhuman entities, ecocentrism advocates environmental practices that protect ecosystems for their own sake, rather than for their potential utility to humans (Namita Kalita & Jigyasa Barsha, 2024).

METHOD

This study was conducted at SMPN (Public Junior High School) 1, located in Pontianak City, West Kalimantan. This research employs a qualitative approach to obtain a deep, comprehensive understanding of the phenomenon under study. The qualitative approach was chosen because it aims to provide a comprehensive understanding of social phenomena by relying on data obtained through observation, interviews, and documentation in natural settings (Sugiyono, 2019). The data collection techniques in this study include literature studies, observations, and in-depth interviews. Literature reviews examine relevant scientific sources, such as journal articles, academic books, research reports, and education policy documents, related to the research focus. Zed (as cited in Sofiah et al. 2020) asserts that literature study encompasses a series of research activities focused on the methodology of gathering literary data, followed by reading, recording, and processing the research materials.

Furthermore, observations were conducted directly in the SMPN 1 Pontianak environment to obtain a clear picture of the conditions, activities, and interactions that occurred. In qualitative research, observation is used to obtain data in the subject's natural environment. As stated by Mehrad et al. (2024), non-intrusive observations in qualitative research allow researchers to capture nuances of behaviour that are not evident in interviews alone.

The in-depth interview technique is the primary method for extracting primary data. Interviews are conducted in a semi-structured manner to teachers, students, and vice principals as key informants. Teachers were interviewed to gather information on social studies learning practices and their views on ecocentrism. Interviews with students aimed to explore their social studies learning experiences, perceptions, and responses regarding ecocentrism. Meanwhile, the vice principal was interviewed to obtain a policy perspective on ecocentrism. Data analysis is carried out qualitatively through the stages of data reduction, data presentation, and conclusion drawing. To ensure the validity of the data, this study uses the triangulation technique of sources and methods, namely by comparing data obtained from various informants and data collection techniques. Data analysis is carried out qualitatively through the stages of data reduction, data presentation, and conclusion drawing. Data from interviews and observations were analyzed thematically by identifying relevant patterns, categories, and themes. To ensure the validity of the data, this study uses the triangulation technique of sources and methods, namely by comparing data obtained from various informants and data collection techniques. The data collection process continues until the information obtained shows a recurring pattern and no new themes emerge. In this study, data saturation was achieved after interviewing 12 students with diverse characteristics. In addition to students, supporting informants include teachers and school vice principals to strengthen the triangulation of sources.

RESULTS AND DISCUSSION

Environmental Damage

The environment serves as the primary foundation supporting human life, providing essential ecosystem services such as clean air, fresh water, fertile soil, and climate regulation. However, over the past few decades, pressure on natural systems has intensified significantly due to increasingly excessive and unsustainable human activities. Economic development models that prioritize rapid growth and resource exploitation have led to widespread environmental degradation, placing a severe strain on ecological balance. Forest destruction, water pollution, rising carbon emissions, and soil degradation have emerged as critical environmental issues that directly threaten ecosystem sustainability. Large-scale deforestation has reduced biodiversity, disrupted wildlife habitats, and weakened forests' capacity to act as carbon sinks. At the same time, industrial waste, agricultural runoff, and domestic pollution have severely contaminated rivers and water bodies, compromising water quality and endangering both aquatic ecosystems and human health. The continuous increase in carbon emissions from energy consumption, transportation, and land-use change has further accelerated climate change, while declining soil quality caused by intensive land use and chemical inputs has reduced agricultural productivity and ecosystem resilience.

According to various national and international reports, Indonesia is among the countries experiencing the highest rates of environmental degradation globally. This condition reflects not only the scale of resource exploitation but also structural challenges in environmental governance, including weak enforcement of regulations and limited public environmental awareness. If left unaddressed, these interconnected environmental problems will continue to undermine ecological stability and threaten the long-term sustainability of human life and natural systems in Indonesia. The following is environmental damage data based on the Ministry of Environment and Forestry in 2024

Table 1. Environmental Damage Data in Indonesia (Environment Indonesia Center, 2025)

Damage Indicator	Data / Quantity	Units / Description
Annual net deforestation	~175.400	Hectare
Total forest area	95.5 million	Hectares
Forests lost since 2000	>9 million	Hectare
Polluted rivers	>60% of large rivers	Medium-Heavy Polluted Range

Environmental damage in Indonesia is complex and multidimensional, involving ecological, social, economic, and institutional aspects. One of the fundamental causes of this degradation is the dominance of an anthropocentric attitude, which places humans at the centre of the natural world and views the environment merely as a means to satisfy human interests. Within this perspective, nature is valued primarily for its utility and economic benefits, rather than for its intrinsic ecological functions. As a result, environmental considerations are often subordinated to development agendas that emphasize economic growth and resource extraction. The large-scale conversion of forests into oil palm plantations and open-pit mining areas exemplifies an anthropocentric approach to land use, treating forests as commodities rather than living ecosystems. This mindset has accelerated deforestation, reduced biodiversity, and caused extensive habitat loss, disrupting ecological balance and weakening the resilience of natural systems.

Furthermore, weak enforcement of environmental regulations reflects an anthropocentric bias in governance, as policy implementation frequently prioritizes industrial and economic interests over environmental protection. Consequently, many industries continue to discharge untreated waste into rivers, leading to water pollution and the degradation of aquatic ecosystems. In urban areas, anthropocentric development models are evident in the rapid growth of motorized transportation and large-scale infrastructure projects that prioritize human convenience and economic efficiency while neglecting environmental capacity.

These activities contribute significantly to air pollution and declining environmental quality. Climate change further intensifies environmental degradation, as human-centred exploitation of natural resources increases greenhouse gas emissions, leading to more frequent and severe extreme weather events, such as prolonged droughts and major floods. Overall, these conditions demonstrate that environmental damage in Indonesia is not merely a technical or regulatory issue, but is deeply rooted in anthropocentric attitudes that shape human behaviour, development policies, and resource management practices. Addressing environmental degradation, therefore, requires a critical reflection on this human-centred approach.

The Importance of Ecocentrism

Ecocentrism is concerned with a deeper, more comprehensive movement than mere instrumentalism or expansionism, as in anthropocentrism and biocentrism. At the heart of ecocentrism lies an axiology that holds that biotic communities are worthy of moral consideration. It is a form of holism whose ethical good is based on the health and flourishing of the ecological entity as a whole (Keller in Tete, 2025). As Ezedike (2020) puts it, "ecocentrism puts all beings in the ecosystem in one moral universe". The ethics of ecocentrism require a new understanding of the ethical relationships that exist in the universe, accompanied by new principles that go hand in hand with them. This new understanding is then translated into concrete actions on the ground (Munir, 2023). Departing from the theory of Ecocentrism initiated by Lynn White, which holds that fulfilling moral obligations and responsibilities is not limited to living things but also applies to all ecological realities, management of natural resources must pay attention to environmental sustainability (Ayuningutami & Najicha 2022). Safeguarding environmental sustainability is very important because the environment is highly influential in maintaining national stability; changes in the environment can pose a domestic threat (Saputra & Najicha, 2022).

What happens to ecosystems is the process of exchanging energy according to a specific pattern, usually referred to as external physiology, which maintains the balance of natural or homeostatic systems (*the balance of nature*). The inclusion of humans as an element in an ecosystem does not change the essence of the principle of natural balance. Sukarna, (2021) adds that humans participate with nature in line with the wisdom of ecological principles. This means that humans must recognize that the survival of other species depends on adherence to ecological principles. In line with that, human goals and interests are still fought, but not by dominating other species. Human goals and interests are advanced by intelligently integrating those of other species, fostering a respect for nature. Man realises himself through a process in which he recognises that he can only become a human being in fundamental unity with nature and through a positive interaction with nature as a whole.

The ethics of ecocentrism have a broader view. According to this understanding, similar to biocentrism, the struggle for salvation and concern for the natural environment do not prioritise respect for species (living things alone) but also give equal attention to all life. This means that this ethics applies to all components of the environment, all ecological communities, both living and dead. Ecocentrism, or Deep Ecology, operates in two realms: the practical and the philosophical. Bill Devall (in Susilo, 2019) puts *the deep ecology* commitment into practical action. He practices living in a dwelling with very little entropy and a lifestyle that consumes. In the philosophical realm, *deep ecology* can also be called *ecosophy* (*eikos* = household, *sophy* = wisdom), in other words, wisdom that regulates life in harmony with nature as a household in a broad sense. *Deep ecology* is a combination of the ecological approach as a science and philosophy as the study of the search for wisdom. The combination of these two approaches can be explained as follows: 1) Human self-realisation takes place in ecological communities. This means that human beings can develop into complete beings precisely in relation to all the realities of life and nature. Humans do not only have relationships with humans, but also 2) Human realization should pay attention to its dire consequences as an *ecological self*. In the sense that man must be aware, he will succeed in becoming a perfect man only in fundamental unity with nature or through man's positive attraction with it as a whole and with other parts of nature.

Observations at SMPN 1 Pontianak City have revealed that students' ecocentric mindset is evident in the school's overall cleanliness and in their collaborative efforts to care for their environment. No litter is found within or outside the classrooms, and the plants in the school area are well-maintained. This behaviour can be interpreted as a manifestation of strong environmental awareness, indicating that students are concerned not only with physical cleanliness but also with the overall equilibrium of the ecosystem. This observation is consistent with ecocentrism theory, which emphasizes recognizing humans as essential parts of the ecosystem rather than separate entities. Such attitudes reflect the success of the school's educational approach in instilling ecocentric values among students.



Figure 1. SMPN 1 Classroom Environment

Based on interviews with students on social studies learning to develop ecocentric attitudes, it was found that classroom instruction has contributed to students' understanding of ecocentric values. Students reported that through social studies lessons, they not only gained knowledge of the importance of environmental preservation but also experienced changes in their sense of responsibility to protect the environment. This shift in attitude is reflected in their everyday behaviour at SMPN 1 Pontianak, particularly in maintaining environmental cleanliness. Although students are aware that cleaning staff are responsible for maintaining the school environment, they consciously avoid littering, refrain from damaging school gardens, and demonstrate enthusiasm in carrying out daily classroom cleaning duties. Furthermore, during the interviews, students expressed strong concerns and critical views regarding various forms of environmental degradation occurring in their surroundings. They openly condemned practices such as waste accumulation in the Kapuas River, illegal logging, hunting of endangered wildlife, mountain excavation, and the proliferation

of illegal mining activities in the West Kalimantan region. Students also demonstrated an awareness that Indonesia is a country endowed with abundant natural resources; however, they recognized that these resources are finite. They emphasized that continued exploitation without environmental awareness would inevitably lead to ecological imbalance and an increased risk of future natural disasters.

These findings are reinforced by interviews with social studies teachers, who stated that the learning materials and instructional models applied in social studies classes are grounded in the principles of ecopedagogy. Teachers reported incorporating contextual learning strategies, including videos and animated media that highlight the importance of environmental conservation. In addition, classroom learning consistently involves discussion and feedback between teachers and students, providing opportunities for students to reflect critically on environmental issues and connect theoretical concepts with real-life situations. This aligns with Uğraş et al.'s (2024) findings, namely that the learning process plays a strategic role in shaping students' awareness, attitudes, and sustainability values, especially within the framework of Education for Sustainable Development (ESD). Meanwhile, interviews with the vice principal revealed that the school's learning environment actively supports the practical application of environmental concepts introduced in the classroom. This support is evident through the availability of school facilities and infrastructure, such as environmental cleanliness reminder boards, informational displays on waste management, and regularly scheduled collective activities to maintain a clean, sustainable school environment. These institutional efforts further strengthen the role of social studies learning in fostering students' ecocentrism attitudes.



Figure 2. SMPN 1 Waste Sorting Period Reminder Board

The ecocentrism at the focus of this research is part of environmental ethics, which views nature as an entity with intrinsic value and as something that must be maintained for current and future generations. Recent research demonstrates that ecocentrism can be actively constructed as a social identity through public communication practices, suggesting that environmental values are shaped not only through formal education

but also through social interactions and narratives that foreground nature as a moral centre (Hannouch & Milstein, 2025). For instance, Zhou et al. (2023) found that perceptions of environmental restorativeness positively influenced pro-environmental behaviour through place attachment, highlighting how environmental values shape human behaviour in natural settings. Although the moderating role of ecocentrism was not significant in their study, their framework underscores the importance of intrinsic environmental values in fostering pro-environmental actions. This insight aligns with the current study's focus on how social studies learning can cultivate ecocentric attitudes among students. (Lou, 2025) added that non-anthropocentric motives, rooted in moral concern for nonhuman entities, can uniquely motivate personal environmentalism, reinforcing the significance of ecocentric values in shaping environmental attitudes. This principle aligns with the perspective of social justice leadership, which emphasizes justice, sustainability, and moral responsibility in the education system.

Furthermore, Karakose et l. (2023) emphasised that leadership practices and educational policies grounded in social justice need to be integrated into the curriculum and learning process so that tudents can internalise these values. In the context of this research, Social Sciences (IPS) learning is positioned as a strategic vehicle for transforming the values of social and environmental justice into an ecocentric attitude among junior high school students. Thus, social studies learning not only serves as knowledge transfer but also as a means of character formation and environmental ethics.

Social studies education is intended to provide an understanding of several concepts and to develop and train their attitudes, values, morals, and skills based on the concepts they already have. In contrast, the concept of social studies includes: interaction, interdependence, continuity and change, diversity or similarity or difference, conflict and consensus, patterns, places, power, trust values, justice and equity, scarcity, specificity, culture, and nationalism to students (Trianto, in Hopeman et al., 2022). Social Science is the study of human beings in their social relationships. Humans, who are essentially social creatures, engage in social interactions with others, ranging from individuals to families to communities. This is developing at the local, national, regional, and international levels. In line with the integration formulated by the Ministry of Education and Culture, it reveals how important social studies are for preparing for global education. Sapriya (2017) added that the global education in question covers various issues, such as (1) ecological systems, (2) technology, (3) environmental issues, and (4) development issues. In particular, the focus on environmental issues concerns the consequences of human exploitation of natural resources, the rapid growth of the world's population, and consumerism, which have led to a global ecological crisis. Problems and issues require solutions realized by the community. All of them can transcend regional boundaries and are expected to give rise to a common concern.

The activities carried out by humans are based on feelings, thoughts, considerations, decision-making, and the will to act, and manifest in physical actions. Based on the structure of human nature, we may be able to determine the starting point and direction of goals for human and nonhuman development. With the elements of reason and free will, it is hoped that students will be able to use and develop them well. Students can know and understand themselves, the natural environment, and the social environment around them, which are increasingly widespread and more complex; the deeper they go, the more they can realize the existence of the Creator, and the more clearly they recognize the values in their life relationships.

CONCLUSIONS AND RECOMMENDATION

Ecocentrism emphasises the ethical importance of protecting the environment by recognising the equal value of all forms of life, including entire ecosystems, both living and non-living. Closely related to the concept of *Deep Ecology*, ecocentrism functions not only as a philosophical perspective but also as a practical guide for fostering environmentally responsible behaviour. The findings of this study at SMPN 1 Pontianak indicate that classroom instruction has contributed to students' understanding of ecocentric values. Students reported that through social studies lessons, they not only gained knowledge of the importance of environmental preservation but also experienced changes in their sense of responsibility to protect the

environment. This shift in attitude is reflected in their everyday behaviour at SMPN 1 Pontianak, particularly in maintaining environmental cleanliness. Although students are aware that cleaning staff are responsible for maintaining the school environment, they consciously avoid littering, refrain from damaging school gardens, and demonstrate enthusiasm in carrying out daily classroom cleaning duties.

Furthermore, during the interviews, students expressed strong concerns and critical views regarding various forms of environmental degradation occurring in their surroundings. They openly condemned practices such as waste accumulation in the Kapuas River, illegal logging, hunting of endangered wildlife, mountain excavation, and the proliferation of illegal mining activities in the West Kalimantan region. Students also demonstrated an awareness that Indonesia is a country endowed with abundant natural resources; however, they recognized that these resources are finite. They emphasized that continued exploitation without environmental awareness would inevitably lead to ecological imbalance and an increased risk of future natural disasters.

Based on the findings and conclusions of this study, several recommendations are proposed as follows:

1. For Schools and Educational Institutions: Schools are encouraged to embed ecocentric values into school culture through eco-friendly routines, environmental programs, and student-led initiatives that emphasize ecosystem sustainability rather than cleanliness alone.
2. For Social Studies Teachers: Teachers should continue to integrate environmental issues using ecopedagogical approaches that connect social and ecological perspectives, thereby strengthening students' ecocentric attitudes and environmental responsibility.
3. For Students: Students are encouraged to apply their environmental awareness through active participation in conservation efforts both inside and outside the school.
4. For Future Research: Future studies may explore the long-term impact of ecocentrism-based social studies learning across different educational levels and regions, and examine causal relationships between environmental attitudes and behaviour using mixed-methods or experimental designs.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper.

Ethical Declaration

All participants provided informed consent prior to their involvement in the study. They were informed about the study's purpose, procedures, and their right to withdraw at any time without consequence.

REFERENCES

Akhmaddhian, S. (2016). Penegakan Hukum Lingkungan dan Pengaruhnya terhadap Pertumbuhan Ekonomi di Indonesia (Studi Kebakaran Hutan Tahun 2015). *UNIFIKASI: Jurnal Ilmu Hukum*, 3(1).

Ayuningutami, P. I., & Najicha, F. U. (2022). Regulasi Hukum Terhadap Penerapan Program Reforma Agraria dalam Lingkup Kehutanan. *YUDISIA : Jurnal Pemikiran Hukum Dan Hukum Islam*, 13(1), 39. <https://doi.org/10.21043/yudisia.v13i1.12899>

Environment Indonesia Center. (2025). *Data Kerusakan Lingkungan: Fakta, Dampak, dan Upaya Pemulihian*. Indonesia Environment & Energy Center.

Ezedike, E. U. (2020). Environmental Ethics and Sustainability: An Introduction To Environmental Philosophy. *University of Port Harcourt Press*.

Francis Tete. (2025). Ecocentrism as Theoretical Framework for Environmental Sustainability. *Nnamdi Azikiwe Journal of Philosophy*, 15(1), 95–104.

Frantz, P., Rego, F., & Barbas, S. (2025). Ecocentrism vs. Anthropocentrism: To the Core of the Dilemma to Overcome It. *The Linacre Quarterly*, 92(4), 449–459. <https://doi.org/10.1177/00243639251339844>

Hannouch, B., & Milstein, T. (2025). Activating Ecocentrism: How Young Women Environmental Activists Produce Identity on Instagram. *Environmental Communication*, 19(2), 198–217. <https://doi.org/10.1080/17524032.2024.2376697>

Hopeman, T. A., Hidayah, N., & Anggraeni, W. A. (2022). Hakikat, Tujuan dan Karakteristik Pembelajaran IPS yang Bermakna pada Peserta Didik Sekolah Dasar. *Jurnal Kiprah Pendidikan*, 1(3), 141–149. <https://doi.org/10.33578/kpd.v1i3.25>

Jon C. W. Pevehouse, & Joshua S. Goldstein. (2016). *International Relations* (Vol. 11). Pearson Education.

Karakose, T., Tülbüş, T., & Papadakis, S. (2023). The scientific evolution of social justice leadership in education: structural and longitudinal analysis of the existing knowledge base, 2003–2022. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1139648>

Katarzyna Guczalska. (2023). Ecocentrism. Hopes and concerns. *Scientific Papers of Silesian University of Technology Organization and Management Series*, 2023(183). <https://doi.org/10.29119/1641-3466.2023.183.10>

Lou, X. (2025). Non-anthropocentric Environmental Motive Correlates with Personal Environmentalism More Strongly than Anthropocentric Motives: A Meta-analysis. *Journal of Agricultural and Environmental Ethics*, 38(4), 27. <https://doi.org/10.1007/s10806-025-09961-5>

M. Ied Al Munir. (2023). Corak Paradigma Etika Lingkungan: Antroposentrisme, Biosentrisme dan Ekosentrisme. *Jurnal Yaqzhan*, 9(1).

Mehrad, A., Nguyen, K., & Dihii, J. B. (2024). Social Cognition Approach: Using Observation and Interview Methods via Qualitative Research. *Journal of Education For Sustainable Innovation*, 2(1), 11–17. <https://doi.org/10.56916/jesi.v2i1.718>

Namita Kalita, & Jigyasa Barsha. (2024). Ecocentrism vs. Anthropocentrism: Reimagining Humanity's Relationship with Nature. *International Journal of Humanities Social Science and Management (IJHSSM)*, 4(6), 448–5450.

Ngadi, N., & Noveria, M. (2018). Keberlanjutan Perkebunan Kelapa Sawit di Indonesia dan Prospek Pengembangan di Kawasan Perbatasan. *Masyarakat Indonesia*, 43(1).

Ohoiwutun, B. (2022). Agama dan Alam dari Perspektif Arne Naess. *Media (Jurnal Filsafat Dan Teologi)*, 3(1), 1–12. <https://doi.org/10.53396/media.v3i1.72>

Purba, J. H. V., & Sipayung, T. (2017). Perkebunan Kelapa Sawit Indonesia dalam Perspektif Pembangunan Berkelanjutan. *Jurnal Ilmu-Ilmu Sosial Indonesia*, 43(1), 81–94.

Rachmad K. Dwi Susilo. (2019). *Sosiologi Lingkungan* (5th ed.). Raja Grafindo.

Raden Mas Sukarna. (2021). Interaksi Manusia Dan Lingkungan Dalam Perspektif Antroposentrisme, Antropogeografi Dan Ekosentrisme. *Hutan Tropika*, 16(1), 83–100. Rodatus Sofiah, Suhartono, & Ratna Hidayah. (2020). Analisis Karakteristik Sains Teknologi Masyarakat (STM) sebagai Model Pembelajaran: Sebuah Studi Literatur. *Pedagogi: Jurnal Penelitian Pendidikan*, 7(1), 1–18.

Sapriya. (2017). *Pendidikan IPS*. Remaja Rosdakarya.

Saputra, I. A. A., & Najicha, F. U. (2022). Pengaruh Lingkungan Terhadap Tumbuhnya Jiwa Nasionalisme. *Jurnal Penelitian Ilmu Sosial*, 2(1).

Shafitri, L. D., Prasetyo, Y., & Haniah, H. (2018). Analisis Deforestasi Hutan di Provinsi Riau dengan Metode Polarimetrik dalam Pengindraan Jauh. *Jurnal Geodesi Undip*, 7(1), 212–222.

Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif R&D*. Alfabeta.

Uğraş, H., Uğraş, M., Papadakis, S., & Kalogiannakis, M. (2024). ChatGPT-Supported Education in Primary Schools: The Potential of ChatGPT for Sustainable Practices. *Sustainability*, 16(22), 9855. <https://doi.org/10.3390/su16229855>

Wahyuni, H., & Suranto, S. (2021). Dampak Deforestasi Hutan Skala Besar terhadap Pemanasan Global di Indonesia. *JIIP: Jurnal Ilmiah Ilmu Pemerintahan*, 6(1), 148–162. <https://doi.org/10.14710/jiip.v6i1.10083>

Washington, H., Piccolo, J. J., Kopnina, H., & O'Leary Simpson, F. (2024). Ecological and social justice should proceed hand-in-hand in conservation. *Biological Conservation*, 290, 110456. <https://doi.org/10.1016/j.biocon.2024.110456>

Widodo, P., & Sidik, A. J. (2020). Perubahan Tutupan Lahan Hutan Lindung Gunung Guntur Tahun 2014 sampai dengan Tahun 2017. *Wanamukti: Jurnal Penelitian Kehutanan*, 21(1), 30. <https://doi.org/10.35138/wanamukti.v21i1.153>

Zhou, B., Wang, L., Huang, S. (Sam), & Xiong, Q. (2023). Impact of perceived environmental restorativeness on tourists' pro-environmental behavior: Examining the mediation of place attachment and the moderation of ecocentrism. *Journal of Hospitality and Tourism Management*, 56, 398–409. <https://doi.org/10.1016/j.jhtm.2023.08.006>