



Submitted on 01/05/2026;
Revised on 01/07/2026;
Accepted on 24/08/2026;

Faith on the Shoreline: A Contextual Eco-Theological Reflection on Creation Stewardship and Community Engagement in Pulau Buluh

Timotius Togatorop¹, Rini Sumanti Sapalakkai², Jabes Pasaribu^{3*},
Desetina Harefa⁴, Johan Natanael Sitingjak⁵

^{1,3,5}Institut Agama Kristen REAL Batam, Indonesia

²Hoseo University, Cheonan, South Korea

⁴Methodist Theological University, Seoul, South Korea

*E-mail: jabespasaribu031@gmail.com

Abstract

This article reports a qualitative study employing participatory and theologically reflective approaches to examine the Community Engagement Program conducted by the Undergraduate Theology Program of Sekolah Tinggi Teologi Real Batam in Pulau Buluh, Batam, Indonesia. Conducted on August 29, 2024, the program combined a coastal clean-up campaign and community education in collaboration with Free the Sea, local leaders, and residents. Drawing on field observation, participatory dialogue, and theological reflection, the study argues that grassroots ecological action constitutes an embodied and contextual enactment of the cultural mandate (*mandatum culturae*). The findings suggest that such action cultivates ecological awareness while reflecting a Pentecostal/charismatic missiological sensibility that integrates creation care with the Church's spiritual and social mission. The study concludes that environmental stewardship is an integral expression of Christian faith and mission and that theological institutions can translate ecological convictions into participatory, community-based practices of creation stewardship.

Keywords: Christian mission; coastal community engagement; creation stewardship; eco-theology; environmental responsibility

Abstrak

Artikel ini melaporkan penelitian kualitatif dengan pendekatan partisipatif dan reflektif-teologis untuk mengkaji Program Pengabdian kepada Masyarakat (PkM) yang dilaksanakan oleh Program Studi Sarjana Teologi Sekolah Tinggi Teologi Real Batam di Pulau Buluh, Batam, Indonesia. Program yang dilaksanakan pada 29 Agustus 2024 ini memadukan aksi bersih pantai dan edukasi masyarakat melalui kolaborasi dengan Free the Sea, tokoh masyarakat, dan warga setempat. Berdasarkan observasi lapangan, dialog partisipatif, dan refleksi teologis, penelitian ini menunjukkan bahwa aksi ekologis berbasis masyarakat merupakan perwujudan konkret dan kontekstual dari mandat budaya (*mandatum culturae*). Temuan menunjukkan bahwa tindakan tersebut menumbuhkan kesadaran ekologis sekaligus mencerminkan sensitivitas misiologis Pentakostal/Kharismatik yang mengintegrasikan pemeliharaan ciptaan dengan misi spiritual dan sosial Gereja. Penelitian ini menegaskan bahwa tanggung jawab lingkungan merupakan bagian integral dari iman dan misi Kristen serta menunjukkan bahwa lembaga pendidikan teologi dapat menerjemahkan keyakinan ekologis ke dalam praktik pemeliharaan ciptaan yang partisipatif dan berbasis komunitas.

Kata Kunci: ekoteologi; keterlibatan komunitas pesisir; misi Kristen; pemeliharaan ciptaan; tanggung jawab lingkungan



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INTRODUCTION

Amid worsening environmental degradation, particularly marine and coastal pollution, the Church, as the body of Christ, cannot remain passive. Environmental damage is not merely a social, economic, or ecological concern but also a matter of faith. The earth and all that is in it are part of God's good creation, entrusted to humanity to cultivate and preserve. Environmental neglect therefore raises questions about both ecological responsibility and humanity's faithfulness to its vocation before God. In this context, the involvement of undergraduate theology students in the Community Engagement Program (PkM) in Pulau Buluh represents a tangible expression of faith-based responsibility for creation care.

Environmental degradation and natural disasters continue to generate significant human, ecological, and economic consequences worldwide. The International Disaster Database (EM-DAT), for example, has documented more than 26,000 disaster records involving fatalities, affected populations, emergencies, and international assistance.¹ *Our World in Data* reports that natural disasters such as earthquakes, storms, floods, and droughts continue to cause tens of thousands of deaths annually,² while floods and earthquakes account for a substantial proportion of global economic losses.³ Although these data demonstrate the scale of environmental vulnerability, they do not explain how ecological responsibility is understood and practiced in particular communities. This makes contextual inquiry especially important in coastal communities whose livelihoods and well-being are closely connected to the marine environment.

Within Christian theology, ecological crisis has increasingly become a subject of theological reflection. Aritonang et al. argue that global warming, flooding, drought, and species extinction are closely related to human greed and disregard for ecological balance.⁴ This perspective resonates with the biblical understanding of the fractured relationship between God, humanity, and creation as a dimension of ecological degradation. These

¹ "Monitoring Hazards & Disasters Worldwide since 1988," *EM-DAT The International Disaster Database*.

² Hannah Ritchie, Pablo Rosado, and Max Roser, "Natural Disasters," *Our World In Data* (Oxford, 2022), last modified 2022, accessed August 12, 2026, <https://ourworldindata.org/natural-disasters>.

³ Eric Neumayer, Thomas Plümper, and Fabian Barthel, "The Political Economy of Natural Disaster Damage," *Global Environmental Change* 24 (January 2014): 8–19.

⁴ Delinda Elizabeth Aritonang, Roberto Hamonangan Silitonga, and Destri Ayu Natalia Hutaauruk, "Relasi Alam Dengan Eksistensi Manusia Terhadap Krisis Ekologi Berdasarkan Perspektif Filsafat-Teologis," *DIEGESIS: Jurnal Teologi Kharismatika* 6, no. 2 (December 2023): 138–155.

concerns converge in Pulau Buluh, a small coastal settlement in Batam, where initial field observations identified waste accumulation along the shoreline. This local condition provides a concrete context for examining how theological convictions concerning creation stewardship can be embodied through community-based ecological action.

The theological framework of this study is grounded in eco-theology, which understands creation care as an integral dimension of Christian faith. White's influential critique of the Christian understanding of human dominion challenged theology to reconsider humanity's relationship with creation.⁵ Bouma-Prediger describes ecological responsibility as *ecological obedience*,⁶ while Bauckham emphasizes creation as a community in which humanity exists relationally with the wider created order.⁷ Wirzba further reframes human vocation from domination toward service, connecting ecological responsibility with worship and discipleship.⁸ These perspectives establish a theological basis for understanding environmental stewardship as an expression of Christian faith and practice.



Figure 1. Group photo of the PkM team with Free the Sea prior to the coastal clean-up action in Pulau Buluh

⁵ Lynn White, "The Historical Roots of Our Ecologic Crisis," *Science* 155, no. 3767 (March 10, 1967): 1203–1207, <https://www.science.org/doi/10.1126/science.155.3767.1203>.

⁶ Steven Bouma-Prediger, *For the Beauty of the Earth: A Christian Vision for Creation Care*, 2nd ed. (Grand Rapids, Michigan: Baker academic, 2010).

⁷ Richard Bauckham, *The Bible and Ecology: Rediscovering the Community of Creation* (Waco, Texas: Baylor University Press, 2010).

⁸ Norman Wirzba, *The Paradise of God: Renewing Religion in an Ecological Age*, ed. David Krasner (Oxford: Oxford University Press, 2007).

This framework is particularly relevant to Sekolah Tinggi Teologi Real Batam within its Pentecostal/charismatic context. Recent Indonesian theological scholarship has interpreted ecological crisis as a theological concern rooted in broken relationships between God, humanity, and creation.⁹ Accordingly, creation care can be integrated with spiritual formation, social engagement, and Christian mission. The study therefore distinguishes *mandatum culturae*, understood as humanity's creational vocation to cultivate and preserve creation, from *missio mandatum culturae*, used here as an analytical term for the missional enactment of this mandate through concrete ecclesial and community practices. Within the broader framework of *missio Dei*, ecological responsibility becomes an integral expression of the Church's participation in God's restorative mission.

Against this background, the study asks: How does grassroots, faith-based ecological action in the Pulau Buluh Community Engagement Program enact a contextual eco-theology of creation stewardship, and how does this practice reflect the missional responsibility of Christian theological education within a Pentecostal/charismatic context? Employing a qualitative approach with participatory engagement and theological reflection, this study examines the Pulau Buluh experience as a contextual expression of eco-theology, creation stewardship, and Christian mission. It argues that ecological responsibility becomes a lived expression of Christian faith when theological convictions are translated into participatory, community-based practices of creation care.

METHOD

This study employed a qualitative approach combining participatory engagement and theological reflection to examine the Community Engagement Program (PkM) conducted by the Undergraduate Theology Program of Sekolah Tinggi Teologi Real Batam in Pulau Buluh on August 29, 2024. The qualitative design was selected to explore the experiences, reflections, and meanings emerging from community-based ecological action rather than to measure the program's long-term effectiveness. Participatory engagement involved theology students, community members, local leaders, and partner organizations in identifying

⁹ Aritonang, Silitonga, and Hutauruk, "Relasi Alam Dengan Eksistensi Manusia Terhadap Krisis Ekologi Berdasarkan Perspektif Filsafat-Teologis."

environmental concerns, undertaking ecological action, and reflecting on the experience. This approach draws on the broader tradition of participatory inquiry but does not claim to constitute Participatory Action Research (PAR) as a formal research design.¹⁰

The study also employed theological reflection to interpret ecological practices in relation to Christian concepts of creation stewardship, the cultural mandate (*mandatum culturae*), and Christian mission. In practical theology, theological reflection connects concrete human practices and experiences with theological interpretation and meaning-making.¹¹ Accordingly, the PkM activity was examined not merely as an environmental intervention but as a contextual practice through which Christian convictions concerning creation care could be expressed and interpreted.

The program was conducted in Pulau Buluh, Batam, in collaboration with Free the Sea, local companies, community leaders, and residents. Participants included undergraduate theology students of Sekolah Tinggi Teologi Real Batam and community members involved in the PkM activities. Participation was based on involvement in the program and collaboration with local stakeholders rather than probabilistic sampling. The available program documentation does not provide a complete demographic profile or exact number of participating community members. Therefore, the study does not claim demographic representativeness or statistical generalizability but treats Pulau Buluh as a contextual case for examining participatory ecological action and its theological meaning.

Data were collected through field observation, participatory dialogue, theological reflection, and program documentation. Initial observations focused on visible environmental conditions, particularly waste accumulation along the coastline, while informal dialogue with residents explored local concerns regarding coastal cleanliness and waste management. The program subsequently proceeded through four stages: initial observation, activity planning, environmental action and theological reflection, and documentation and evaluation. The activity combined theological education on humanity's responsibility toward creation with

¹⁰ Stephen Kemmis and Robin McTaggart, "Participatory Action Research: Communicative Action and the Public Sphere," in *The SAGE Handbook of Qualitative Research*, ed. N. K. Denzin and Y. S. Lincoln, 3rd ed. (Thousand Oaks, CA: SAGE Publication, 2025), 559–603.

¹¹ Caleb Hutcherson, "Practical Theology in Arab Evangelical Perspective: Considering a Particular Practice of Theological Reflection," *Practical Theology* 16, no. 2 (March 4, 2023): 192–204, <https://www.tandfonline.com/doi/full/10.1080/1756073X.2023.2201027>.

practical coastal clean-up. Following the clean-up, students and community members participated in a brief reflective discussion concerning environmental care as an expression of obedience to God and love for creation and neighbor. Written reports and photographs were used to document the program.

The collected qualitative material was analyzed thematically. Thematic analysis provides a systematic and flexible method for identifying, organizing, and interpreting recurring patterns of meaning in qualitative data.¹² The analysis proceeded from contextual observations and participant reflections to the identification of recurring themes related to environmental responsibility, creation stewardship, community participation, *mandatum culturae*, and Christian mission. These themes were subsequently interpreted in dialogue with the theological framework of eco-theology, creation stewardship, *missio mandatum culturae*, and *missio Dei* developed in the Introduction.

Because the study did not employ standardized pre- and post-intervention instruments, it does not claim statistically measurable changes in environmental awareness or long-term behavioral transformation. Rather, the findings are presented as a contextual qualitative interpretation of a participatory ecological experience, focusing on how community-based ecological action provided a context for embodying and reflecting upon creation stewardship within Christian theological education.

RESULTS AND DISCUSSION

Beach Clean-Up as an Embodied Expression of Creation Stewardship

The coastal clean-up in Pulau Buluh should be understood not merely as an environmental activity but as the first concrete expression of the study's central theme: creation stewardship as an embodied dimension of Christian faith and mission. The initial field observation identified accumulated waste along the coastline, providing a tangible local manifestation of the broader ecological crisis. Marine debris, particularly plastic waste, poses persistent threats to coastal and marine ecosystems because of its volume, durability, and widespread distribution. Much of this waste originates from human activities and reaches the

¹² Virginia Braun and Victoria Clarke, "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (January 21, 2006): 77–101, <https://www.tandfonline.com/doi/full/10.1191/1478088706qp063oa>.

ocean through direct disposal as well as rivers, wind, and rainfall. Our World in Data estimates that approximately 530 million tons of plastic waste are generated annually, with around 1.7 million tons entering the oceans.¹³ These figures situate the Pulau Buluh experience within a wider ecological crisis while also highlighting the need to interpret local environmental problems through concrete community action.

The ecological significance of marine debris extends beyond the visible degradation of the shoreline. Plastic pollution disrupts marine food webs, damages habitats, and places pressure on the resilience and functioning of marine ecosystems. Lincoln et al. emphasize that marine litter and climate change constitute interconnected threats that intensify pressures on marine environments and coastal communities, with implications for human health, economic well-being, and food security.¹⁴ Thus, the removal of waste from the Pulau Buluh coastline can be interpreted as more than an attempt to restore physical cleanliness. It represents a practical response to conditions that affect the interconnected well-being of humans and the wider created order. The activity consequently provides an empirical basis for moving from environmental observation to theological interpretation.

From a theological perspective, this movement is significant because ecological responsibility is not external to Christian discipleship. Duha et al. argue that the destruction of nature raises a theological question concerning the responsibility entrusted to human beings as caretakers of creation.¹⁵ Within the framework developed in this study, the coastal clean-up can therefore be understood as a contextual enactment of the *mandatum culturae*: humanity's responsibility to cultivate and preserve the creation entrusted by God. The significance of the activity lies not merely in the amount of waste removed, but in how ecological concern became a concrete context in which theological convictions were translated into embodied practices of creation stewardship.

This interpretation also explains why the involvement of theology students is

¹³ Hannah Ritchie, "How Much Plastic Waste Ends up in the Ocean?," *Our World In Data* (Oxford, October 5, 2023), last modified October 5, 2023, accessed August 12, 2026, <https://ourworldindata.org/how-much-plastic-waste-ends-up-in-the-ocean>.

¹⁴ Susana Lincoln et al., "Marine Litter and Climate Change: Inextricably Connected Threats to the World's Oceans," *Science of The Total Environment* 837 (September 2022): 155709.

¹⁵ Sang Putra Immanuel Duha et al., "Tanggung Jawab Orang Percaya Atas Pengrusakan Alam: Perspektif Pendidikan Agama Kristen," *REAL DIDACHE: Journal of Christian Education* 3, no. 2 (September 2023): 90–105.

analytically important. Their participation positioned theological education beyond the classroom and connected theological formation with a concrete ecological reality. Rather than treating creation care as an abstract theological concept, students encountered the environmental consequences of human practices and responded through collective action. The activity thus created a pedagogical space in which theological knowledge, ecological awareness, and practical responsibility could interact. In this sense, the clean-up functioned simultaneously as environmental action, theological formation, and community engagement.

The participatory character of the activity further shifts the meaning of creation stewardship from an individual ethical obligation toward a communal practice. The involvement of local residents, community leaders, students, and partner organizations demonstrated that ecological responsibility is most meaningful when it is enacted collectively within the social context in which environmental problems occur. The Pulau Buluh experience therefore suggests that faith-based ecological action can create a shared space in which theological convictions and local environmental concerns encounter one another. The community was not merely the recipient of an externally designed environmental intervention; its participation formed part of the process through which creation care was practiced and interpreted.



Figures 2 & 3. Preparation for the coastal clean-up action and distribution of cleaning equipment

This finding provides an analytical bridge to the subsequent dimensions of the program. The ecological problem generated the need for action, theological reflection provided its meaning, community participation transformed that meaning into shared practice, and theological education connected the practice with Christian mission. The beach clean-up therefore functions as the empirical starting point for understanding *missio mandatum culturae* in this study. It represents not a separate environmental program, but a contextual enactment of creation stewardship through the participation of the theological institution and the local community. From this perspective, the significance of the Pulau Buluh experience lies not merely in cleaning the coastline, but in demonstrating how Christian faith can become materially visible through responsible relationships with God, neighbor, and creation.

Theological Education as Ecological Formation

The coastal clean-up activity in Pulau Buluh demonstrates that theological education can function as more than the transmission of doctrinal knowledge. Its significance lies in creating a context in which theological convictions concerning creation are interpreted, practiced, and reflected upon collectively. The central argument of this study is that creation stewardship becomes more theologically formative when it is embodied in participatory practices that connect theological learning with concrete ecological responsibility. In this sense, the PkM activity provides an example of how theological education can move from conceptual understanding toward lived Christian practice.

The theological basis for this argument is found in the biblical understanding of humanity's vocation to cultivate and preserve creation. Genesis 2:15 presents human responsibility toward the earth not simply as permission to use its resources, but as a vocation to work and care for the garden. Within the framework of this study, this vocation is understood as the *mandatum culturae*, which provides the theological foundation for creation stewardship. The missional significance emerges when this mandate is embodied in concrete practices that serve both human communities and the wider created order. Rather than treating ecological responsibility as an additional activity alongside Christian mission, the Pulau Buluh experience suggests that care for creation can constitute one of the contexts in which Christian mission becomes visible.

This interpretation also responds to the concern raised by Lahagu et al. regarding the broader implications of Christian mission. Their discussion of discipleship points to the need for Christian formation to engage realities beyond the boundaries of individual spirituality, including the responsibilities generated by human relationships and social contexts.¹⁶ Applied to ecological responsibility, this perspective suggests that theological formation cannot remain detached from the material conditions in which communities live. The accumulated waste along the Pulau Buluh coastline therefore became not merely an environmental problem to be solved, but a pedagogical and theological context in which students could encounter the practical implications of their vocation.

Pasaribu similarly calls for a reconstruction of the Church's understanding of mission in response to contemporary challenges. His critique highlights the need to recover a sense of ecclesial responsibility that connects Christian faith with the realities confronting communities.¹⁷ The Pulau Buluh experience extends this concern into the ecological sphere. The contribution of the present study is not to claim that environmental action is automatically theological, but to show that an ecological practice becomes theologically significant when it is intentionally interpreted through Christian convictions concerning creation, vocation, and mission. This distinction is important because it prevents environmental activities from being described as Christian merely because they are conducted by a Christian institution.

The same principle can be observed in the relationship between faith and concrete social action. Pasaribu et al. emphasize in their PkM research that Scripture is not intended to remain detached from the actions of believers, particularly in their engagement with marginalized communities.¹⁸ This perspective provides an important bridge between theological education and community engagement. In Pulau Buluh, theological learning was not delivered primarily through a formal lecture or classroom setting. Instead, theological meaning was communicated through participation, dialogue, practical action, and reflection.

¹⁶ Ardianto Lahagu et al., "Making Disciples of All Nations: Membangun Pemuridan Lintas Negara Dalam Era Global," *Jurnal PKM Setiadharm* 6, no. 1 (2025): 86–97.

¹⁷ Jabes Pasaribu, "Menimbang Sentral Pelayanan: Misi Dan Tanggung Jawab Gereja Menghadapi Skandal," *Jurnal Teologi Injil dan Pendidikan Agama* 2, no. 1 (2024).

¹⁸ Jabes Pasaribu et al., "Misi Dan Pelayanan Kesehatan Serta Pendidikan Di Desa Air Gelubi," *Real Coster : Jurnal Pengabdian kepada Masyarakat* (March 2025): 1–14.

The students therefore occupied a dual role as learners and participants, while community members were not merely recipients of theological instruction but active participants in the ecological practice.

This participatory dimension is particularly significant for understanding theological education within the Pentecostal and charismatic context of Sekolah Tinggi Teologi Real Batam. Pentecostal theological formation has traditionally emphasized experiential faith, spiritual transformation, and active participation in Christian ministry. The Pulau Buluh experience suggests that these characteristics can be extended into ecological formation. Creation care can become a context in which spiritual formation is connected with social responsibility and embodied practice. The ecological dimension of theological education therefore does not replace evangelistic or spiritual formation but broadens the practical field in which Christian discipleship is enacted.

The concept of *missio mandatum culturae* becomes useful at this point, provided that it is distinguished from the *mandatum culturae*. The latter refers to the theological vocation to cultivate and preserve creation, whereas *missio mandatum culturae* describes the contextual enactment of that vocation through practices of Christian mission. Widjaja's discussion of missiology emphasizes the relationship between theological understanding, mission, and concrete Christian experience.¹⁹ In the Pulau Buluh context, the distinction allows the beach clean-up to be interpreted not simply as an application of an abstract theological mandate, but as a missional practice through which that mandate becomes visible in a particular community.

The theological contribution of this study therefore lies in proposing ecological formation through embodied participation as a bridge between creation theology and theological education. The Pulau Buluh experience indicates that students can encounter creation stewardship not only by studying biblical or theological concepts but by participating in concrete ecological practices and subsequently interpreting those experiences theologically. Community engagement thus becomes a pedagogical space in which theological knowledge, ecological awareness, and Christian mission converge.

This argument also clarifies the relationship between environmental responsibility and

¹⁹ Fransiskus Irwan Widjaja, *Misiologi Antara Teori, Fakta Dan Pengalaman*, 1st ed. (Yogyakarta: Andi Offset, 2018).

faith. The clean-up activity should not be interpreted as evidence that the participants' faith increased or that the community underwent measurable theological transformation, since the study did not employ instruments designed to establish such outcomes. Its significance is more appropriately understood as formative potential. The activity created a space in which participants could connect care for the environment with responsibility toward God, neighbor, and creation. Such a connection moves environmental stewardship beyond a purely utilitarian concern for cleanliness or health and places it within the broader theological framework of Christian vocation.

The experience in Pulau Buluh consequently challenges a separation between theological education and ecological engagement. Theological education can contribute to creation care not simply by adding environmental topics to its curriculum, but by creating learning contexts in which students and communities practice and interpret ecological responsibility together. In this sense, the beach clean-up represents more than an act of environmental service. It is a contextual pedagogical practice through which the *mandatum culturae* is translated into *missio mandatum culturae*. This provides a basis for understanding theological education as an important site where Christian faith, ecological responsibility, and community-based mission can be integrated.



Figures 4 & 5. Coastal clean-up activities, community collaboration, and environmental education efforts

Community Reflection as Shared Ecological and Theological Awareness

Community reflection constituted an important component of the PkM because it extended the meaning of the coastal clean-up beyond the immediate removal of waste. The reflection provided a space in which participants could consider environmental stewardship as a shared and continuing responsibility rather than as a one-time activity. This emphasis is consistent with previous community engagement in Pulau Buluh, which identified limited awareness of the effects of waste on public health and marine ecosystems and employed participatory socialization and beach-cleaning activities to strengthen environmental awareness.²⁰

Within the present study, ecological care was further interpreted in relation to Christian faith, particularly the responsibility to care for creation entrusted by God to humanity. The reflective discussion connected the physical condition of the coastal environment with the community's social and spiritual life. Rather than treating environmental cleanliness merely as an aesthetic concern, participants were invited to consider its implications for communal well-being and their relationship with creation. This connection is significant because it demonstrates how ecological action can become a context for theological meaning-making. The beach clean-up provided the practical experience, while reflection enabled participants to interpret that experience through the categories of faith, responsibility, and creation stewardship.

The participatory character of the reflection was also significant. The discussion did not follow a formal theological seminar or structured lecture but emerged from the shared experience of students and community members who had participated directly in the environmental activity. This approach complements earlier PkM experience in Pulau Buluh, where participatory socialization was combined with direct environmental action to address community awareness concerning coastal waste.²¹ The present study extends this practical model by interpreting participation not only as a strategy for environmental awareness but also as a context for theological reflection and Christian formation.

²⁰ Dewi Lidya Sidabutar et al., "Sinergi Free the Sea Dan Prodi Pendidikan Kristen Anak Usia Dini Sekolah Tinggi Teologi Real Batam: Aksi Bersih Pantai Untuk Masa Depan Laut Di Pulau Buluh," *Real Coster : Jurnal Pengabdian kepada Masyarakat* 8, no. 1 (March 28, 2025): 15–28, <https://ojs.strealbatam.ac.id/index.php/coster/article/view/645>.

²¹ Ibid.

Informal responses from several residents indicated that the activity prompted them to consider environmental care in relation to Christian faith. These responses should not be interpreted as evidence of measurable or long-term transformation, since the study did not employ standardized instruments to assess changes in theological or ecological awareness. They nevertheless provide qualitative indications that the activity created a space for participants to connect environmental responsibility with Christian identity and practice.

This finding strengthens the study's broader argument that creation stewardship becomes more meaningful when it is practiced and interpreted collectively. Faith is therefore not approached merely as a set of doctrinal affirmations or religious observances, but as a lived orientation that can shape relationships with God, neighbor, and creation. In the context of Pulau Buluh, community reflection transformed the clean-up from an isolated environmental action into a shared process of interpreting ecological responsibility through faith.

Consequently, community reflection represents an important link between environmental action, theological formation, and Christian mission. The ecological problem prompted collective action, the action generated shared experience, and reflection provided an interpretive framework through which that experience could be understood theologically. The Pulau Buluh experience therefore suggests that community-based ecological engagement can function as a contextual space for cultivating creation stewardship within Christian theological education. Rather than separating spiritual formation from environmental responsibility, the activity brought these dimensions together in a participatory practice of Christian faith and mission.

Collaboration with Free the Sea as a Practice of Sustainable Stewardship

The collaboration with *Free the Sea*, a Batam-based waste-management company specializing in marine plastic recovery, extended the Community Engagement Program beyond the immediate removal of waste from the coastline.²² The partnership provided a practical mechanism for collecting and directing plastic waste toward further processing,

²² "Satu Lagi Perusahaan Jerman Investasi, BP Batam Apresiasi Peresmian PT. Free The Sea," *BP Batam* (Batam, 2023), last modified 2023, accessed August 12, 2026, <https://bpbatam.go.id/satu-lagi-perusahaan-jerman-investasi-bp-batam-apresiasi-peresmian-pt-free-the-sea/>.

thereby connecting community-based environmental action with responsible waste management. This aspect is important because coastal clean-up activities can have limited ecological significance when collected waste is not subsequently managed through appropriate systems.

The collaboration therefore contributed an important dimension to the study's understanding of creation stewardship. Environmental responsibility involves not only preventing pollution but also developing practices that reduce the persistence and circulation of waste within ecosystems. In this sense, the partnership illustrated how theological commitments to creation care can be expressed through cooperation with actors beyond the Church and theological institutions. The community contributed local participation and environmental action, the theological institution provided educational and reflective dimensions, while the waste-management partner contributed practical expertise in handling recovered materials.

This multi-stakeholder character is consistent with the broader understanding that ecological problems require collective responses involving communities, educational institutions, religious organizations, businesses, and other social actors. Previous community-engagement research in Pulau Buluh likewise demonstrates the value of collaboration between *Free the Sea*, STT Real Batam, and local communities in addressing coastal waste and strengthening environmental awareness.²³ The present study extends this practical observation by interpreting such collaboration through a theological lens. Rather than viewing environmental partnership as an activity external to Christian mission, it can be understood as a contextual expression of the Church's responsibility to participate in the care of creation.

The partnership also illustrates a principle of circular and relational stewardship. Plastic collected from the coastline was not treated simply as discarded material but as waste that could enter a further process of recovery and reuse. This demonstrates that creation stewardship involves responsible relationships with material resources and with the communities affected by environmental degradation. Such a perspective challenges a purely utilitarian understanding of nature in which environmental resources are valued primarily according to their immediate usefulness to human beings. Instead, stewardship emphasizes

²³ Sidabutar et al., "Sinergi Free the Sea Dan Prodi Pendidikan Kristen Anak Usia Dini Sekolah Tinggi Teologi Real Batam: Aksi Bersih Pantai Untuk Masa Depan Laut Di Pulau Buluh."

responsibility, care, and accountability for the consequences of human practices.

From the perspective of *missio mandatum culturae*, the collaboration is significant because it demonstrates how the cultural mandate can move from theological principle to concrete social practice. The *mandatum culturae* calls humanity to cultivate and preserve creation, while its missional enactment requires forms of cooperation capable of addressing ecological problems within particular contexts. The Pulau Buluh experience therefore suggests that creation care is most effective when theological conviction is translated into participatory and collaborative practices that involve multiple sectors of society.

The significance of the partnership consequently lies not in the technological or commercial profile of *Free the Sea*, but in the relational structure it created within the PkM program. The collaboration connected ecological action, community participation, theological education, and responsible waste management within a single process. In this respect, the partnership strengthens the central argument of this study that Christian ecological responsibility is not limited to individual acts of environmental concern. It can become a form of public and missional engagement in which theological institutions collaborate with communities and other social actors to embody care for creation.

Impacts and Key Learnings

The Community Engagement Program generated qualitative insights into the relationship between ecological action, theological formation, and community participation. Environmental education combined with coastal clean-up created a context in which environmental responsibility could be understood not only in terms of public health and communal well-being but also as a Christian responsibility toward creation. This finding is consistent with previous community engagement in Pulau Buluh, which identified environmental awareness as an important dimension of collaborative coastal-cleaning activities.²⁴ The present study extends this insight by interpreting environmental awareness through the framework of creation stewardship.

For theology students, the activity connected theological learning with concrete social and ecological realities, demonstrating that theological formation can occur through service,

²⁴ Ibid.

participation, and reflection. The experience also provided opportunities to understand Christian faith as embodied in relationships with God, neighbor, and creation. However, because the study did not employ standardized instruments or longitudinal observation, it cannot establish measurable or long-term changes in environmental awareness or behavior. The findings are therefore limited to qualitative indications derived from observation, participatory dialogue, and reflection.

The central learning is that ecological action can function as a context for theological reflection and formation. The clean-up provided an experiential basis for understanding creation stewardship, while collective participation transformed ecological responsibility into a shared practice. This strengthens the study's argument concerning *missio mandatum culturae*, in which the *mandatum culturae* provides the theological foundation for caring for creation and its missional enactment translates this responsibility into contextual practice.

The Pulau Buluh experience therefore demonstrates how theological institutions can connect theological education, community participation, ecological action, and Christian mission. Its significance lies not merely in the removal of coastal waste but in showing how Christian theological education can translate theological conviction into a contextual, participatory, and embodied practice of creation stewardship.



Figures 6 & 7. Beach clean-up action by Free the Sea and waste collection process

CONCLUSION

The Community Engagement Program (PkM) in Pulau Buluh demonstrates that environmental stewardship can function as an integral expression of Christian faith, theological formation, and mission. Through coastal clean-up, community education, participatory reflection, and collaboration with Free the Sea, the program created a contextual space in which creation care could be understood and practiced as a shared responsibility toward God, neighbor, and the natural environment. The experience further indicates that *mandatum culturae* can be translated into *missio mandatum culturae* when theological convictions are embodied through participatory and community-based ecological action. For theology students, the program connected theological learning with concrete ecological and social realities, while for the community it provided an opportunity to relate environmental responsibility to Christian faith and communal well-being. Although the study does not claim measurable or long-term behavioral transformation, its qualitative findings suggest that theological institutions can contribute meaningfully to ecological engagement by integrating creation stewardship into theological education and community mission. Sustained collaboration, more systematic educational resources, and further research are therefore needed to develop contextual models of Christian ecological engagement in coastal communities.

Acknowledgment

The author would like to express sincere gratitude to fellow lecturers and researchers at Sekolah Tinggi Teologi Real Batam for their valuable insights and feedback during the preparation of this article. Appreciation is also extended to all individuals who contributed to the theological understanding of Christian leadership through academic discussions and reference support. This study did not receive specific grants from funding agencies in the public sector, commercial, or non-profit sector.

Conflict of Interests

The author declares no conflict of interests, either financial, professional, or personal, that could have influenced the content or outcome of this study. There is no involvement of

any funding source or institution in the design, analysis, writing, or decision to submit this article for publication.

Declaration of Generative AI

During the preparation of this work, the author used Claude (Anthropic) to paraphrase and refine the wording of the manuscript, ChatGPT (OpenAI) to assist with translating the text from Indonesian into English, and Grammarly and QuillBot to check grammar and improve the clarity of the language. These tools were used solely for language and presentation. They were not used to generate research data, conduct analysis, formulate interpretations, or draw conclusions. After using these tools, the author reviewed and edited the resulting text as needed and takes full responsibility for the content of the publication.

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