

Literary Works Based on Environment As Teaching Materials in Literature Learning Oriented Environmental Education

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Abstract. Awareness toward the environment is built by perspectives on the environment. Ecocentric and anthropocentric perspectives are the main things that indicate the extent of human attitudes/behavior towards the environment. Literature learning oriented environmental education becomes an alternative in efforts to build an ecocentric perspective of students towards the environment. The teaching materials that can be used in the learning are literary works (short stories and novels) that raise environmental issues. This study aims to describe environmental-themed literary works that can be used as teaching material in literature learning oriented environmental education. This study uses a qualitative method with an ecocriticism approach. Data analysis techniques in this study were (1) identifying; (2) classifying; (3) describing; (4) analyzing; and (5) conclusions. The results show that environmental-themed literary works that can be used as teaching material in literature learning oriented environmental education among them: short stories *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Al-Fatihah untuk Pohon-pohon* by Muliadi GF, *Lais* by Nenden Lilis, *Derai dan Luruh* by D. Nilasyah. Besides short stories, there are also novels, among them *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy.

Keywords: literary works based on environment, teaching materials, literature learning, environmental education

1 Introduction

The environmental crisis has become an environmental problem nowadays. Ecological crisis began to be voiced since the 1960s, where most people began to rethink their relationship to nature when humans' action begin to threaten the balance of nature and alienate humans with life other than themselves. At its peak, in the 1980s, almost certainly everyone's awareness was sucked into the problem, even scientific articles that discussed this issue increased sharply.[1]

Indonesia as one of the industrialized countries, is one of the major contributors in the extinction of biodiversity, global warming, and the destruction of marine ecosystems. Besides, Indonesia is considered the largest forest destroyer in the world because the level of forest destruction in Indonesia is very high.[1] In fact, according to Greenpeace, about 70 percent of the environmental destruction in Indonesia is caused by mining.[1]

This proves that the ecological crisis occurs because humans exploit nature excessively. Besides, according to Thathong, those previous strategies proposed were more of control and treatment rather than prevention. Consequently, these environmental crises can be seen to emanate mainly from human activities due to their attitude and behavior towards nature.[2]

This attitude is based on the human perspective on nature which tends to be anthropocentric, namely the perspective that human interests are more important than natural interests as expressed by Buell that anthropocentrism is the assumption or that the interests of humans are of higher priority than those of nonhumans.[3]

Environmental awareness is built by a perspective toward the environment. Ecocentric and anthropocentric perspectives are the main things that indicate the extent of human attitudes/behavior towards the environment. Therefore in resolving such problems, special attention needs to be placed on increasing the knowledge of the populace and thereby inculcating a positive attitude and behavior towards the environment. This can be achieved by effective implementation of environmental education.[4]

Literature learning oriented environmental education is an alternative in an effort to build a student ecocentric perspective toward the environment. The goal of such a programme is to change the behaviour of learners 'and to translate acquired knowledge into action' in order to preserve or minimize the detrimental effect on the environment.[5] Besides, Environmental Education is seen as a process of infusing into the educational system environmental content in order to enhance the awareness of the people on environmental issues at all levels of education. It is an approach to education which is hoped to bring some solutions to the deterioration relationship between man and the environment.[4]

Environmental education can be integrated into literature learning, at the elementary school, junior high school, senior high school, and university levels. The method or strategy in integrating environmental education in literature learning is to select and apply teaching materials in the form of environmental-themed literary works in Teaching and Learning Process. The teaching materials for literary works that can be used as an alternative literature learning oriented environmental education in this study are short stories and novels.

The short stories and novels consist of the short story *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Al-Fatihah untuk Pohon-pohon* by Muliadi GF, *Pudarnya Impian 'Uma* by Khoirriyah Az-zahro. Apart from short stories, there are also novels, consist of novel *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy.

The reason for choosing this literary work is because the literary works (short stories and novels) have the theme of the environment or raise environmental issues. Among them are the issue of species extinction due to deforestation for the construction of houses/villas, destruction of hills and karst due to limestone mining, natural damage due to illegal logging, and extinction of trees due to road widening, efforts to save the environment from planned sea sand mining projects, environmental damage due to bombing coral reefs, destruction of mangroves due to illegal logging and destruction of coral reefs due to bombing, and destruction of forests due to illegal logging.

To determine the extent to which the teaching materials used in environmental education-oriented literature learning, the short stories and novels are analyzed and studied using ecocriticism theory. Garrard stated the eco-criticism analysis is interdisciplinary that extends to other disciplines, namely literature, culture, philosophy, sociology, psychology, environmental history, politics and economics, and religious studies. Besides, ecological knowledge is not only

to see the harmony and stability of the environment, but also to know human attitudes and behavior. [6]

Based on these problems, the problem formulations to be discussed in this study are (1) How are environmental themes/ issues described in literary works which are used as teaching materials; (2) How is the selection of environmental-themed literary teaching materials in literature learning oriented environmental education?

2 Method

This research uses qualitative research with an ecocriticism theory approach. The stages in the research are as follows. First, determining the source of the data, which is collecting data that is relevant to the formulation of problems about environmental-themed literary works or those that raise environmental issues. Primary data are literary works (short stories and novels) with the theme of the environment. The short stories are *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Al-Fatihah untuk Pohon-pohon* by Muliadi GF, *Lais* by Nenden Lilis, *Derai dan Luruh* by D. Nilasyah. Besides short stories, there are also novels, among them *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy. Secondary data are various references to ecocritical theory and environmental education related to environmental themes or issues.

Second, data classification. At this stage all data sources, both primary and secondary data, are classified based on the research formula. Third, data analysis, namely applying ecocriticism theory in analyzing primary data and relating it to environmental education according to data that has been classified based on the research formula. The fourth step is to conclude the data obtained from the discussion based on the results of analysis and interpretation.

3 Discussion

3.1 Environmental Themed Indonesian Literary Works

Indonesian literary works that can be used as teaching materials in environmental education in literature learning are literary works that raise environmental issues. Literary works discussed in this research are literary works in the form of short stories and novels. These literary works consist of the short story *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Al-Fatihah for Pohon-pohon* by Muliadi GF, *Pudarnya Impian 'Uma* by Khoirriyah Az-zahro. In addition, novel of *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy.

Environmental Issues in Short Stories. The short stories discussed below raise environmental issues. Among them are species extinction due to deforestation for the construction of houses/villas, destruction of hills and karst due to limestone mining, natural destruction due to illegal logging, and extinction of trees due to road widening,

Short Story of Jeritan Tengah Malam by Makhfud Ikhwan. This short story is summarized in an anthology of short stories from Indonesia–Malaysia published in 2013 that raises environmental issues as a central issue in the story. The theme raised in the short story is about the primacy of ape species because the ape habitat (forest) no longer exists as a result of deforestation for the purpose of building housing. This is as illustrated in the following quote.

“Aku menunjuk ke arah tebing. Telunjukku kuarahkan tepat ke lambung sebelah utara yang krowak oleh garukan ekskavator warna kuning. Watu sepur sudah jadi masa lalu. Separuh gerbongnya, dari arah ekor, telah runtuh beberapa tahun lalu. Sementara hutan jati rimbun di atasnya telah lebih dahulu digunduli.” [7]

*“Tebing yang jadi rumah mereka (monyet-monyet) sudah habis, dikeruk dibuat semen.”
“Untuk apa, Yah?” [7]*

“Ya, untuk pembangunan. Untuk membangun rumah-rumah orang di kota. Rumah Pak Menteri, rumah Pak Presiden, juga rumah kita.” [7]

These short stories excerpts from *Jeritan Tengah Malam* show the destruction of the forest by clearing the teak forest which was previously thick due to housing construction. Besides, the result of forest destruction has caused the extinction of species, namely the monkeys that previously existed and lived there.

Short Story of Ki Pawon by Hery Nurdiansyah. In Ki Pawon's short story, environmental issues are described as central issues. The short story takes the theme of changes in village conditions in West Java due to limestone mining. Meanwhile, the message the author wants to convey through the short story is about the importance of preserving the beauty of the environment.

The short story contains about the condition of villages in West Java which are no longer beautiful due to limestone mining carried out not only by the company, but also community elements who do not have environmental awareness. The mining causes environmental damage due to the destruction of hills and karst using not only modern equipment such as a bulldozer backhoe, but also traditional equipment such as crowbars (a sharp piece of metal used for digging hard soil, chopping rocks, etc.) or a knife. This is illustrated in the following quotations.

“Aku jadi ingat kejadian seminggu yang lalu. Separuh Pasir Tanjung telah dirusak dan dihancurkan, termasuk salah satu gua yang ada di puncaknya. Ini dilakukan olehku dan para penambang batu kapur lainnya. Secara sporadis bongkahan-bongkahan batu gamping di dalam gua itu kuhancurkan dengan dinamit, tanpa melihat adanya nilai sejarah dan budaya purba yang dikandungnya. Oh, aku menyesal. Sungguh, aku memang tak tahu-menahu akan hal itu.” [8]

“Datanglah ke desaku sekarang! Bersiaplah melupakan bayangan kalian tentang desaku yang elok dan memesona itu. Relakanlah bayangan kalian tertiuap hembusan angin yang bercampur dengan pekatnya debu-debu batu kapur atau bahkan tercabik-cabik oleh pongahnya tangan bercakar bulldozer backhoe, seperti tercabik-cabiknya bongkahan-bongkahan batu kapur di bukit-bukit karst itu. Lihatlah pemandangan yang ada dan cermatilah adanya. Sesekali kalian akan memperoleh sensasi ketegangan luar biasa, ketika melihat para penambang batu kapur tradisional serta merta tiada ragu memanjat dan bergelantungan di sisi tebing terjal dan rapuh itu. Demi upah tiga puluh ribu rupiah. Tak ada yang menjamin keselamatannya. Mereka hanya bergantung pada tali tambang yang

dililitkan ke badan sekadarnya. Tangannya memegang linggis yang mereka fungsikan untuk mencongkel kepingan-kepingan batu kapur. Mereka seakan tak mau kalah berpacu dengan bulldozer backhoe tadi.”[8]

Yang Terpenjara Waktu By Zhizhi Siregar. This short story tells the story of a woman who cannot forget the memories of her late husband (Dewakinara) and her daughter (Limara) who really loved the culture, hospitality, and philosophy of life of the Toraja people as well as the natural beauty of the Land of Toraja, which year after year its beauty subsided due to illegal logging of the limara tree carried out by illegal loggers on the orders of one of the country's top officials. Apart from that, the short story also describes the memory of the death of her husband and child as the result of being poisoned by the accomplice of the country's top officials who took revenge because she and her husband exposed illegal logging and sent him to prison.

This is described in the following quotation.

“Kamu tetap di sini,” bisik Dewakinnara. Ia mengganti lensa kameranya menjadi lensa jarak jauh. Perjalanan singkat ke hutan ini seharusnya sekedar bertemu burung-burung unik untuk foto Dewakinnara dan bahan makanan untuk menu baru restoran Indonesiaku. Tapi sialnya kami bertemu dengan para pembalak yang sudah pasti liar, karena ini hutan lindung. Kalau masih ragu, senapan-senapan yang mereka sampirkan di dada tentu bisa memberi penegasan sendiri.[9]

Al-Fatihah untuk Pohon-pohon By Muliadi GF. This short story tells of a girl named Akilah, who loved the trees since she was born and thinks that the trees which growing in her yard were her friends. Like Akilah, their father, mother, and grandmother also loved trees that grew in their yard which were always watered, cared for, and prayed for every day so that these trees would grow. Until one day Akilah had to lose her grandmother who died because she was hit by a vehicle. In addition, she had to lose the trees that had been watered and cared for by her family because the yard which was full of trees was taken for road widening. Akilah felt sad because she had lost them (her grandmother and the trees that she thinks her friends) and she could only pray and send al-fatihah to her grandmother and the trees that she loved.

This represented in the following quotation.

“Apalagi, ketika jalan itu dilebarkan, halaman kami diambil banyak, banyak pohon yang ditebang, mati. Karena semua itu, untuk beberapa waktu lamanya saya musuhan dengan jalan raya.” [10]

Pudarnya Impian 'Uma By Khoirriyah Az-zahro. Khoirriyah Az-zahro packaged her story by inserting environmental issues in her short story *Pudarnya Impian 'Uma* by describing the condition of the Martapura River which is no longer clear due to being contaminated by black chunks of coal as a result of coal mining. This is illustrated in the following quotes.

“Ke hadapan sungai yang tak lagi bening, Aku menggugat. Mengapa Ia tega membiarkan mereka melupakan kisahnya, hingga Uma’ harus memudarkan impian-impian itu?”[11]

“Suara kapal tongkang batu bara tiba-tiba mengusik aktivitas bersantapku. Dengan sisa nasi yang terkunyah, kutuju sungai di belakang rumah. Segera pandanganku dipenuhi oleh

bongkahan-bongkahan hitam menggunung yang berlalu santai pada permukaan sungai.”[11]

The environmental issue is not a central issue that is told in this short story because this short story discusses the fading dream of an old woman who longs for *the lanting house*, namely the traditional raft house of the Banjar tribe in South Kalimantan with a floating raft foundation consisting of three wooden tree trunks that the big one. Even so, the author tries to include environmental issues in the short story by depicting the setting of the place, namely *Martapura River* which has been contaminated by coal waste due to coal mining. This implies that the author wants to try to convey that excessive exploitation of natural resources (coal mining) will cause environmental damage (rivers polluted with coal waste).

Environmental Issues in Novels. The novels discussed below raise environmental issues, namely about efforts to save the environment from planned sea sand mining projects, environmental damage due to coral reef bombing, damage to mangroves due to illegal logging and damage to coral reefs due to bombing, and forest damage due to logging wild.

Kelomang by Qizink La Aziva. Qizink La Aziva's attitude towards environmental issues through his work, a novel entitled *Kelomang* and published in 2016 shows his caring attitude towards the environment. This is because he raises the environmental theme as a central issue in his story. The environmental issue raised in the novel is an effort to save the environment from the planned sea sand mining project off the north coast of Serang, which is carried out by PT Bintang Laut in collaboration with certain officials (the Regent of Serang and his subordinates).

Broadly speaking, this novel tells about the struggles of environmental activists (Saija figures, Adinda, environmentalists and Serang residents) who are concerned about the existence of sea sand on the north coast of Serang. They fight for the sea sand mining plan not to be given permission by the local government (Regent of Serang and his subordinates) because it will damage the environment. In addition, they are also still struggling to criticize the problem of land-based sand mining which has damaged hills and polluted river water. This is as described in the following quotation.

“Jika penambangan ini sudah berjalan, bisa dibayangkan besarnya kerusakan yang akan ditimbulkan. Kita masih berjuang mengkritisi masalah penambangan pasir darat yang menghabiskan bukit dan mencemari air sungai, sekarang masih ditambah dengan penambangan pasir laut”[12]

Based on this analysis, it can be concluded that Qizink La Aziva through his work (the novel *Kelomang*) has a high concern for the environment. He not only includes environmental issues in his work (describing the environmental conditions that occur in Serang), but also campaigns on the importance of maintaining and maintaining the balance of the environment in land and sea sand in Serang. This is done by fighting against injustice and against the interests of irresponsible individuals (those who exploit nature for personal / group interests) and taking real action by maintaining cleanliness of the environment and carrying out nature conservation.

Dari Rahim Ombak By Tison Sihabudin Bungin. Tison Sahabuddin Bungin in his work *Dari Rahim Ombak*, published in 2015, represents environmental issues as a central issue. This is

because the novel takes the theme of the existence of coral reefs in Bungin Island, West Nusa Tenggara. In addition, the message that the author wants to convey in this novel is about the importance of preserving and preserving the existence of coral reefs in Bungin Island which have suffered damage and extinction of coral reefs due to excessive bombing by people with an anthropocentric perspective.

Meanwhile, the contents of the story of this novel describe the environmental damage caused by exploitative coral reef bombing by people with an anthropocentric perspective on Bungin Island, NTB with the aim of getting as much fish as possible quickly or in other words with the aim of making the maximum profit. . In fact, bombing coral reefs has become the livelihood of some Bungin Island people who have an anthropocentric perspective. They are of the view that the available Natural Resources (SDA) must be used to get benefits for their lives regardless of the damage to coral reefs caused by the bombing they have done. This is as the following quote

“Anjul memilih jalan hidup untuk menyelamatkan lingkungan. Menyelamatkan karang karena ia merasa nelayan akan sengsara puluhan tahun akan datang jika karang terus dirusak. Sementara di pulau kami pengrusakan karang terjadi tiap hari Bu. Nah, saat menanam karang ia dibom nelayan pengebom. Tidak ada yang sanggup menolongnya karena siapapun menentang pengeboman menjadi warga kelas 4. Akan dikucilkan Bu.”[13]

Based on the analysis and quotations, the author through his work (novel) wants to represent and raise the issue of the importance of protecting and preserving coral reefs and the impacts caused by the bombing of coral reefs. Therefore, it can be concluded that the author's attitude towards the environment through this novel is an attitude of high concern for the environment (the existence of coral reefs) because it makes environmental issues a central issue. In addition, the author indirectly wants to campaign about the importance of protecting and maintaining coral reefs by conserving coral reefs and not bombing. This is because the bombing of coral reefs will lead to the extinction of coral reefs and marine biota species. If this happens, it will not only disrupt the balance of the marine ecosystem, but also harm the lives of the surrounding community.

Pincalang Novel by Idris Pasaribu. Idris Pasaribu through his work, Pincalang, shows his concern for the environment. The author not only shows his concern for the existence of mangrove forests, but also the existence of coral reefs. In addition, environmental issues are a central issue in his work. The author describes the destruction of mangrove forests due to illegal logging and damage to coral reefs from bombing. This is as the following quotes.

“Amat sangat marah melihat pohon-pohon bakau ditebang sembarangan. Para penebang itu tidak sedikit pun menghiraukan Amat yang sedang menanam bibit-bibit bakau di sela hutan-hutan bakau yang menggundul”.[14]

It can be concluded that Idris Pasaribu is one of the authors who has a high concern for the existence of mangrove forests and coral reefs. The environmental message in the novel is represented indirectly. Through his work, the author wants to convey a message about the importance of protecting the existence of mangroves and coral reefs.

Qozan By Imogail Zam Zami. Imogail Zam-zami Djalaluddin with his novel Qozan describes environmental issues as a central issue. This is because this novel raises environmental problems that occur in the interior tribes of Central Sulawesi. The problem that is told in this novel is the

destruction of forests due to illegal logging by outsiders of the interior tribes for personal gain. The outsiders are the capital holders and their subordinates. This forest destruction has caused various disasters that befell inland tribes who live and live in the forest to protect the forest. This is as the following quote.

“ Kebenaran itu adalah mengusir para penebang pohon yang telah menghabisi hutan di wilayah kesukuannya sekaligus mengembalikan wajah hutan seperti dulu lagi, seperti yang pernah diceritakan oleh kakek-nenek mereka “. [15]

“ Karena kerusakan itu pulalah, pagi itu seperti pagi yang kemarin diadakan suatu upacara yang berdiam di rimba raya Sulawesi Tengah. Upacara itu adalah upacara nompakoni yang diadakan oleh suku tempat kelahiran Qozan. Melalui upacara itu, mereka sangat berharap segala bencana yang terjadi di hutan mereka dapat teratasi, terutama para pemegang modal yang banyak itu agar segera keluar dari wilayah kesukuan mereka dan tak lagi menebangi hutan mereka yang hijau itu ” [15]

Based on this analysis, it can be concluded that Imogail Zam-zami Djalaluddin, through his novel Qozan, is one of the authors who has concern for the environment (in this case forests). This is because he raises environmental issues in his work as a central issue. In addition, the message he wanted to convey through his work was filled with positive messages for the sustainability of the environment (forest) in the future.

3.2 Teaching Materials for Literature Learning Oriented Environmental Education

Literary works (short stories and novels) that raise environmental issues can be used as teaching materials in literature learning oriented environmental education. This is because literary works are in the form of text and can be used as tools / media to assist teachers (teachers or lecturers) in the teaching and learning process. This is according to the opinion of Madjid that teaching materials are all forms of materials, information, tools and texts that are used to assist teachers / instructors / lecturers in carrying out teaching and learning. The materials in question can be written or unwritten materials. Teaching materials or curriculum materials are curriculum content or content that must be understood by students in an effort to achieve curriculum goals. [16]

In addition, novels or collections of short stories in the form of books are categorized as print-based teaching materials. The types of teaching materials based on their nature, one of which is print-based teaching materials, including books, pamphlets, student study guides, tutorial materials, student workbooks, maps, charts, photos, materials from magazines. and newspapers, and others. [17]

Teaching materials using literary works (short stories and novels) that raise environmental issues can be used as a means to motivate and stimulate learners' sensitivity and concern for the environment. This is in accordance with one of the functions of teaching materials expressed by Greene and Petty (in Tarigan), which is to present learning methods and means to motivate students. [18]

Environmental education can be integrated in literature learning through Indonesian language subjects at the elementary, junior high school, and senior high school levels. In addition, it can also be integrated into lectures/learning literature at the university level, such as the Appreciation of Prose and Literary Criticism. Literary works (short stories and novels) with environmental themes or raising environmental issues can be used as teaching materials in literature learning oriented environmental education. The environmental themed teaching

materials (literary works) that have been discussed can then be used as alternative teaching materials in literature learning and are classified as follows.

Environmental-themed Teaching Materials at Elementary School Level. The teaching material in the form of environmental-themed literary works that can be applied at the high school level (grade IV, V, and VI) is *Al-Fatihah untuk Pohon-pohon* by Muliadi GF. This is because the contents of the story are simple and easier for children to understand. In addition, according to the child's age, psychological and emotional level.

Another reason related to environmental education-oriented literary learning is because the short stories are full of environmental messages for children. This is because the short story indirectly teaches children to love the environment around them (such as the trees that are told in the short story) from childhood.

Environmental-themed Teaching Materials at Junior High School Level. Teaching materials for literary works (short stories) that can be used as teaching materials in environmental education-oriented literature learning at junior high school are *Al-Fatihah untuk Pohon-pohon* by Muliadi GF, *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, and *Pudarnya Impian 'Uma* by Khoirriyah Az-zahro.

The reason for choosing these teaching materials is because in addition to being in accordance with the age, psychological and emotional level of students, the environmental issues raised in the short story will motivate students to love the environment, build an ecocentric perspective towards students, be friendly to nature, and have an awareness of environment by not exploiting the environment.

Environmental-themed Teaching Materials at The Senior High School and University Levels. The short story *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Pudarnya Impian 'Uma* by Khoirriyah Az-zahro. In addition, the novel *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy can be used as alternative teaching materials in literary learning oriented environmental education, both at the senior high school and university levels.

The reason for choosing this is because the level of thinking and intellectual of the learners in this category is higher and more complex than the elementary and junior high school levels so that students find it easier to digest the contents of the literary work. Besides, learners in this category have a higher level of criticality so that they can understand the content and message of the literary work properly and optimally. This does not rule out the possibility that learners are not only motivated to love the environment and have an ecocentric perspective on the environment, but are also motivated to be kind and positive towards nature, and not to act arbitrarily towards nature by exploiting nature excessively.

4 Conclusion

Literary works (short stories and novels) with environmental themes that can be used as alternative teaching materials in environmental education-oriented literary learning in this study consist of the short story *Jeritan Tengah Malam* by Makhfud Ikhwan, *Ki Pawon* by Hery Nurdiansyah, *Yang Terpenjara Waktu* by Zhizhi Siregar, *Al-Fatihah untuk Pohon-pohon* by

Muliadi GF, *Pudarnya Impian 'Uma* by Khoirriyah Az-zahro. Apart from short stories, there are also novels, consist of the novel *Kelomang* by Qizink La Aziva, *Dari Rahim Ombak* by Tison Sihabudin Bungin, *Pincalang* by Idris Pasaribu, *Qozan* by Imogail Zam Zami, and *Baiat Cinta di Tanah Baduy* by Uten Sutendy.

These literary works have environmental themes or raise environmental issues such as species extinction due to deforestation for the construction of houses/villas, destruction of hills and karst due to limestone mining, natural damage due to illegal logging, and extinction of trees due to road widening, efforts to save the environment from the plan. sea sand mining project, environmental damage due to coral reef bombing, mangrove forest damage due to illegal logging and coral reef damage due to bombing, and forest damage due to illegal logging.

Teaching materials for environmental-themed literary works can be used as teaching materials in literature learning oriented environmental education. This learning is not only learning literature in Indonesian subjects at the elementary, junior high and high school levels, but also literature learning in the Appreciation of Prose Fiction and Literary Criticism at the university level by paying attention to age, psychological, emotional, and intellectual /intellectual levels. This study still has limitations in exploring environmental education in literature learning. This can be used as a basis for further research or future research.

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