

Eco Enzyme As a Means of Environmental Conservation Education in Understanding Events 2:15

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Abstract

Based on the meaning of Genesis 2:15, this paper talks about the use of eco enzyme as a way to teach people about environmental conservation. Eco enzyme is a natural mixture of organic waste mixtures that can be used to clean the environment in an environmentally friendly way. By understanding God's message to man to cultivate and care for the Earth (Genesis 2:15), the use of eco enzyme can be a practical way to educate Christians to do what they should do to protect the environment.

Keywords: Eco-enzyme, environmental learning, Genesis 2:15

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INTRODUCTION

Environmental issues are becoming increasingly important throughout the world. To preserve nature and achieve sustainable development, environmental conservation is very important because human activities have caused many negative impacts on the environment, such as pollution, exploitation of natural resources and damage to ecosystems. (Sodikin, 2010)

In Genesis 2:15, it is stated that "the Lord God brought the man into the garden of Eden to cultivate and care for it," indicating that Christians have an obligation to care for and care for the environment in which they live. According to this verse, humans are tasked with protecting and managing God's creation, including the natural environment in which they live. (Pedro Jiménez, 2022)

Interpreting Genesis 2:15 as a whole, Christians are asked to play a role as the main actors in efforts to protect the environment. This is in line with Christian principles, which teach a responsible and sustainable way of life as well as love and care for God's creation. However, there is often a difference between understanding theology and applying it in everyday life. This is contrary to Christian principles which teach about three things: love and care for God's creation, a responsible and sustainable lifestyle, and maintaining ecosystem balance as a way to steward God's creation. One effort that can be made to bridge this gap is through contextual and applicable environmental conservation education. This education aims to raise awareness and develop practical skills in preserving the environment.

In this way, Christians not only have a theological understanding of this topic, but they are also able to apply it in everyday life. (I. Putu Ayub Darmawan A Study of Christian Theology on Nature CV Widina Media Utama, 2023),

In situations like this, eco enzyme appears as an environmental conservation education method that is interesting and easy to use. Eco enzyme is a natural solution made by fermenting a mixture of organic waste such as fruit peels,

vegetable waste, and sugar water or rice washing water. This solution has many benefits, including being an environmentally friendly cleaner for organic waste and organic fertilizer. The objectives of this education are as follows: First, increase awareness of the importance of preserving the environment; second, building practical skills to manage the environment sustainably; and third, integrating the principles of the Christian faith into environmental conservation efforts.

In environmental conservation education, using eco enzymes has several advantages. First, eco enzyme can be made easily and cheaply, so it can be made by anyone, including church communities or Christian institutions. Second, they use organic waste, which is often considered rubbish, supporting the idea of environmentally friendly recycling and waste processing. Paul Wong, (Why Should Christians Struggle to Take Care of the Earth If After Jesus Comes There Will Be a New Heaven and Earth?," 2021) Third, eco enzyme offers a practical solution to reduce the use of chemicals that can pollute the environment.

Christians can learn about how to manage the environment sustainably by incorporating eco enzymes into environmental conservation education programs. They will have the opportunity to try for themselves how to use resources wisely, reduce waste, and use environmentally friendly products in everyday life. This real-life experience gives us a better and more valuable understanding of how to honor and respect the Creator by preserving the universe and living an abundant and sustainable lifestyle as taught in the Bible.

Through the creation and use of eco enzymes, Christians can directly practice the principles of recycling and using organic waste, which is often considered rubbish, to produce products that are beneficial to the environment such as cleaners, organic fertilizer and waste decomposers. During this process, they will gain knowledge about responsible ways to manage and optimize natural resources in addition to reducing negative impacts on the environment by reducing the use of dangerous synthetic chemicals. Introduction to the basic principles of sustainable natural resource management is one step. Everyone will understand how important it is to balance the use of natural resources with the needs of present and future generations. By using a responsible approach, we will learn how to optimize the use of natural resources by considering economic, social and environmental aspects holistically. (Natural Resource Management: Building a Balance Between Economy and Environment," Article, 2023)

Apart from that, they will be invited to understand the bad consequences caused by irresponsible exploitation of the environment. Everyone should understand the dangers posed by excessive use of dangerous synthetic chemicals. By understanding this, everyone, especially society, will be encouraged to adopt a sustainable and environmentally friendly approach by reducing the use of these synthetic chemicals and looking for safer and more sustainable alternatives.

Therefore, it is hoped that all communities will act as drivers of change and be able to implement sustainable and environmentally friendly natural resource management practices, (Reyhan Julianto Pribadi, 2021) which will make a positive contribution to human welfare and environmental sustainability. In addition, this practical experience allows Christians to learn environmentally friendly living skills and habits, such as sorting and processing household waste, using eco enzymes as

natural cleaners for household purposes, and growing crops with organic fertilizers, and applying conservation principles environment in their daily lives. Therefore, they not only gain theoretical knowledge, but also gain awareness and behavior that is in accordance with the principles of the Christian faith regarding preserving and maintaining what God has created.

This is in line with efforts to live a lifestyle that is in harmony with God's commands in Genesis 2:15. Therefore, this research aims to study the role of eco enzymes as a means of environmental conservation education in interpreting Genesis 2:15. By understanding the importance of environmental conservation from the perspective of the Christian faith and applying it practically through the use of eco enzymes, Christians are expected to be able to contribute to positive change in society.

RESEARCH

To research the problem above, the analytical method used is qualitative. A literature study approach was used to gain an in-depth and comprehensive understanding of the use of eco enzymes (Arimami Suryo A., Photographer: Arimami Suryo A., 2020) as an environmental conservation education tool in the context of Genesis 2:15, as well as the possibilities and obstacles to implementing it in church or other Christian institution. This method allows researchers to identify main themes, explore various relevant literature sources, and analyze various perspectives and results.

Researchers can study the concept of eco enzymes, principles of environmental conservation, the meaning of Genesis 2:15, and environmental education practices that have been carried out by reading literature which includes books, scientific journals, articles, research reports, and official documents. By combining these various sources of information, researchers hope to produce a comprehensive and thorough picture of the opportunities and difficulties of using eco enzymes as an environmental conservation education tool based on Christian faith.

In addition, it is hoped that this research will provide new insights or practical suggestions to assist churches or Christian institutions in developing effective and contextual environmental conservation education programs through careful and in-depth literature analysis. (Carolina Etnasari Anjaya, Reni Triposa, n.d.) Therefore Therefore, this literature study method is the right approach to achieve overall research objectives and contribute to

DISCUSSION

Eco Enzyme: Environmentally Friendly Conservation Solution

The use of materials that are environmentally friendly and do not damage the ecosystem is an important component in environmental conservation. ("Local Wisdom And Environmental Preservation (Case Study in Kampung Naga, Tasikmalaya Regency and in Kampung Kuta, Ciamis Regency," 2021) Eco enzyme is one of the alternatives that it is very likely to replace harmful chemicals, according to discussions in the literature.

Eco enzyme is a natural solution made by fermenting a mixture of organic materials such as fruit peels, vegetable waste, water, palm sugar and molasses (cane molasses). This mixture is made with a ratio of three kilograms of vegetable or fruit peel, ten liters of clean water, and three kilograms of molasses or palm sugar.

Dr. Rosukon Poompanvong, founder of Health Farm in Thailand, first introduced Eco Enzyme. Yuvianti D Article 6 No 3 (2023), He was born in 1956 (64 years old) in Suphanburi Province, and received an MA degree from Kasetsart Bangkok University, Bangkok, in 1983, and B.A. in education from Kasetsart University in the same year. He then went to Sri Lanka to study alternative medicine at the University of Colombo's Calubo Villa Hospital. In 1992, he earned his Ph.D. Dr. Rosukon also became the first person in Asia with a Ph.D. in alternative medicine. (Delvian Yosuky Vincent Linardo Tio Sania Rachmi Felix Santono, 2022) He also studied Finance and Bank Administration in Germany and Switzerland, Integrated Development at the University of Haifa, Israel, in 1983, and Peace Building from the Institute of Moral ReArmament in Switzerland, in 1984. (Rida Jelita, "Eco Enzyme and Its Extraordinary Achievements in Agriculture," 2020)

For more than three months, the fermentation process produces enzymes that are useful and useful as environmentally friendly cleaners, organic fertilizers and decomposers of organic waste. Eco enzyme can help you reduce dependence on artificial chemical products that can pollute the environment and endanger human health. Additionally, Eco Enzyme has several additional benefits. The first is that the raw materials are easily obtainable and come from household organic waste, which offers a solution for recycling and reducing landfill waste. The second is that the manufacturing process is easy and does not require special equipment, and can be done by anyone, including communities or groups of people who have limited resources. Third, the production costs of eco enzyme are very affordable and relatively cheap, so it can be a cost-effective alternative to expensive chemical products. And fourth, the use of eco enzyme as a cleaner, fertilizer or waste decomposer does not leave dangerous residues, so it is safe for the environment and living creatures around it. Furthermore, as a sustainable solution, eco enzyme can help reduce carbon footprints and support a more environmentally friendly lifestyle.

Eco enzyme has many benefits, so it can be widely used in many places. It is not only used in homes, but also in industry, agriculture, and other public facilities. Their use can make a significant contribution to sustainable development and environmental conservation efforts.

Eco enzyme is an excellent learning tool for teaching environmental conservation. Students can be directly involved in the practice of recycling and utilizing organic waste through the easy and cheap process of making eco enzyme. By seeing how materials usually considered waste can be transformed into useful products, students can gain a deeper understanding of the principles of sustainable environmental management.

Interpreting Genesis 2:15 in Environmental Conservation Education:

From the perspective of Christianity, God's command to cultivate and care for the earth, which is found in Genesis chapter 2 verse 15, provides a strong theological foundation for environmental conservation efforts. (Husnul Kblack,

2016) This shows that God gives humans the responsibility to oversee and protects everything He created, including the environment in which humans live.

In this context, "working on" can be interpreted as an active action to care for and manage the Earth with full responsibility, (Sang Putra Immanuel Duha, Otniel Otieli Harefa, Jan Lukas Lombok, n.d.) which includes using natural resources wisely, maintaining the balance of the ecosystem, and maintain biodiversity. Meanwhile, "maintain" emphasizes the importance of maintaining the integrity and sustainability of the natural environment as God's inheritance to mankind. This mandate is not only a right, but also a moral responsibility that must be carried out by mankind. This shows that God has given humans the mandate to look after His earth, not in a cruel way, but in a wise and loving way. Therefore, in Christian beliefs, making efforts to protect the environment is not only a moral calling, but also an expression of love and appreciation for God's beautiful creation.

As part of God's creation plan, the mandate to cultivate and care for the earth also shows the strong relationship between humans and the natural environment. In Christian beliefs, the earth is not just a place for humans to live, but also a home given by God to be managed wisely. Therefore, preserving the natural environment is a way to express gratitude to God who has given us the beauty and diversity of nature. In addition, the mandate emphasizes the importance of acting as caliph on earth. As caliphs, humans are entrusted with acting on behalf of God to manage His creation. This role describes the close relationship between humans and God, where humans act as His representatives to care for and maintain the earth and everything in it.

In this context, understanding the mandate to manage and conserve the earth also raises awareness of the importance of ecological justice. This means that humans must consider the welfare of all living creatures and future generations in every action to manage natural resources. This requires awareness of the social and ecological impacts of every decision taken in environmental management.

Thus, environmental conservation efforts from the perspective of the Christian faith not only include concrete actions to care for nature, but also strengthen awareness of the sustainable relationship between humans, nature and the Creator. Through a deep understanding of this mandate, Christians are encouraged to become pioneers in environmental conservation efforts, upholding the values of love, justice and responsibility for God's creation. Top of Form

The literature review shows that the meaning of Genesis 2:15 in the context of environmental conservation education has several important implications. (Santi Susanti, 2020) First, this emphasizes that environmental conservation efforts are not just pragmatic actions, but are also a form of obedience and respect for God. Second, this meaning reminds Christians of their responsibility as stewards of God's creation, who must manage natural resources wisely and sustainably.

Christians will not only gain theoretical knowledge about the principles of environmental management (Rita Maryana, 2013) but they will also be able to apply it in real life by incorporating eco enzymes into environmental conservation education programs. Making and using eco enzymes can be a way to live out the values of the Christian faith such as love, care and responsibility for what God has

created. This is a concrete manifestation of efforts to implement God's mandate in Genesis 2:15 in everyday life.

Genesis 2:15 as a Mandate from God for Environmental Conservation

In the book of Genesis 2:15, it is written, "The Lord God brought the man into the garden of Eden to cultivate and care for the garden." This verse contains a very important mandate from God for humans regarding their responsibilities towards the natural environment.

First, this verse emphasizes that God gave humans the trust to cultivate or manage the Garden of Eden, which is a representation of the entire earth and its natural resources. The word "cultivate" in Hebrew comes from the word "avad" which means to work, cultivate, or care for. This shows that humans are given the task of managing and developing natural resources in a responsible and sustainable manner. (Yakub Hendrawan Angin Angin Tri Astuti Yeniretnowati, 2024)

Second, the mandate to "preserve" the garden of Eden emphasizes humanity's responsibility to care for, protect, and preserve the natural environment. The word "keep" in Hebrew comes from the word "shamar" which means to watch over, care for, or supervise. This suggests that humans must act as guardians and protectors of nature, ensuring the balance and continuity of the ecosystem.

Thus, Genesis 2:15 not only gives humans the freedom to utilize natural resources, but also emphasizes their responsibility to manage and preserve the environment in a wise and sustainable way. This is in line with modern environmental conservation principles which emphasize the importance of using natural resources responsibly, preventing environmental damage and maintaining biodiversity.

In the context of the Christian faith, it emphasizes that humans are creatures created by God who must respect, care for and preserve nature as a form of obedience and reverence to the Creator. (Purba et al., 2023) This is also in line with Christian teachings about love and care, and responsibility towards God's creation. Therefore, Genesis 2:15 provides a strong theological basis for Christians to be actively involved in environmental conservation efforts. This mandate reminds us that preserving the environment is not just a pragmatic action, but is also a form of obedience and respect to God who created the universe with all its beauty and riches.

In implementing this mandate, Christians can take concrete steps such as reducing consumption, recycling, using sustainable energy sources, protecting biodiversity, and participating in environmental conservation programs. Apart from that, education and spreading awareness about the importance of environmental conservation are also important aspects in realizing this responsibility. (Irwan Moridu Ari Purwanti Melinda Melinda Rahmad Fajar Sidik Asfahani Asfahani, 2023) Apart from carrying out personal responsibility in caring for the environment, education and spreading awareness about The importance of environmental conservation plays an important role in realizing this responsibility more broadly. Environmental education plays a key role in shaping environmentally friendly attitudes, knowledge and behavior among society. Through education, individuals are given a deep understanding of various environmental issues, ranging from the

importance of preserving biodiversity to the negative impact of human activities on the environment.

Environmental education also encourages awareness of the consequences of consumptive behavior and waste of natural resources. (Ines Tasya Jadidah, 2023) By understanding the impact of every action, individuals become better able to make sustainable choices in their daily lives. Apart from that, environmental education also provides an understanding of the principles of sustainable natural resource management and innovative solutions to overcome environmental challenges.

Spreading awareness about the importance of environmental conservation also involves effective and inclusive communication efforts to various levels of society. This includes outreach campaigns, social activities, and the use of mass media and information technology. Through this approach, messages about the importance of protecting the environment can be conveyed in a way that is interesting and easy to understand by various groups, from children to adults, from local communities to the global level.

Education and spreading awareness about environmental conservation is not just about providing information, but also about shaping sustainable attitudes and behavior. This requires collaboration between various parties, including governments, educational institutions, non-governmental organizations, and the general public. Through this joint effort, it is hoped that awareness of the importance of environmental conservation can be increased significantly, so that all parties can work together to maintain environmental sustainability for future generations. Top of Form

Thus, Genesis 2:15 is not just a verse in the Holy Bible, but is a call to action and realizing an environmentally friendly lifestyle. (Frederik & Rouw, 2023) This mandate reminds us that as humans, we have the responsibility to be stewards of the goodness of God's creation, so that future generations can enjoy the beauty and riches of this extraordinary nature.

Genesis 2:15 relates to human responsibility towards the environment

Genesis 2:15 is a very important verse in understanding the relationship between humans and the natural environment from the perspective of Christian faith. This verse says, "The Lord God brought man into the garden of Eden to cultivate and care for the garden." In this verse, there are two key words that emphasize human responsibility towards the environment, namely "cultivate" and "maintain."

The word "cultivate" in Hebrew comes from the word "avad" which means to work, cultivate, or care for. (Utomo, 2020) This shows that humans are given the task of managing and developing natural resources in a responsible and sustainable way. Humans are expected to use the universe wisely, optimize its potential, and maintain ecosystem balance.

On the other hand, the word "keep" in Hebrew comes from the word "shamar" which means to look after, care for, or supervise. (Zaluchu, 2021) This implies that humans must act as guardians and protectors of nature, ensuring the

preservation and continuity of the ecosystem. Humans have a responsibility to protect biodiversity, prevent environmental damage, and maintain natural balance. In a theological context, the word "shamar" also reflects the role given by God to humans as guardians of His earth. As revealed in the Book of Genesis, humans were placed in the Garden of Eden to "work and care" (Genesis 2:15), indicating that this role was not a responsibility simply tied to morality, but was also part of the divine design for the relationship between humans and His creation.

"Maintaining" actions include real efforts to monitor and maintain the sustainability of the natural environment. This includes efforts to maintain the quality of air, water and soil, as well as paying attention to the welfare of flora and fauna. In this way, humans are not only expected to passively care for the environment, but also to play an active role in protecting and preserving the life within it.

Apart from that, the concept of "shamar" also emphasizes the importance of justice and equality in the treatment of all of God's creation. Humans are called to be fair guardians, who not only pay attention to their own interests, but also the needs of other creatures and future generations. This triggers deeper consideration of the impact of human decisions and actions on the global ecosystem and all forms of life within it. (Jamal Srouji and Deirdre Cogan, 2023) Apart from Genesis 2:15, there are several other Bible verses that also support the concept of responsibility humans to the environment:

First in Psalm 24:1: "The earth is God's with all its contents, the world and everything in it, because it is He who established the earth on the sea, who placed the world on the rivers." The second in the book of Genesis 1:28: "God blessed them, and God said to them: 'Be fruitful and multiply, fill the earth and subdue it, have dominion over the fish of the sea and the birds of the air, and over all the animals that creeps on the earth.'" And the third in the book of Revelation 11:18: "Arise your wrath, O Lord God Almighty! The time has come to judge the dead and reward your servants, the prophet -prophets and saints and to all who fear your name, both small and great, and to destroy those who destroy the earth." Then the fourth in the book of the old testament is Deuteronomy 20:19: "When you besiege a city that is at war against you, you shall not cut down its fruit trees, because you may eat the fruit; you shall not cut them down, because the tree is the support of your life."

As explained in Genesis chapter 2 verse 15, human responsibility for the environment inspires us to respect what God created. Celia Deane-Drummond, *Theology and Ecology* (BPK Gunung Mulia, 2006), This verse not only shows that humans will manage and protect Earth, but also shows the close relationship between humans and nature. This relationship requires humans to maintain the ecosystem that God has created. In this context, Genesis 2:15 provides a deep theological foundation for the Christian view of the need to protect and care for nature as an expression of love and obedience to the Creator. Gai Suhardja, *River Theology* (PT Kanisius, n.d.),

Apart from Genesis 2:15, other verses in the Bible also provide strong encouragement for environmental protection. Psalm 24:1 affirms that the earth and everything in it belongs to God, emphasizing the importance of respecting and

caring for His gifts. Meanwhile, Genesis 1:28 gives humans the mandate to fill and conquer the earth, which in its context requires responsibility in managing natural resources. Revelation 11:18 warns of the consequences of environmental destruction, emphasizing the need for justice for those who destroy the earth.

From these verses, it can be seen that the teachings of the Bible strengthen the view that humans have a moral responsibility to preserve the environment. Therefore, in facing today's environmental challenges, Christian churches and institutions have a calling to lead in nature conservation efforts, developing a deep understanding of the relationship between faith and environmental protection, (Ecotheology In Christian Perspective - Dantje T. Sembel, Ph.D). - and inspire his people to act as wise and caring protectors of nature.

These verses, along with Genesis 2:15, confirm that God gave humans the responsibility to care for and protect His creation, including the natural environment. Thus, it is the duty of humans to act as wise guardians of the earth and everything in it, by respecting God's will and maintaining the sustainability and harmony of the ecosystem He created.

Thus, through a deep understanding of the meaning of "shamar" in a theological context, humans are given a strong moral and spiritual foundation to act as protectors and guardians of nature. This encourages individuals to develop an attitude full of responsibility, love and wisdom in carrying out their role as caliphs on earth, and to continue fighting for environmental sustainability for the common good and future generations.

Top of Form

In the book of Genesis 2:15 it is emphasized that humans have two main responsibilities towards the environment: managing and developing natural resources wisely, and protecting and preserving the balance of the ecosystem. These two aspects must be balanced and complementary, not contradictory or ignoring one of them.

Human responsibility towards the environment is not only pragmatic or technical, but also has deep spiritual and theological dimensions. (Muh. Aris Marfai, 2019) As creatures created by God, humans are given the mandate to be good stewards of God's creation, including natural environment. This is a form of obedience and respect to the Creator who has given the gift of the universe with all its riches and beauty.

In the context of the Christian faith, responsibility towards the environment is also in line with the values of love, care and responsibility for God's creation. Christians are called to love and care for nature as a form of love and appreciation for the Father. Moreover, this responsibility is also part of a sustainable and abundant lifestyle, as taught in the Bible.

Therefore, Christians have a moral and spiritual responsibility to be at the forefront of environmental conservation efforts. (Komura, 2024) This can be realized through various means, such as reducing excessive consumption, recycling, using sustainable energy sources, protecting diversity biodiversity, and participate in environmental conservation programs.

Apart from that, education and spreading awareness about the importance of environmental conservation are also important aspects in realizing this

responsibility. Churches and Christian institutions can play an active role in campaigning for environmentally friendly lifestyles and educating people about the importance of preserving the universe as a form of obedience to God.

By understanding Genesis 2:15 and its relationship to human responsibility towards the environment, Christians can become significant agents of change in efforts to preserve God's creation. Through concrete actions and a sustainable lifestyle, they can make a positive contribution to the future of the earth and future generations.

Implementation in Churches and Christian Institutions

Although the use of eco enzymes as a means of environmental conservation education has a lot of potential, its implementation in churches and Christian institutions is certainly not free from challenges and obstacles. A literature study identified several factors that need to be considered to ensure the success of such a program.

First, the importance of support and involvement from church leadership or Christian institutions. Without commitment and good examples from leaders, environmental conservation education programs will be difficult to accept and carry out consistently. ("Environmental Ethics Theory and Practice of Learning) - Second, the availability of adequate human and financial resources to run the program in a sustainable manner. This includes the need for trained facilitators or educators, as well as a budget to provide supporting materials and infrastructure. (Aji Setyawan, 2024)

Apart from that, cultural factors and public perception also influence the success of the program. Several literatures highlight the resistance or doubts of some Christians who believe that environmental issues are less relevant to their faith. (Sony Kristiantoro, 2022) Therefore, ongoing education and outreach efforts are very important to raise awareness and change society's paradigm.

In implementing environmental conservation education programs with eco enzyme, churches or Christian institutions can learn from examples of good practices that have been carried out by other organizations or communities. Sharing experiences and collaborating with parties who have similar concerns can help identify the most effective strategies and methods according to the local context. For example, churches can form partnerships with local environmental agencies, volunteer groups, or perhaps organizations that have successfully implemented environmental conservation programs in the past.

By sharing experiences and knowledge, churches can gain valuable insight into best practices, obstacles they may face, and ways to overcome challenges in implementing eco enzyme programs. (Rida Jelita, 2022). In addition, this kind of collaboration also allows for the sharing of resources, whether in the form of workforce, funds, or infrastructure, which can strengthen overall program implementation.

Apart from learning from existing good practice experiences, churches can also adopt a participatory approach in designing and implementing environmental conservation education programs. Actively involving the church community in the program planning and implementation process can ensure that the initiative is

relevant to local needs and aspirations. It also builds a stronger sense of ownership and involvement of church members in environmental protection efforts.

In addition, it is important to consider adapting the eco enzyme program according to local culture and customs. Each community has its own unique context, and strategies that are effective in one place may not be completely appropriate in another. Therefore, in developing environmental conservation education programs, churches need to be sensitive to existing cultural values and norms, as well as integrating eco enzymes into the local social, cultural and economic context. By paying attention to these supporting factors and challenges, and continuing to innovate in program development, churches and Christian institutions have a great opportunity to become agents of change in environmental conservation efforts. The use of eco enzymes as an educational tool can be a concrete first step in realizing an environmentally friendly lifestyle (Junaidi et al., 2021) and is in line with God's mandate in Genesis 2:15. Eco enzyme, which is a natural product made from organic materials such as fruit, vegetable remains and sugar water, has many benefits in environmental management. First of all, eco enzyme can be used as a replacement for dangerous synthetic chemicals in daily activities, such as household cleaners, plant fertilizers and natural pest control.

Through education about the use of eco enzymes, (Nurfajriah Nurfajriah, 2021) churches and Christian institutions can guide their congregation to adopt more sustainable and environmentally responsible living practices. This not only includes reducing the use of harmful chemicals, but also expanding understanding of natural cycles and the importance of maintaining biodiversity. Thus, the use of eco enzymes is not only a practical step in maintaining environmental cleanliness, but also a form of commitment to caring for God's creation with full responsibility. (Rizkita et al., 2023)

Apart from that, the use of eco enzymes can also be an effective means of building awareness of the importance of sustainable management of natural resources. Through the process of making eco enzyme which involves composting organic materials, individuals can learn about the recycling cycle and the importance of reducing organic waste. This not only teaches practical values about resource management, but also helps change mindsets and behavior towards the environment.

Thus, the use of eco enzymes as an educational tool not only creates opportunities to recognize and apply environmentally friendly solutions in everyday life, but also provides a solid foundation for the formation of thought patterns and attitudes that are in accordance with God's mandate in Genesis 2:15 . This can bring significant positive changes in the lifestyle of Christians, as well as a significant contribution to preserving the environment for future generations.

CONCLUSION

Eco enzyme is an environmentally friendly solution that has great potential in environmental conservation efforts, (Enggar Maharani & Mahendra Dewi, 2022) especially in the context of environmental conservation education among Christians. As a natural solution produced from the fermentation process of organic materials, eco enzyme can function as a cleaner, fertilizer and waste decomposer that is safe

for the environment. Its use can reduce dependence on synthetic chemical products that pollute the environment and endanger human health, while supporting the principles of recycling and sustainable waste management.

From the perspective of the Christian faith, environmental conservation efforts have a strong theological foundation in Genesis 2:15, where God gave humans a mandate to "cultivate and care for" the Garden of Eden (earth). This verse emphasizes human responsibility as stewards of God's creation, who must manage natural resources wisely and preserve the balance of the ecosystem. Thus, environmental conservation is not just a pragmatic action, but also a form of obedience and respect to the Creator.

Through integrating eco enzymes in environmental conservation education programs, Christians can learn and practice the principles of sustainable environmental management in a real way. (Rahma et al., 2023) The activity of making and using eco enzymes is a means to live out the values of faith such as love, care and responsibility for God's creation, while realizing God's mandate in Genesis 2:15 in everyday life.

However, the implementation of this kind of program in churches and Christian institutions is not free from challenges and obstacles, such as the need for support from leadership, the availability of adequate human and financial resources, as well as cultural factors and public perception. Therefore, education, outreach and collaboration efforts with parties who have similar concerns are very important to ensure the success of the program.

By paying attention to the potential, theological foundations and existing challenges, churches and Christian institutions have a great opportunity to become agents of change in environmental conservation efforts through education using eco enzymes. This step not only contributes to the preservation of God's creation, but also creates a lifestyle that is environmentally friendly and in harmony with the values of the Christian faith, so that future generations can enjoy the beauty and riches of this extraordinary nature.

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