
GENESIS 1:26–28 AS A PARADIGM FOR ENVIRONMENTAL SUSTAINABILITY AND HUMAN DEVELOPMENT IN NIGERIA: AN ECO-THEOLOGICAL INVESTIGATION

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Abstract

Alfred North Whitehead's theory of organism has long emphasised the interconnectedness between humanity and the natural environment. However, the increasing exploitation of natural resources in recent decades has significantly disrupted this relationship. Consequently, the fundamental purpose of dominion in Genesis 1:26–30, namely the promotion of harmony between environmental protection and human survival, has not been adequately appreciated, resulting in persistent ecological and developmental challenges. This study seeks to reconstruct the concept of dominion in Genesis 1:26–30, not merely within the framework of environmental stewardship but also as a vital strategy for safeguarding human survival in line with Sustainable Development Goal (SDG) 15. The study adopts a qualitative research approach, employing exegetical analysis based on secondary sources, including scholarly literature and lexical materials, complemented by limited primary data obtained through ecological field observation. The findings reveal that the creation narrative presents a divine blueprint for sustainability that predates the creation of humanity. This suggests that the preservation of the ecosystem, which existed before human beings, is indispensable to human survival. Without a healthy environment, the realisation of human potential and the attainment of sustainable development become increasingly unattainable. The study therefore recommends that key stakeholders, including governments, policymakers, and religious organisations, should regard ecological intervention not merely as an environmental management concern but as an essential undertaking that prioritises human life. Environmental protection should be recognised as a non-negotiable component of sustainable development and a prerequisite for the continued flourishing of humanity.

Keywords: Creation Care, Dominion Theology, Sustainable Development, Ecological Ethics, Nigeria

Introduction

Across ecological scholarship, there is broad consensus that human life and the natural environment are deeply interdependent systems. This relationship is classically expressed in Alfred North Whitehead's philosophy of organism, which presents reality as a web of interconnected processes in which all forms of life are mutually sustaining (Whitehead, 1929). Despite this conceptual clarity, the contemporary world is marked by escalating environmental degradation, which has placed severe strain on the ecological systems that sustain human existence.

Empirical evidence underscores the gravity of this crisis. The World Health Organization reports that approximately 99 per cent of the global population is exposed to air that exceeds recommended safety limits, contributing to about seven million premature deaths annually, largely from respiratory, cardiovascular, and cerebrovascular diseases. Similarly, the United Nations indicates that a significant proportion of diseases in developing regions is associated with inadequate water quality, while desertification affects nearly 35 per cent of Nigeria's landmass, with serious implications for agriculture and food security (United Nations Environment Programme, 2021). Additional concerns include marine pollution, which constitutes the majority of oceanic contamination, and declining soil fertility, both of which threaten global food systems and ecological balance. These conditions directly relate to Sustainable Development Goal (SDG) 15 (Life on Land), which emphasises the protection, restoration, and sustainable use of terrestrial ecosystems as essential to human survival and development (Institute for Health Metrics and Evaluation, 2024).

Within scholarly discourse, perspectives on environmental stewardship remain divided. While some argue that humanity has no intrinsic moral obligation toward the natural environment, others maintain that sustainable resource use is inseparable from human survival and societal continuity. In theological and biblical studies, increasing attention has been given to eco-theological readings of Scripture, particularly those concerned with creation care and environmental ethics. However, despite this growing interest, insufficient attention has been paid to human survival as a central interpretive lens for understanding ecological responsibility within the creation narrative, especially in relation to Genesis 1:26–28 and its dominion mandate.

This study therefore seeks to reconstruct the theology of dominion in Genesis 1:26–28, not only within the framework of environmental ethics but also as a critical paradigm for human survival in alignment with SDG 15. It employs a qualitative research design, utilising exegetical analysis of biblical texts supported by textbooks, lexical studies, keyword analysis, the Biblia Hebraica Stuttgartensia (BHS), and limited participatory ecological observations. The scope of the study is limited to a theological and exegetical interpretation of Genesis 1:26–28, with particular attention to its ecological implications. The justification for this research lies in its contribution to bridging biblical theology and contemporary environmental concerns, offering a framework in which dominion is reinterpreted as responsible stewardship essential for ecological sustainability and long-term human flourishing.

Literature Review

The Foundation of Environmental Abuse

The history of environmental degradation is closely intertwined with the major stages of human civilisation, particularly the Agricultural and Industrial Revolutions. Although environmental challenges predate the modern era, the intensive agricultural practices of the ancient Sumerian city-states marked one of the earliest instances of significant human impact on the natural environment. Population growth driven by year-round cultivation contributed to deforestation, flooding, over-irrigation, and soil salinisation,

thereby undermining ecological stability (Ponting, 2007). While these environmental pressures contributed to the decline of some early societies, they also encouraged the development of adaptive practices aimed at promoting a more sustainable relationship between humanity and nature.

The Industrial Revolution, however, marked a far more profound turning point in the history of environmental exploitation. The technological transformations of the eighteenth and nineteenth centuries enabled humanity to exert unprecedented control over the natural world. Central to this transformation was the large-scale use of fossil fuels, particularly coal, which powered increasingly efficient machinery and later facilitated electricity generation. While these innovations stimulated economic growth and improved living standards, they also accelerated environmental degradation on an unprecedented scale (McNeill, 2000).

Rapid population growth, combined with industrialisation, scientific advancement, and technological innovation, intensified humanity's ecological footprint. Although developments such as improved sanitation systems and medical breakthroughs significantly enhanced public health and longevity, they also increased demand for natural resources and generated new forms of environmental stress. These developments laid the foundation for what scholars describe as the Anthropocene, an era characterised by humanity's dominant influence on the Earth's ecosystems through the exponential consumption of natural resources (Steffen, Crutzen, & McNeill, 2007).

During this period, a mechanistic view of the world encouraged the belief that increases in wealth, population, and technological capability were unequivocal indicators of human progress. Over time, however, growing awareness of the environmental costs associated with such progress prompted critical reflection and the emergence of ecological consciousness. Beginning in the 1930s and gaining momentum after the Second World War, environmental concerns increasingly challenged prevailing assumptions about limitless economic growth. Robin describes the post-1950 period as the "Great Acceleration", a phase during which human activities expanded so dramatically that humanity emerged as a significant geophysical force capable of reshaping the planet itself (Robin, 2013).

The pursuit of economic prosperity, often detached from ethical and ecological considerations, contributed to a range of environmental crises. Technological innovations such as plastics, synthetic chemicals, and nuclear energy transformed modern societies and accelerated industrial development. At the same time, the widespread use of synthetic fertilisers, herbicides, and pesticides generated serious ecological consequences, particularly for rural ecosystems and wildlife populations (Carson, 1962). As scientific and technological progress continued, environmental problems increasingly transcended national boundaries and assumed a global dimension.

Consequently, environmental concerns that had accompanied human civilisation for centuries became more acute in both developed and developing nations (Wilson, 2002). Rising awareness of these challenges stimulated a variety of conservation initiatives and environmental protection programmes designed to preserve biodiversity, safeguard natural resources, and promote ecological sustainability (McNeill, 2000).

The progression from localised environmental pressures associated with early agricultural societies to the far-reaching ecological consequences of industrialisation and technological advancement has shaped contemporary environmental discourse. It is within this historical context that modern environmental protection initiatives have emerged, drawing upon multidisciplinary perspectives to develop sustainable solutions to the complex ecological challenges confronting humanity in the twenty-first century.

Earth Care Initiatives and Biblical Eco-theology

Throughout history, environmental management has been characterised by a succession of interventions designed to address emerging ecological challenges. In ancient societies, environmental problems such as the accumulation of human waste, deforestation, flooding, and soil salinisation were mitigated through relatively simple measures aimed at reducing human pressure on the natural environment. As societies became increasingly industrialised, however, environmental concerns assumed new dimensions. The use of rudimentary machinery and hazardous substances in industrial production generated unprecedented levels of pollution, prompting responses from Enlightenment political economists and the Romantic movement of the nineteenth century, both of which sought to draw attention to the environmental consequences of unchecked industrial growth (McNeill, 2000).

In response to concerns arising from urbanisation and rapid population growth, the Reverend Thomas Malthus advanced his influential, though widely contested, theory of population growth, warning that unchecked population expansion posed a significant threat to human well-being and resource availability (Malthus, 1798). Similarly, John Stuart Mill recognised the importance of environmental limits and resource management, anticipating many of the concerns that would later form the foundation of ecological economics (Mill, 1848). Interest in biodiversity and ecological relationships also grew during this period. Eugenius Warming, often regarded as a pioneer of modern ecology, drew attention to the physiological relationships between plants and their surrounding environments, thereby laying important foundations for ecological science (Warming, 1909).

The early twentieth century witnessed a more systematic engagement with ecological sustainability. Ecological studies increasingly emphasised the interconnectedness of living organisms within a unified planetary system and highlighted the significance of natural cycles in maintaining environmental balance. This growing ecological consciousness found expression in the writings of E. F. Schumacher, whose critique of pollution, consumerism, population growth, and the depletion of finite resources challenged prevailing assumptions regarding economic progress and development (Schumacher, 1973).

By the latter half of the twentieth century, environmental problems had become global in scope, affecting both developed and developing nations. Growing concern over environmental degradation prompted renewed calls for conservation and sustainable resource management. Reflecting these concerns, President Jimmy Carter urged Americans in his 1977 State of the Union Address to “conserve energy and eliminate waste” (Carter, 1977). Such appeals contributed to the emergence of significant international conservation initiatives, including the International Union for Conservation of Nature's World Conservation Strategy in 1980 and the adoption of the World Charter for Nature by the United Nations General Assembly in 1982. These initiatives sought to halt the decline of global ecosystems and promote more sustainable patterns of development (United Nations General Assembly, 1982).

The publication of the report of the United Nations World Commission on Environment and Development in 1987 further advanced the concept of sustainable development. The Commission emphasised the need to address the requirements of impoverished populations while ensuring that economic development did not exacerbate environmental degradation. Efforts to balance social justice with ecological sustainability encouraged the promotion of sustainable lifestyles, increased public awareness of environmental issues, and greater adoption of recycling practices and renewable energy technologies. These developments offered viable alternatives to dependence on fossil fuels and nuclear energy, marking an important shift towards more environmentally responsible forms of development.

The growing momentum of environmental awareness was not confined to the natural and social sciences. Religious communities also became increasingly engaged in ecological discussions, leading to significant

developments within Christian theology (White, 1967). Emerging as a major theme within contemporary Christian thought during the latter half of the twentieth century, eco-theology developed as an interdisciplinary approach that emphasises responsible care for creation and recognises the interconnectedness of all life within God's created order. As a faith-based response to environmental challenges, eco-theology complements broader academic and professional efforts to promote environmental sustainability, grounding its arguments in biblical teachings concerning humanity's relationship with the natural world.

One significant historical development highlighted by Steven Bouma-Prediger concerns the period between 1500 and 1750, during which human power increasingly came to be viewed as a means of mastering a challenging and changing environment (Bouma-Prediger, 2010). This perspective was reinforced by urbanisation, scientific advancement, and the technological innovations associated with the Industrial Revolution. Consequently, the biblical concept of dominion became the subject of intense debate, with many critics arguing that it had contributed to exploitative attitudes towards nature (Horrell, Hunt, & Southgate, 2010). Nevertheless, a number of Christian theologians and policymakers defended the original intent of the dominion mandate, interpreting it not as a licence for exploitation but as a call to responsible stewardship of creation (Northcott, 1996).

During and after the Industrial Revolution, theological reflections on nature increasingly emphasised humanity's custodial role within creation. Reformation theology affirmed God's continuing presence within the natural world and maintained that the earth ultimately belongs to its Creator. Within this framework, human beings are understood not as owners of the earth but as caretakers entrusted with its management. Such a perspective integrates the natural world into God's redemptive purposes and encourages patterns of consumption that are balanced by conservation, restoration, and responsible resource management.

The development of modern eco-theology was further advanced by the work of Joseph Sittler, whose theology of grace for nature, developed during the 1960s through his interpretation of Paul's Epistle to the Colossians, provided an important theological foundation for ecological engagement. Subsequent contributions by Jürgen Moltmann and the influential arguments of Lynn White Jr. brought the relationship between biblical traditions and contemporary environmental crises into the centre of Western academic discourse (Sittler, 2000; Moltmann, 1985; White, 1967). Beyond the influence of Greek dualism and Western political ideologies on attitudes towards nature, the Bible has remained a significant factor in shaping global ecological debates. In recent decades, these discussions have gained increasing prominence within Religious Studies, particularly in Africa and other regions of the Global South.

Despite these developments, environmental conservation within eco-theological discourse has largely been framed as a strategy for protecting ecosystems, preserving biodiversity, and ensuring environmental sustainability. Less attention has been given to the extent to which environmental stewardship functions as an indirect yet essential means of safeguarding human survival. This overlooked dimension of the creation narrative calls for a renewed interpretation of the dominion mandate—one that recognises environmental conservation not merely as a responsibility towards nature but also as a necessary condition for sustaining human life and flourishing.

Creation Narrative in Genesis 1:26-30 and Man's Sustainability

Genesis 1:26-30 is a key passage in the Creation Narrative found in Genesis 1:1-2:3. This passage describes God's creation of humanity and their role in relation to the rest of creation. It is part of the Priestly (P) tradition, which emphasizes order, structure, and divine sovereignty. These verses occur on the

sixth day of creation, when God creates human beings in His image and gives them dominion over the earth.

English Translations (King James Version)

26. And God said, let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

27. So God created man in his own image, in the image of God created him; male and female created him.

28. And God blessed them, and God said unto them, be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

Hebrew Translations

26. ובְּהַקְדָּמָה הַשָּׁמַיִם וּבְעוֹף הַיָּם בְּדִגַּת וַיְרִדוּ כְּדִמוּתֵנוּ בְּצַלְמֵנוּ אָדָם נַעֲשֶׂה אֱלֹהִים וַיֹּאמֶר
עַל־הָאָרֶץ: הָרִמֵּשׁ וּבְכָל־הָרֶמֶשׂ וּבְכָל־הָרֶמֶשׂ

27. אֵתֵם: בָּרָא וַיְנַקְבֶה זָכָר אֹתוֹ בָּרָא אֱלֹהִים בְּצֵלֶם בְּצַלְמוֹ אֶת־הָאָדָם אֱלֹהִים וַיְבָרָא

28. הַשָּׁמַיִם וּבְעוֹף הַיָּם בְּדִגַּת וַיְרִדוּ וּבְכָשָׁה אֶת־הָאָרֶץ וּמִלְאֻוּ וַרְבּוּ פָּרוּ אֱלֹהִים לָהֶם וַיֹּאמֶר אֱלֹהִים אֵתֵם וַיְבָרֶךְ.
עַל־הָאָרֶץ: הָרִמֵּשׁוֹת וּבְכָל־תְּהֵ

Textual Integrity and Cultural Import of Genesis 1:26-28

The textual integrity of Genesis 1:26–30 rests primarily upon the reliability of the Masoretic Text (MT), which remains the principal source for Old Testament exegesis owing to its generally conservative transmission and close alignment with the historical and cultural context of ancient Israel. Nevertheless, the Septuagint (LXX) provides valuable interpretative insights and remains exegetically significant because it reflects the theological and cultural perspectives of the Hellenistic world in which it emerged (Steinmann, 2021). Despite textual variations among the major witnesses (including the Masoretic Text, Septuagint, Samaritan Pentateuch, and Latin Vulgate) the central theological message of the passage remains substantially unchanged. Most differences concern lexical choices and translation nuances rather than significant alterations to meaning. Such variations largely arise from the distinct linguistic, cultural, and textual traditions that shaped the transmission of these textual families (Steinmann, 2021).

In Genesis 1:26, the synonymous expressions *בְּצַלְמֵנוּ* (*bešalmenu*, “in our image”) and *כְּדִמוּתֵנוּ* (*demutenu*, “according to our likeness”) are rendered in the Septuagint as *ἡμετέραν* (*hemeteran*) and *ὁμοίωσιν* (*homoiōsin*) respectively. These translations preserve the essential theological emphasis on humanity's unique relationship with the Creator and offer comparable interpretative insights. A more significant exegetical issue concerns the translation of the dominion mandate. Rather than employing terminology commonly associated with kingship, such as *βασιλεία* (*basileia*), the Septuagint uses *καὶ ἀρχέτωσαν* (*kai archetōsan*), derived from the verb *ἄρχω* (*archō*), meaning “to govern,” “to rule,” or “to exercise authority.” This lexical choice shifts the emphasis from royal sovereignty to responsible governance and orderly administration. Consequently, the LXX presents humanity's dominion primarily as a vocation of governance exercised within the created order.

Further interpretative nuances emerge in Genesis 1:28. The Hebrew imperative פָּרֹ (peru), traditionally translated as “be fruitful,” is rendered in the Septuagint as ἀύξάνεσθε (auxanesthe), meaning “grow” or “increase.” While the concept of fruitfulness undoubtedly includes biological reproduction, the Greek rendering may suggest a broader notion of flourishing and expansion. Moreover, the frequent use of καρπός (karpos, “fruit”) elsewhere in the Septuagint indicates that fruitfulness may encompass productivity, prosperity, and the fulfilment of purpose beyond mere procreation. Such nuances invite a wider understanding of humanity's role within creation.

Similarly, the Septuagint's translation of וָרָדוּ (uredu, “have dominion”) as ἄρχετε (archete) rather than terms such as ἐξουσία (exousia) or βασιλεία (basileia) further reinforces the concept of governance rather than domination. The emphasis is not upon unrestricted control but upon the responsible administration and ordering of creation. This interpretation aligns closely with broader biblical themes of stewardship and accountability before God.

Modern English translations likewise reflect differing interpretative approaches. The King James Version (KJV) retains the traditional rendering “have dominion,” whereas the New International Version (NIV) prefers the expression “rule over” the fish of the sea, the birds of the air, and every living creature. Although both translations communicate authority, the latter may suggest a more functional and administrative responsibility. On the basis of these textual and lexical observations, a personal translation of Genesis 1:28 may be rendered as follows: God created humanity in His image and likeness, blessed them, and commissioned them to govern creation responsibly, to be fruitful, multiply, and sustain the flourishing of all living creatures. Such a translation captures the integrative relationship between authority, stewardship, and the preservation of life that lies at the heart of the dominion mandate.

Lexical Grammatical Analysis of Gen. 1:26-30

- "Na'aseh" (נַעֲשֶׂה) – "Let Us make": The plural form suggests divine deliberation, sometimes interpreted as the Trinity, the heavenly court, or a majestic plural.
- "B'tzalmenu kidmutenu" (בְּצַלְמֵנוּ כִּדְמוּתֵנוּ) – "In Our image, after Our likeness"
- "Tzelem" (image) and "Demut" (likeness) indicate both physical and spiritual resemblance to God, granting humans unique dignity and authority.
- "Veyirdu" (וַיִּרְדּוּ) – "And let them have dominion":
- The verb "radah" (רָדָה) can mean rule, govern, or subdue. Some interpret this as stewardship rather than exploitation.
- "Peru u'revu" (פָּרוּ וּרְבוּ) – "Be fruitful and multiply": This first command from God establishes reproduction and human expansion as divine blessings.
- "Ve'chivshuha" (וַיַּכְבְּשׁוּהָ) – "And subdue it":
- The verb "kavash" (כָּבַשׁ) can mean tame, bring under control, or subjugate, implying responsibility over creation.

Socio-Literary Analysis of Genesis 1:26-30

The creation of humanity in the image and likeness of God, expressed in the phrase בְּצַלְמֵנוּ כִּדְמוּתֵנוּ (beśalmenu kidmutenu), has generated extensive theological and scholarly debate throughout the history of biblical interpretation. At the centre of these discussions is the Hebrew expression נַעֲשֶׂה (na'aseh), translated as “Let us make,” which has been interpreted from a variety of theological and exegetical perspectives. Classical theologians such as Thomas Aquinas understood the image of God primarily in terms of rationality, arguing that humanity reflects the intellectual and moral nature of the Creator. From a functional perspective, however, scholars such as John H. Walton and Richard Middleton contend that human beings were created to serve as God's vice-regents on earth, reflecting patterns of kingship and

representation commonly found in the ancient Near Eastern world. In contrast, Karl Barth and other covenantal theologians emphasise the relational dimension of the divine image, arguing that it finds expression in community, fellowship, and love (Aquinas; Middleton, 2005; Barth, 1958).

While each of these perspectives contributes valuable insights, the concept of the *imago Dei* cannot be reduced to any single interpretation. A holistic understanding recognises humanity as God's representative within creation, endowed with rational capacity, moral responsibility, and relational awareness (Waltke & Fredricks, 2001). Furthermore, the linguistic construction of the passage reinforces the communal dimension of the divine act of creation. Expressions such as *בְּצַלְמוֹ* (*bešalmo*, “in his image”) and *בָּרָא* (*bara'*, “he created”) occur within a broader literary framework that has prompted scholars to reflect upon the collective nature of divine deliberation. Claus Westermann interprets the plural language as either a royal plural or a deliberative form of divine speech, highlighting the majesty and intentionality of God in the act of creation (Westermann, 1984). Similarly, Leupold argues that the image of God carries implications of divine commissioning, conferring upon humanity a delegated authority and responsibility analogous to that of a ruler entrusted with a territory (Leupold, 1942).

The debate concerning the image and likeness of God is inseparable from the question of human purpose within creation. Genesis 1:28 expands this discussion by describing humanity's vocation through a series of imperatives: to be fruitful, multiply, fill the earth, subdue it, and exercise dominion over other living creatures. The Hebrew expressions *וּמְלֵאוּ אֶת-הָאָרֶץ* (*umile'u et-ha'areš*, “fill the earth”) and *וַיִּכְבְּשׁוּהָ וַיִּרְדּוּ* (*wekibshuha uedu*, “subdue it and have dominion”) indicate that humanity was entrusted with the task of developing, cultivating, and responsibly managing the earth's resources (Middleton, 2005). These commands suggest active engagement with creation rather than passive occupation, implying a responsibility to harness creation's potential in ways that contribute to both human flourishing and ecological stability.

Contemporary scholarship has increasingly challenged interpretations of dominion that emphasise domination and exploitation. Richard Bauckham argues that biblical dominion should be understood as participation in God's wise governance of creation rather than the exercise of unrestricted power. According to this perspective, dominion reflects divine attributes such as justice, wisdom, compassion, and care for all living creatures (Bauckham, 2010). Human authority over creation is therefore intended to promote the well-being of the entire created order rather than serve narrowly anthropocentric interests. Such an interpretation resonates strongly with contemporary concerns for environmental sustainability and aligns with Sustainable Development Goal (SDG) 15, which seeks to protect terrestrial ecosystems and preserve biodiversity (United Nations, 2015).

Beyond the chronology of the creation account, Genesis 1 invites reflection upon the theological significance of the order of creation itself. The establishment of ecosystems prior to the creation of humanity suggests a deliberate divine preparation of the earth as a habitable environment capable of sustaining life. The natural world was furnished with the resources necessary for human existence before humanity was commissioned to inhabit and govern it. Consequently, dominion should not be interpreted as a licence for reckless exploitation but as a mandate for responsible stewardship aimed at preserving the integrity and productivity of creation. Humanity's authority is therefore inseparable from its obligation to sustain the ecological systems upon which life depends.

From this perspective, Genesis 1:26–28 presents a vision that is undeniably anthropocentric yet profoundly interconnected. Human flourishing is intrinsically linked to the well-being of the natural environment. The creation narrative portrays humanity as occupying a unique position within creation, but this privileged status carries corresponding responsibilities towards the broader ecological community. Under an

eco-theological reading, environmental degradation becomes not only a violation of humanity's stewardship mandate but also a direct threat to human survival. The destruction of ecosystems, depletion of natural resources, and disruption of ecological balance ultimately undermine the conditions necessary for human life and development.

Accordingly, environmental stewardship emerges as a central component of the dominion mandate. The protection and preservation of creation are not merely ecological concerns; they constitute essential responsibilities tied to the continued flourishing of humanity. Genesis 1:26–28 therefore provides a theological foundation for understanding environmental conservation as both a divine obligation and a practical necessity for human survival. Such an interpretation opens new avenues for examining the relationship between environmental protection and human well-being, particularly within contemporary discussions of sustainable development and ecological justice.

The Need for the Intersection of Environmental Protection and Human Life for Sustainable Development.

Despite the evident ecological orientation of the biblical creation narrative, a significant disjunction persists between humanity and the natural environment, largely attributable to the persistent undervaluation of ecological systems. Although various interventions have been undertaken by governmental and non-governmental organisations, many of these environmental challenges remain unresolved (World Health Organization, 2024). Air pollution, in particular, has emerged as a major global health concern, significantly increasing the prevalence of diseases such as chronic obstructive pulmonary disease (COPD), stroke, heart disease, lung cancer, and pneumonia (Roser, 2024). In addition, it has been associated with a range of neurological and psychological disorders, including dementia, depression, anxiety, and psychosis.

The severity of this crisis became especially apparent in 2021, when global mortality rates rose sharply, with air pollution contributing to an estimated 8.1 million deaths worldwide—equivalent to more than one in eight deaths globally. The majority of these fatalities were attributed to outdoor particulate matter pollution, followed by indoor air pollution and ozone exposure (Lelieveld, Klingmüller, Pozzer, Burnett, & Haines, 2019).

Similarly, the rapid pace of land degradation driven by human activity remains a matter of serious concern. Approximately one million square kilometres of land are lost annually, bringing the total extent of degraded land to over fifteen million square kilometres—an area larger than Antarctica. This widespread degradation threatens climate stability, biodiversity conservation, and global food security. In response, the United Nations has called for urgent intervention, proposing an estimated investment of 2.6 trillion US dollars by the end of the decade to address land degradation and desertification, alongside increased engagement from the private sector. Such measures are deemed essential for mitigating declining agricultural productivity, food insecurity, and rising levels of poverty.

Emerging environmental hazards further compound these challenges. Recent studies have confirmed the presence of microplastics in human tissues, raising serious concerns regarding potential health implications. These particles are now pervasive in air, water, and food systems, with exposure linked to inflammation, oxidative stress, and possible endocrine disruption. Although the long-term effects remain under investigation, the detection of microplastics in vital organs represents a significant and alarming development (Lelieveld, Klingmüller, Pozzer, Burnett, & Haines, 2019).

In addition, climate change continues to intensify extreme weather events, including heatwaves, droughts, floods, and hurricanes, thereby posing serious risks to human health and safety. These climatic disruptions

have contributed to rising cases of heat-related illnesses, respiratory complications arising from wildfire smoke, and injuries associated with severe storms. Climate change has also facilitated the spread of vector-borne diseases while simultaneously undermining healthcare delivery systems in vulnerable regions. In this context, Olawoyin (2019) starkly observes that “the planet seems to be rushing to hell metaphorically,” underscoring the urgency of the global environmental crisis.

Taken together, these interrelated ecological challenges underscore the pressing need for comprehensive environmental protection strategies aimed at safeguarding both human health and planetary stability. This imperative resonates strongly with the principles of environmental stewardship embedded in Genesis 1:26–28, which affirms the theological basis for responsible dominion and ecological sustainability. Read in this light, the creation narrative offers a renewed interpretive horizon in which the preservation of ecosystems is understood as an implicit divine mandate, designed to ensure a habitable, sustainable, and harmonious environment for human existence.

Findings

A close reading of the biblical text, in light of the adverse effects of environmental mismanagement, affirms humanity’s portrayal as bearing the image of the divine. The theological discourse on human beings as divine representatives’ underscores key attributes such as relationality, moral responsibility, and rational capacity. A collective reading of Genesis 1:26–28 further suggests a participatory and communal dimension within the act of creation, thereby reinforcing the idea of humanity’s divine commissioning within the created order.

In light of the true meaning of dominion, the Hebrew imperatives in Genesis 1:28 (calling humanity to fill, subdue, and exercise governance over the earth) emphasise stewardship rather than exploitation. The distinct contribution of this study lies in its integration of the dominion mandate with Sustainable Development Goal (SDG) 15, thereby highlighting the imperative of preserving life on land. Moreover, the sequence of creation, in which the ecosystem precedes humanity, indicates a deliberate divine intention that positions human beings as responsible caretakers of an already established and life-sustaining environment.

Eco-theological perspectives further illuminate the profound interconnection between human well-being and ecological integrity. Environmental exploitation, therefore, stands in direct contradiction to the divine mandate, as the overuse and degradation of natural resources pose a serious threat to human survival. This interdependence is of central importance, as environmental stewardship is required not only for the preservation of ecosystems but also for the sustenance of human life and the fulfilment of theological responsibility. A key insight arising from this intersection is that the eco-theological project is fundamentally oriented towards human survival, extending beyond environmental preservation to encompass the recognition that ecological sustainability constitutes the very foundation of human existence. A clear appreciation of these realities provides a basis for informed recommendations that further strengthen the relationship between theology, ecology, and sustainable development.

Conclusion

This study has critically examined the theological implications of humanity’s role as divine representatives and stewards of creation, as articulated in Genesis 1:26–28. The analysis demonstrates the intersection between biblical dominion and environmental sustainability, emphasising that dominion is not synonymous with unchecked authority but rather entails responsible governance grounded in wisdom, justice, and compassion. The study further establishes that environmental degradation stands in opposition to the divine mandate and poses a significant threat to human survival.

By aligning theological interpretation with Sustainable Development Goal (SDG) 15, the study underscores the necessity of promoting responsible stewardship, encouraging interdisciplinary dialogue, and integrating environmental sustainability into religious education and practice. The recommendations provide a framework for both faith-based engagement and policy-driven environmental action, aimed at ensuring humanity fulfils its divinely assigned responsibility in preserving creation.

Ultimately, the eco-theological enterprise extends beyond environmental conservation to encompass the safeguarding of human existence itself. Environmental sustainability is therefore inseparable from human flourishing, rendering ecological stewardship not only a theological obligation but also an existential necessity. Accordingly, proactive efforts in environmental advocacy, education, and policy implementation are essential for cultivating a sustainable future that honours both divine intention and human responsibility.

Recommendations

Religious communities and relevant stakeholders should promote responsible stewardship grounded in a biblical understanding of dominion as wise and accountable governance, supported by theological education that integrates environmental ethics with sustainability principles. In the same vein, faith-based teachings should be aligned with Sustainable Development Goal 15 by encouraging conservation-oriented policies and sustainable land use practices that balance ecological protection with responsible human development. Furthermore, effective responses to environmental challenges require stronger interdisciplinary collaboration among theologians, environmental scientists, policymakers, and faith-based organisations in order to develop practical and context-relevant solutions. Finally, religious leaders should intensify environmental awareness as a moral responsibility while also encouraging concrete actions such as tree planting, waste management, and the adoption of clean energy technologies to promote ecological sustainability.

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