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Implementation of Catholic Religious Education for the Formation of Ecological Awareness among Students at SMAN 1 Nita

Yosef Mario Ambasan[1)], Yakobus Risal Toda Wea[2)], Wilfridus Ruben Bau[3)], Paulus B. L. Nu[4)], Eligio Ildelfiano de Carvalho[5)]

IFTK Ledalero[1)2)3)4)5)]

marioambasan4@gmail.com[1)], yakobusrisaltodawea@gmail.com[2)], bauruben78@gmail.com[3)], blaugranavisca652@gmail.com[4)], finocarvalho@gmail.com[5)]

Abstract

This study analyzes the implementation of Catholic Religious Education in fostering ecological awareness among students at SMA Negeri 1 Nita. This study uses quantitative methods. The purpose of this study is to explore students' understanding, awareness, and application of ecological values in their daily lives. The results show that although students do not have a good understanding of the *Laudato Si'* Encyclical, which strongly emphasizes the importance of preserving nature, there is still room to improve the implementation of these values in concrete actions. However, students have developed a fairly good ecological awareness through Catholic Religious Education. This subject plays an important role in shaping students' character and ecological awareness by emphasizing the values of responsibility and ethics. This study suggests the integration of environmental education into the curriculum and the development of ecological leadership to support nature conservation.

Keywords: Catholic Religious Education, Ecological Awareness, Laudato Si, SMA Negeri 1 Nita

Introduction

Humans and the natural environment are entities that form a chain of life and dynamic and diverse patterns of interaction. The dynamism and diversity of the relationship between humans and the natural environment occur due to several factors. First, the growth and development experienced by humans and the natural environment over time. The natural environment includes plants, animals, soil, water, air, gas, petroleum, sand, rocks, and others (biotic and abiotic or living and non-living). The growth and development that occur in these elements of the natural environment can be seen through changes in size and quantity, either increasing or decreasing. In animals, in particular, there is the factor of instinct that shapes these changes. Meanwhile, the growth and development that occurs in humans is highly dependent on the patterns of education and lifestyle that each individual learns and experiences according to their age. Second, needs and

climate change (Suprihadi, 1984:8-10). The demands of basic needs encourage humans to always depend on the surrounding environment. Climate change can also determine the relationship between the surrounding environment; how the surrounding environment is influenced by and influences humans.

The relationship between humans and nature is not always harmonious. Over time, this relationship has led to fractures, destruction, and damage. These extreme situations are evident in global warming, increased greenhouse gases, clean water shortages, factory waste, landslides, floods, and increased casualties (humans). According to data from the World Meteorological Organization (WMO), 2024 is considered the hottest year on record, with global warming reaching 1.5°C. This has resulted in Antarctic sea ice reaching its second lowest point in history and significant glacier loss. Then, the global temperature rose from January to September 2024 by 1.54 (± 0.13)°C. In addition to global warming, greenhouse gases also experienced their highest increase in 2024. Carbon dioxide (CO2) increased from 278 ppm (in 1750) to 420 ppm (in 2023), or an increase of 51%. These two global problems, which have been proven to be on the rise, certainly have a significant impact on human survival.

At the national level, one of the recent disasters that has caused quite a stir among the public is the flash flood that occurred on the island of Sumatra. This disaster killed hundreds of people, destroyed farmers' fields, killed livestock, and destroyed residents' homes. It cannot be denied that the natural disaster that occurred on the island of Sumatra was a logical consequence of illegal logging, indiscriminate tree felling, and the corrupt system that exists in this country. In a sense, the moral decay of the country's leaders contributed to the disaster in Sumatra.

On a smaller scale, actions that damage nature can be seen in the form of household waste disposal, irregular burning of garbage, littering in the surrounding environment, and so on (KWI: 2008, 137-138). The consequences of these destructive actions can be seen in phenomena such as the death of all kinds of animals and plants; deforestation; decreased availability of clean water; soil degradation; pollution of rivers; and litter scattered everywhere. According to data from the National Waste Management Information System (SIPSN), in 2024, waste accumulation in Indonesia will increase significantly to 27,740,752.06 tons, or around 76 thousand tons per day. This amount is equivalent to 76 thousand Toyota Avanza cars. Thus, all problems in the natural environment, both globally and nationally, are very concerning. Humans are the main cause of all types of environmental problems. At this point, the statement that human parasitism today not only disturbs the atmosphere, climate, water, soil, flora, and fauna but also disturbs almost all basic natural cycles and threatens global environmental stability is justified (Brookchin: 1970, 8).

In Environmental Ethics, Sony Keraf explains that the anthropocentric view has a negative impact on nature from two perspectives. First, anthropocentrism is understood as a philosophical view that considers the highest moral values to apply only to humans. Within this framework, human needs and interests are considered paramount, so that moral responsibility towards the environment is considered unimportant, excessive, even irrelevant. Second, anthropocentrism has an instrumentalistic tendency in the relationship between humans and nature. Nature is viewed solely as a means to fulfill human interests. Concern for the environment only arises insofar as it benefits humans, not because nature is considered to have intrinsic value that should be appreciated and protected. If nature has no direct benefit for humans, then its existence is considered meaningless. This modern anthropocentric view is also evident in the technocratic approach to reality, including the way of viewing humans and nature. This is evident in the way nature is exploited without regard for its integrity (Keraf: 2010, 79-82).

The Catholic Church, as part of the world, responded to this ecological crisis by issuing the encyclical Laudato Si in 2015. This encyclical speaks extensively about contextual issues in today's world, such as pollution and climate change, water and industrial waste problems, loss of biodiversity, deforestation, decline in human quality of life and social deterioration, global inequality, and various other concrete issues. Laudato Si pays close attention to issues affecting the land, water, air, and all forms of life on earth, including the poor who are most often neglected and abused. Through this encyclical, the Church calls for a communal ecological conversion. It is the full awareness that human beings, in all of creation, are part of a universal community and develop enthusiasm and creativity in facing the world's problems responsibly (Pope Francis: 2015, art. 216-221). In this way, human beings can build a loving brotherhood with all of creation. Here, ecological problems and world poverty have culminated in the encyclical Laudato Si. Through Laudato Si, Pope Francis calls for an ecological conversion for all humanity in its relationship with nature as God's creation. Human actions that destroy nature are an offense against God's work and the universal communion of the entire universe.

Thus, efforts to build ecological awareness are urgently needed. Through ecological awareness, the cries of nature can be heard and solutions can be found. Efforts to instill this awareness must be continuously carried out and promoted to everyone, especially the younger generation. As the future generation of the nation, young people need to be equipped and strengthened with ecological awareness. Otherwise, the image of a sustainable universe will remain nothing more than a dream. Therefore, the target group of this study is the students of Nita State Senior High School (SMAN1 Nita).

Nita State Senior High School is one of the state schools located in Sikka-Maumere Regency. The research conducted on the students at SMAN1 Nita focused on the extent of the students' knowledge of ecology, ecological awareness, and sustainable practices carried out by the students at school. The three important aspects that are alive or practiced at SMAN1 Nita are viewed based on the Laudato Si encyclical. This review based on the encyclical aims to provide input, evaluation, and encouragement so that students at SMAN1 Nita have a high sensitivity or solidarity towards the surrounding nature. And if their actions or ways of thinking have fallen into ecological sin, they can be made aware and make ecological repentance.

Method

This study uses a survey-based quantitative approach as its main method. The study was conducted at SMA Negeri 1 Nita, involving 30 students as participants. Sampling was carried out by distributing questionnaires prepared by the research team. In practice, the researchers prepared a questionnaire that was given directly to the respondents.

Data was collected through questionnaires divided into three main sections, namely, Ecological Knowledge, Ecological Awareness, and Sustainable Practices. This survey aimed to obtain an overview of people's perceptions of environmental responsibility based on the teachings of the Church, as well as to evaluate the extent to which this understanding is manifested in everyday life.

This method is considered effective and efficient because it not only encourages respondents to read, but also to deeply understand each question before answering. In addition, this approach also encourages participants to reflect on their ecological knowledge and awareness, and to provide conscious answers according to their level of understanding.

Research Findings

The respondents in this study consisted of male and female students from Nita State High School 1. There were a total of 30 respondents in this survey, consisting of students from different departments, namely Natural Sciences, Social Sciences, and Languages. The majority of respondents were female, numbering 21, while there were 9 male respondents. Thus, the total number of female respondents was 70% and male respondents was 30%. The majority of respondents were aged 16-19 years, with the following details: 16 years old (33.33%), 17 years old (36.67%), 18 years old (23.33%), and 19 years old (6.67%). The description of gender and age in this study is presented in the following table:

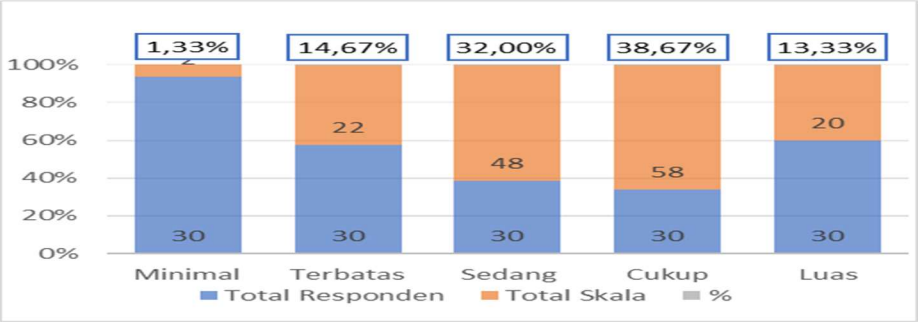
No	Gender	Total respondents	%
1	Wanita	21	**70,00%**
2	Pria	9	**30,00%**
Total		30	100,00%
No	Age	Total Respondents	%
1	16	10	**33,33%**
2	17	11	**36,67%**
3	18	7	**23,33%**
4	19	2	**6,67%**
Total		30	100,00%

- **Students' Ecological Knowledge**

This survey measures and analyzes Catholic teachings on environmental conservation. The total score on each scale indicates respondents' perceptions of the topics surveyed. Students' ecological knowledge is described in the following table:

QUESTION	SCALE					TOTAL
	MINIMAL	LIMITED	MEDIUM	MODERATRLY	BROAD	
1		4	8	18		30
2		1	8	12	9	30
3		4	7	17	2	30
4	2	10	10	5	3	30
5		3	15	6	6	30
TOTAL	2	22	48	58	20	

Based on the table above, the details of the percentage of students' ecological knowledge in gravic are as follows:



Based on the survey results, it can be seen that the level of ecological knowledge of students at Nita 1 Public High School varies. Most of the students' ecological knowledge is at a moderate and sufficient level. Only a small percentage of students have minimal ecological knowledge (1.33%). This shows that students have an understanding and knowledge of ecology. They have knowledge about ecological concepts, but do not yet have a more integral understanding. This can be seen from the limited percentage of ecological knowledge (14.67%). Knowledge at a minimal and limited level may indicate that a small number of respondents may not fully understand or have not applied Catholic teachings in concrete actions to protect the environment.

A total of 32.00% of respondents had moderate ecological knowledge. This shows that some respondents have understood and applied Catholic teachings in environmental preservation, although still limited. Students' ecological knowledge was at a sufficient level (38.67%). This shows that they have a good understanding of ecological concepts and are able to apply them in certain situations. Students' ecological knowledge is at a broad level (13.33%), indicating that some respondents have a deep understanding and may be active in environmental preservation in accordance with Catholic teachings. They have a deep understanding of various environmental issues and are actively involved in environmental conservation activities.

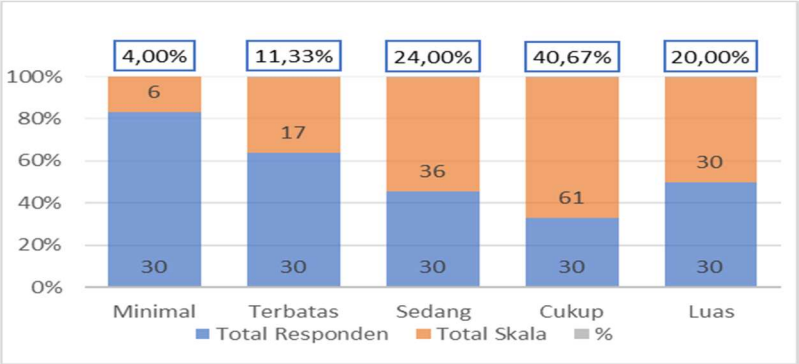
Overall, the ecological knowledge of students at SMA Negeri 1 Nita is relatively good, with most students having moderate to adequate understanding. However, there are a small number of students who have limited or minimal knowledge. There is still an opportunity to deepen their understanding of complex environmental issues and encourage their participation in concrete actions. Strengthening teaching and practice through church activities, environmental groups, and Catholic education can increase positive responses and the application of these teachings in the community.

- **Ecological Awareness and Attitude**

This survey aims to examine students' perceptions of ecological responsibility within their faith. A description of ecological awareness based on respondents' answers is presented in the following table:

QUESTION	SCALE					TOTAL RESPONDEN
	MINIMAL	LIMITED	MEDIUM	MODERATELY	BROAD	
6	2	2	4	10	12	30
7		3	7	18	2	30
8	4	7	7	7	5	30
9		4	8	15	3	30
10		1	10	11	8	30
TOTAL	6	17	36	61	30	

Based on the data above, the breakdown of the percentage of students' ecological awareness in the graph is as follows:



The majority of respondents, approximately 60.67% (a combination of *sufficient* and *extensive), gave a fairly high level of assessment to the questions asked. It can be interpreted that most respondents have sufficient* awareness of responsible environmental management (40%), which is an integral aspect of their Christian faith. 20% feel this is a *broad aspect* of their faith. Only a small portion feels ecological awareness is still *minimal* or *limited* . This indicates that most respondents believe and associate responsible environmental management as a fairly important to very important aspect of their faith.

The evaluation results indicate that the majority of respondents (40.67%) consider environmental impacts quite frequently in their activities. Twenty-four percent rated themselves as having moderate consideration, while another 20% reported frequently considering environmental impacts extensively. This finding reflects that respondents link environmental degradation issues to important moral and theological values within the Catholic faith. This indicates that environmental issues are recognized as a relevant part of their faith. Most respondents also indicated a personal awareness of the long-term consequences of their actions on the environment, particularly for future generations. Meanwhile, the percentage of respondents who rated themselves as having minimal (4%) and limited (11.33%) considerations was relatively small, indicating that only a small number of respondents have not fully considered environmental issues within the framework of their faith.

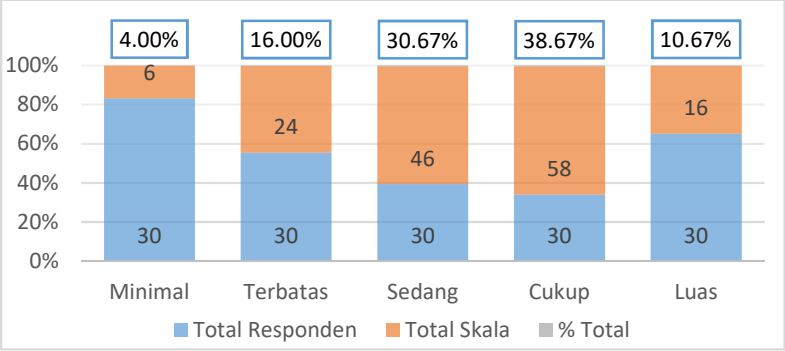
Overall, the data indicates that the majority of respondents have a fairly high level of awareness and commitment to environmental stewardship as part of their Christian/Catholic faith. The data show that the majority of respondents (40.67%) gave a fair rating *to* various questions related to the relationship between the Catholic faith and environmental issues. Respondents generally linked environmental concerns to moral and theological values, and felt personally responsible for environmental impacts for future generations. However, there was variation among respondents, with approximately 24.00% giving a *moderate rating* and 20.00% giving a *broad rating*. Only approximately 11.33% gave a *limited rating* and 4.00% gave a *minimal rating*.

- **Sustainable Practices and Behaviors**

The data presented shows the frequency distribution of respondents' involvement in environmentally friendly habits and behavior in their daily lives as follows:

QUESTION	SKALA					TOTAL RESPONDEN
	MINIMAL	LIMITED	MEDIUM	MODERATELY	BROAD	
11	1	3	9	14	3	30
12	2	7	13	8		30
13	1	6	7	13	3	30
14	2	7	10	8	3	30
15		1	7	15	7	30
TOTAL	6	24	46	58	16	

The data shows the distribution of respondents' involvement in environmentally friendly practices as follows:



The graph above shows that only a small percentage of respondents, around 4%, have very low levels of participation in environmentally friendly activities. This finding suggests the need for increased awareness and involvement in environmental conservation efforts. Sixteen percent of respondents fall into the limited participation category, meaning they only engage in environmentally friendly actions sporadically and inconsistently, such as recycling or reducing the use of single-use plastics. Meanwhile, 30.67% of respondents indicate fairly regular involvement in environmentally friendly activities, such as conserving water or recycling. The largest group, 38.67%, fall into the moderately active category, as evidenced by their involvement in practices such as waste reduction and recycling. This reflects the success of various educational programs and environmental awareness campaigns. On the other hand, only 10.67% of respondents demonstrate a strong commitment to sustainable practices. While this indicates a group with a strong level of environmental awareness, it is still relatively small.

Based on the data presented, respondents' participation levels in environmentally friendly activities show significant variation. The majority of respondents were moderately to quite active,

reflecting the initial success of environmental education and campaign programs. However, a small minority still demonstrated strong commitment, while others remained inconsistent in implementing environmentally friendly behaviors.

Discussion

In a study conducted at SMAN 1 Nita, students generally had a good understanding of efforts to preserve nature. Furthermore, overall data showed that there was still room for improvement in environmental practices, and further efforts were needed to raise awareness and participation in environmental initiatives. This can be interpreted as a sustainable, massive, and structured plan. Therefore, this needs to be appreciated.

Upon closer examination, students' understanding, awareness, and involvement in preserving the integrity of creation are influenced by the religious education they receive in school, from elementary to high school. In a more integral sense, this is due to the continuity of Catholic Religious Education teaching at each level of education. Catholic Religious Education lessons obtained from elementary school to secondary school have helped students to be able to implement it in their daily lives. Therefore, the emergence of the Laudato Si' Encyclical is not something new. This is because the values obtained in Catholic Religious Education are very parallel to the values contained in Laudato Si'. At the very least, there are several values that serve as basic capital for students in supporting and preserving God's creation, such as, ***first***, the value of responsibility. Catholic Religious Education taught to students greatly helps them understand their responsibilities and roles. This is important because without a sense of responsibility, efforts to protect and preserve God's creation will never be implemented. Students must feel responsible for the environment in which they live, not just as something they inhabit. Furthermore, this responsibility can help students to be more sensitive and responsive in thinking about the legacy that will be passed on to the next generation. Catholic Religious Education in schools is a means of implementing Christ's teachings for inner change and direct renewal of life (Dapiyanta: 2022, 13).

Second, ethical values. In Catholic Religious Education classes, students are taught to become ethical individuals. They are taught how humans should behave and how to distinguish between right and wrong behavior. The goal is very clear: before committing an act such as littering, students must first be able to determine whether the behavior is good, right, or wrong. Religious education can shape students' ethical values such as compassion, empathy, and justice. Of course, this is very good in supporting the integrity of creation.

Third, character building. Character building in individuals will be successful as expected if the basic character of the individual is taken into account first. Basic character can be used as a foundation in developing and shaping an individual's character (Pranata, Wahyuningrum & Jelahu: 2020, 118). And indeed, this is taken very seriously in Catholic Religious Education. Religious Education plays a very strategic role in shaping the character of students. Of course, this must be balanced with adequate and appropriate learning materials that are not boring. In Catholic Religious Education, students are always guided to develop strong character. With strong character, students can determine their attitudes firmly without being influenced by the attitudes and decisions of others.

Fourth, it explains the relationship between humans and creation. Compared to other subjects, religious education has greater value in explaining the relationship between humans and creation. For the group, this is important because by understanding the relationship between the two, a person is less likely to fall into exploitative mindsets. People tend to dominate and destroy nature because they don't properly understand the relationship between humans and creation. Therefore, religious education at every level of education must be maintained and collaborative work must be created so that efforts to preserve creation can be more mature.

- **Implications for Catholic Education and Church Leadership**

In the context of life in the Diocese of Maumere, many Catholic schools have implemented this approach. However, in public schools, this approach has not been very effective. This means that the emphasis in Catholic schools is very different from that in public schools. Therefore, we have several recommendations for schools in the Diocese of Maumere to increase ecological awareness. ***First***, integrate environmental education. Based on our observations, current learning has been limited to the classroom. Students feel like they are living in a concrete, multi-story building, contemplating environmental concepts from within the classroom. This is highly ineffective. Therefore, the group recommends that teaching and learning activities in religious education be conducted several times outside the classroom or in nature. This can help students interact with nature and facilitate their understanding of the material presented.

Second, curriculum and learning methods. In our opinion, schools in the Maumere Diocese have not been specifically designed to respond to environmental issues. This is closely linked to the curriculum. Curriculums in Indonesia, in general, are still designed solely to meet the job market. Students are ultimately left with only high exam scores but lack ecological awareness. We need to design a curriculum that is open to environmental issues and willing to engage in

conservation efforts.

Third, teachers with ecological insight. One aspect that is no less important but has a central role is teachers with ecological insight. In our opinion, many religious education teachers do not have ecological insight. As a result, they fail to set a good example for students. Teachers must have insight and have an ecological spirit so that students can emulate them.

- **Theoretical and Practical Contribution**

Based on the results of research at SMA N 1 Nita, we discovered something interesting that can be used as a contribution to environmental theology. In addition to Catholic Religious Education, students generally possess local wisdom within their respective cultures regarding the preservation of creation. Within their respective cultures, students are also equipped with an understanding passed down from their ancestors. The concept of *Laudato Si* ', initiated by Pope Francis, for example, is correlated with the cultural values of the tribes in the Diocese of Maumere. This research can help develop a more comprehensive and contextual concept of environmental theology by considering the experiences and perspectives of young people. In relation to leadership development, this research can help develop youth leadership in the environmental field and promote collaboration between young people and other communities.

Limitations and Implications for Features

The group acknowledges that this study still has shortcomings. These include, ***first***, the limited sample size. The number of students at SMA N 1 Nita is around hundreds, while only 30 were interviewed. Therefore, the sample size should be broader and more representative. ***Second***, the specific context. This research may only be applicable in specific contexts, such as within the Catholic community. In principle, this movement should be a collective movement, a movement of all religions, without focusing on any particular religion.

Conclusion

Ecological awareness is very important to instill in every individual, especially among the younger generation. In this study, students at SMAN 1 Nita have demonstrated a fairly good understanding of ecological values, although there is still room for improvement in terms of their practices and participation in nature conservation efforts. The religious education received by students plays an important role in shaping their character and ecological awareness. One of the theological perspectives in the Catholic Church used by the group, which is a solution both

conceptually and practically, is the Encyclical Laudato Si. This encyclical, issued by Pope Francis, raises many ecological issues. Based on these issues, Pope Francis calls for responsibility, solidarity, love, and full awareness of nature conservation. Humans are also asked to show true repentance or ecological conversion; so that humans and nature can live as brothers and sisters in the same house (earth).

The next step to achieve greater change is to make intensive efforts to integrate environmental education into the curriculum and raise ecological awareness among students, teachers, and the wider community. In the context of global movements, it is important to avoid narrow approaches and support interfaith and intercultural collaboration in preserving the sustainability of the earth. This study highlights the need for a more practical approach to environmental education. Where students are given the opportunity to interact directly with nature and enrich their ecological knowledge more comprehensively. Through these collective steps, it is hoped that we can build sustainable ecological awareness, not only within the school environment, but also in everyday life, thereby creating a more harmonious relationship between humans and nature.

Thus, this study makes an important contribution to the development of environmental theology theory and practice by introducing the perspectives of young people who are influenced by their local cultures and supporting youth leadership in environmental conservation. However, this study has several limitations, and therefore, further research is needed with a broader sample and involving various communities from diverse religious and cultural backgrounds. In this way, the ecological awareness movement can be realized as a joint effort involving all parties to protect the earth and pass on a sustainable environment to future generations.

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