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Eco-spirituality in Papua New Guinea's Traditional Beliefs and Christian Teachings: A Response to the Contemporary Ecological Crisis

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ABSTRACT

Like many other countries, Papua New Guinea (PNG) faces significant environmental challenges, including deforestation and climate change impacts. This research responds to these ecological issues by analyzing traditional beliefs and religious practices in PNG, emphasizing the interconnectedness of all life forms and their intrinsic relationship with the cosmos, and integrating them into Christianity. Using qualitative interviews, ethnographic fieldwork, and textual analysis, the research reveals that the holistic perspectives of indigenous and Christian beliefs and their eco-spirituality can inspire meaningful dialogue and action in addressing pressing environmental issues and nurturing spiritual well-being. Key findings indicate that these integrated spiritual perspectives can lead to more sustainable environmental practices and policies. By showcasing the wisdom embedded in PNG's indigenous knowledge and its alignment with particular Christian spiritualities, the research underscores the relevance of these belief systems to current academic and practical discourses on environmental sustainability. This research not only enriches the understanding of eco-spirituality in a specific cultural context but also offers valuable insights for global efforts to harmonize humanenvironment relationships, emphasizing the role of spirituality in fostering sustainable futures.

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1. Introduction

In the early morning of May 24, 2024, while most residents of Yambali village in Enga Province, Papua New Guinea (PNG), located 595 km northwest of the capital Port Moresby, were fast asleep, a colossal landslide occurred, causing parts of a mountain to collapse onto the village. According to The National Disaster Centre, the landslide had buried over 2,000 people and affected over 70,000. Several factors were believed to have contributed to the landslide, including the village's geographical location, deforestation, climate change, heavy rainfall, and earthquakes.² Additionally, Red Cross PNG's Interim Secretary General Janet Philemon noted that the area is known for gold mining, and activities related to gold mining might have destabilized the mountain.³ Nevertheless, PNG is grappling with an ecological crisis mainly driven by human activities.

PNG, often called the "land of paradise," is an island nation in the southwestern Pacific Ocean. It is known for its incredible biological diversity, characterized by expansive tropical rainforests, mangroves, and coral reefs. Additionally, PNG is rich in mineral resources like gold, copper, and oil, with mining being a significant economic driver through projects. Marine resources, including fisheries and aquaculture, are vital for local communities and the national economy.⁴ Unfortunately, PNG faces

² Alind Chauhan, "Geographical Location, Deforestation, Climate Change: What Led to the Deadly Landslide in PNG," *The Indian Express*, June 3, 2024, https://indianexpress.com/article/explained/explained-climate/landslide-papuanew-guinea-reasons-9369851/

³ "PNG: Large Landslide Causes 'Loss of Life and Property,'" *Le Monde*, May 24, 2024, https://www.lemonde.fr/en/international/article/2024/05/24/papua-new-guinea-large-landslide-causes-loss-of-life-and-property_6672528_4.html

⁴ William Standish and Richard T. Jackson, "PNG," *Encyclopedia Britannica*, June 7, 2024, https://www.britannica.com/place/Papua-New-Guinea; Simon A. Kawagle, "The Mineral Resources of PNG," *Resource Geology* 55, no. 3 (2005): 285–288; PNG Forest Authority, *PNG Forestry Outlook Study* (Bangkok: The Food and Agriculture Organization of the United Nations, 2009), 5-7; "PNG Fisheries Industry," *National Fisheries Authority*, accessed 8 June 2024, https://www.fisheries.gov.pg/fisheries-industry.

many environmental crises, with deforestation and significant biodiversity loss. Mining activities exacerbate environmental degradation, water pollution, and habitat destruction. Coastal and marine resources are declining due to over-harvesting, destructive fishing methods, and coastal pollution, while mangrove loss threatens coastal protection and biodiversity. Climate change poses further risks, with rising sea levels, extreme weather events, and shifts in temperature and precipitation patterns impacting ecosystems, livelihoods, and national vulnerabilities.⁵

PNG is renowned for its rich cultural diversity, with over 800 distinct groups, each exhibiting unique language, cultural practices, traditions, social structures, and religious beliefs, coexisting alongside Christianity, the dominant religion. PNG people have always been deeply religious, with traditional religions playing a crucial role as an integral part in personal and communal life. In PNG, cultures, religion, and social organization are intricately intertwined. PNG people have a holistic view of the cosmos, encompassing all living and non-living entities, including humans, plants, animals, rocks, rivers, oceans, spirits, gods, and ancestors.

This paper explores integrating traditional eco-spiritual beliefs in PNG with Christian teachings to offer practical solutions for addressing the ecological crisis. Drawing on Pope Francis' call for diverse cultural and spiritual perspectives, the paper underscores the importance of incorporating various forms of wisdom, including religious insights, to tackle

⁵ Stephen Nicholls, *The Priority Environmental Concerns of PNG, IWP-Pacific Technical Report* (Apia, Samoa: SPREP, 2004), 3; "People vs. The Climate Crisis in PNG," *Cool Earth*, February 22, 2023,

https://www.coolearth.org/news/people-vs-climate-crisis-png/

⁶ Standish and Jackson, "PNG," Encyclopedia Britannica.

⁷ Joe Gaqurae, "Indigenization as Incarnation: The Concept of Melanesian Christ," in *Christ in Melanesia: Exploring Theological Issues* (Point 1997), ed. James Knight (Goroka: The Melanesian Institute, 1977), 147.

⁸ Gilbert Herdt, "Self and Culture: Contexts of Religious Experience in Melanesia," in *The Religious Imagination in New Guinea*, eds. Herdt, Gilbert and Michele Stephen (New Brunswick: Rutgers University Press, 1989), 16.

⁹ Gaqurae, "Indigenization as Incarnation," 147; Philip Gibbs, "Getting to Know Our Neighbours," *Common Theology* (Spring 2011): 5; Darrel Whiteman, "Melanesian Religions: An Overview," in *An Introduction to Melanesian Religions* (Point Series No. 6), ed. Ennio Mantovani (Goroka, PNG: The Melanesian Institute, 1984), 93.

environmental challenges.¹⁰ By embracing the sacredness of nature and committing to the principles of stewardship and reverence, as outlined in both indigenous traditions and Christian values, PNG can develop a holistic approach to its ecological crisis. This integrated framework respects and honors the natural world and paves the way for achieving environmental harmony.

2. Traditional Beliefs in PNG

2.1. Animism and Nature Worship

Animism is the belief that natural objects, places, and creatures possess a spiritual essence concerned with human affairs and can influence human interests by helping or harming them. ¹¹ Animism is a foundational aspect of traditional PNG beliefs in recognizing a complex hierarchy of spirits, ranging from supreme to lower ranking, such as bush and ancestral spirits. ¹² There are also beliefs in sky gods who dwell on high, but believing in God as Creator or sky gods and supreme beings is not widespread in PNG. Instead, the focus is often on more localized spirits directly associated with the immediate environment and daily sustenance. ¹³

In animism, the natural environment is seen as alive with spirits and supernatural beings. Mountains, rivers, trees, and animals are not just physical entities but are imbued with spiritual significance. This belief fosters a deep connection between the people and their surroundings, encouraging a respectful and harmonious relationship with nature. ¹⁴ Depending on the area and way of living, the people of PNG have diverse methods of worshiping and respecting the spirits who assist them in their daily activities, such as hunting, fishing, and planting. ¹⁵

¹⁰ Francis, *Laudato Si': On Care for Our Common Home* (Vatican City: Libreria Editrice Vaticana, 2015), no. 63.

¹¹ Cf. George Kerlin Park, "Animism," *Encyclopedia Britannica*, November 25, 2023, https://www.britannica.com/topic/animism.

¹² Theo Alerts, *Traditional Religion in Melanesia* (Port Moresby: University of PNG Press, 1998), 18.

¹³ Ennio Mantovani, "A Fundamental Melanesian Religion," in *Christ in Melanesia: Exploring Theological Issues* (Point 1997), ed. James Knight (Goroka: The Melanesian Institute, 1997), 163; Philip Gibbs, "Indigenous Spirituality: Expanding the View," 54; Alerts, *Traditional Religion in Melanesia*, 36.

¹⁴ Mantovani, "A Fundamental Melanesian Religion," 163.

¹⁵ Alerts, Traditional Religion in Melanesia, 11-24.

In the highland regions of PNG, where hunting is a primary source of sustenance, the ritual practices are deeply intertwined with a belief in spirits and gods, which are considered essential for a successful hunt. These supernatural beings are regarded with awe and reverence as integral parts of the natural world. ¹⁶ In certain regions, hunters create carvings believed to be living beings and to possess magical properties. Hunters engage in rituals of reverence and prayer with these figures, believing that the spirits within them embark on nocturnal hunts or battles, slaying the souls of their prey. The following day, hunters expect a successful catch, interpreting it as a direct result of the spirits' nocturnal endeavors. Parts of the hunted animals are offered to these carvings as tokens of respect and gratitude. ¹⁷

In coastal and island regions, where communities derive sustenance from lakes or seas, there is a belief in gods caring for aquatic animals. Fishermen may offer prayers and libations to these spirits, asking for calm seas and bountiful catches. Rituals might be performed at specific times, such as the beginning of the fishing season, and involve the entire community. The communities conduct ceremonies to honor the spirits of the sea symbolized by rocks, sharks, or giant sea snakes. Offerings are made to ensure safe passage and a bountiful catch. Fishermen often attribute their success or failure to the favor or disfavor of these spirits, integrating their religious practices closely with their daily lives. ¹⁸

In agricultural communities, where planting and harvesting are vital, people share variations on familiar themes in their myths and tales about agriculture-related gods and spirits. These spirits and gods are believed to guide people in making gardens and planting crops, ensuring fertility and growth. Thus, the people pay homage to the spirits of the land and crops and perform various rituals to honor these agricultural spirits, seeking their blessings for abundant harvests. Farmers engage in planting ceremonies that involve blessing seeds and the land itself. These rituals might include offerings, dances, and communal prayer, with the expectation of fertility and a good harvest. The spirits of the Earth are invoked to protect the crops from pests and natural disasters and to encourage growth and abundance. ²⁰

¹⁶ Aerts, 12.

¹⁷ Alerts, 11-14.

¹⁸ Alerts, 14-16

¹⁹ Alerts, 35-36.

²⁰ Alerts, 20-24

2.2. Ancestor Worship and Dema-Deities

Ancestor worship is a fundamental aspect of PNG's spiritual and cultural practices. This reverence connects the living with their deceased forebears, maintaining a continuum between past and present generations. This spiritual connection ensures that the wisdom and experiences of past generations are honored and preserved.²¹ The ancestors can be broadly categorized into two types: historical ancestors and mystical ancestors.

2.2.1. Historical ancestors

Historical ancestors refer to individuals who were once community members and are remembered through oral histories, genealogies, and collective memory. These ancestors have a clear genealogical link to current community members. Their identities, life stories, and deeds are often well-documented within the oral tradition. Even while they were still alive, people perceived them as the embodiment of gods. ²² Historical ancestors are revered for their contributions to the community's history, whether through leadership, wisdom, bravery, or other notable qualities. ²³

In numerous communities across PNG, ancestors hold revered status as potent spirits capable of offering guidance, protection, and blessings to their descendants. Regarded as steadfast guardians, they vigilantly watch over the well-being of their kin and community, acting as intermediaries between the earthly realm and the spiritual domain. Ancestral spirits are believed to influence various aspects of life, from health and prosperity to social harmony and conflict resolution. They are invoked in rituals to provide guidance, protection, and blessings. Specific rituals are performed to honor these ancestors, including offering food, drink, and other valuables. The stories and traditions associated with historical ancestors are passed down through generations, ensuring the preservation of cultural heritage and societal values.²⁴

²¹ Alerts, 51-54.

²² Harvey Whitehouse, *Inside the Cult: Religious Innovation and Transmission in Papua New Guinea* (New York: Oxford University Press, 1995), 41.

²³ Mantovani, "A Fundamental Melanesian Religion," 104-105.

²⁴ Mantovani. 104-105.

2.2.2. Mystical ancestors

Mystical ancestors are often mythological figures or deified beings who may not have a direct genealogical connection to the current community members. These ancestors represent primordial forces, cultural ideals, or significant mythical events. They may embody characteristics or powers that go beyond human capacities. Mystical ancestors are believed to have a broader influence on the natural world and cosmological order. They are often associated with creation myths, natural phenomena, and supernatural powers. ²⁵

Mystical ancestors serve as archetypes that represent foundational cultural and spiritual ideals. They are invoked to ensure harmony with the cosmic order and to connect with the spiritual world. Ceremonies involving mystical ancestors may include complex rituals to invoke their power and ensure cosmic balance. These rituals often involve symbolic acts, dances, chants, and the use of sacred objects. The stories of mystical ancestors are integral to the community's mythology and explain the origins of the world, human beings, and natural phenomena. These narratives often provide moral lessons and cultural norms.²⁶

There is a group of mystical ancestors known collectively as dema deities, representing ancestral spirits who played crucial roles in the creation and transformation of the world. Dema-deities are a concept found in the religious beliefs of various Melanesian cultures, particularly among the Marind-Anim people of New Guinea. Mantovani explained:

Dema is an ancestor who, due to some difficulty, is either killed violently or willingly chooses to die. However, shortly after being laid to rest, a miraculous event occurs. From the body of this deceased ancestor, essential plants or animals, such as a coconut tree, yam, sweet potato, or other crucial resources, begin to grow. These new life forms are vital for the community's sustenance and livelihood.²⁷

A common theme in myths involving dema deities is the idea of sacrifice and regeneration. This sacrificial act is seen as a necessary process for life and fertility. Dema deities are often viewed as cultural heroes who have established the laws, customs, and rituals that govern society. They are revered and remembered through various ceremonies and oral

²⁵ Mantovani, 104-105.

²⁶ Mantovani, 105-106.

²⁷ Mantovani, 106.

traditions. By honoring these deities, communities seek to ensure the land's continued fertility and the society's well-being.²⁸

Anthropologists and scholars studying Melanesian cultures interpret the myths of dema-deities as reflecting deep-seated beliefs about the interconnectedness of life, death, and rebirth. They highlight how these myths and rituals reinforce social cohesion, cultural identity, and the relationship between humans and the natural world.²⁹

2.3. Bio-cosmic Religion

The traditional beliefs of PNG are characterized by a profound reverence for life and the interconnectedness of all beings, leading scholars to describe them as a bio-cosmic religion.³⁰ Philip Gibbs explains that biocosmic religion does not focus on an ultimate called God (*theo*) but rather on the ultimate experience of life (*bios*), something essential for existence, in which everything participates. Life in the bio-cosmic religion context is material, biological, and spiritual.³¹

The term "cosmic" signifies that everything partakes in this universal life to varying extents, creating an interconnected whole. This interconnectedness means that the more a reality participates in cosmic life, the more robust, healthier, and richer it becomes. Although distinguishable from humans in many ways, animals and plants are integral components of this cosmic network. Regardless of its form, each entity contributes to and draws from the same life force that sustains the universe. This shared existence underpins the concept of "bio-cosmic," a recognition that all living things are bound together in a delicate balance. 32

²⁸ Mantovani, 106-107.

²⁹ Alerts, 28.

³⁰ Philip Gibbs, "Getting to know our Neighbours," 5; Whiteman, "Melanesian Religions," 93; Ennio Mantovani, "Discussion: Is There a Bio-cosmic Religion? A Reply to Dr. Garland," *Catalyst* 16, no. 4 (1986): 352-366.

³¹ Philip Gibbs, "Indigenous Spirituality: Expanding the View," in *Dreaming a New Earth: Raimon Panikkar and Indigenous Spiritualities*, ed. Gerald Hall and Joan Hendriks (Victoria, Australia: Mosaic Press 2012), 54-55.

³² Sam Tukidia, "Oceanian Indigenous Religions and Christianity: Decolonizing the Philosophy of Religion for Oceania," accessed 8 June 2024, https://www.researchgate.net/publication/368636863_Oceanian_Indigenous_Religions_and_Christianity_Decolonizing_the_Philosophy_of_Religion_for_Oceania

Thus, the bio-cosmic religion requires proper relationships between humans, nature, and spiritual beings.³³ Central to the bio-cosmic religion is the continuation, protection, maintenance, and celebration of life. This core principle manifests in various aspects of cultural practices, spiritual rituals, and social structures, reflecting a holistic worldview where every element of existence is interrelated and sacred.³⁴

With the focus on life, traditional beliefs in PNG emphasize life's cyclical nature, where birth, death, and rebirth are part of an eternal cycle. Rituals for birth, initiation, marriage, and funerary rites celebrate each life stage. Birth rituals welcome new life with blessings from ancestors and spirits. Initiation ceremonies mark the transition to adulthood, reinforcing community bonds and cultural traditions. The belief in life's continuation extends to spiritual existence, with ancestral spirits guiding the living.³⁵

Additionally, PNG people regard life as a supreme value, making its protection a paramount concern in their traditional beliefs. This protection is not limited to human life but includes animals, plants, and the environment. Rituals and practices safeguard the community's well-being, ensuring harmony with nature and the spirit world. ³⁶ For instance, hunters seek permission from animal spirits before a hunt, and farmers perform ceremonies to bless the land and crops. This respect for all life forms fosters a sustainable and balanced relationship with the natural world.

Moreover, protecting life in PNG traditional beliefs extends beyond human existence to encompass all living beings and the natural environment. Sacred sites such as groves, rivers, mountains, and specific trees or stones are protected from exploitation and desecration.³⁷ These sites are seen as the abodes of spirits and ancestors, and their preservation is crucial for maintaining ecological balance and biodiversity. Taboos and

³³ Whiteman, "Melanesian Religions," 93.

³⁴ Whiteman, 91.

³⁵ Pascale Bonnemère, "Actions, Relations and Transformations: The Cycle of Life According to the Ankave of Papua New Guinea," *Oceania* 88 (114): 41-42, DOI:10.1002/ocea.5180.

³⁶ "Preserving Traditional Culture Systems in PNG," *Act Now Blog*, July 10, 2015, https://actnowpng.org/node/25621

³⁷ Rachel A. Dickie and Kenneth E. Maly, "Indigenous Traditions and Sacred Ecology in the Pacific Islands," *UW-L Journal of Undergraduate Research VIII* (2005): 4–5, https://www.uwlax.edu/globalassets/offices-services/urc/juronline/pdf/2005/dickie.pdf

cultural restrictions governing these areas prevent overexploitation and promote conservation.

The main practical concern is to keep the channels of life open, which involves maintaining and strengthening relationships with people and other elements of the cosmos. This concern entails practices that ensure health, prosperity, social harmony, the long-term availability of resources, and the well-being of the community and environment. Traditional healing practices, agricultural rituals, and community gatherings all contribute to the sustenance of life. These practices are deeply rooted in the belief that life must be nurtured and sustained through respectful interaction with the world's visible and invisible aspects.³⁸

Concretely, life is maintained primarily in two ways: through the right relationships with human and spirit beings, with both the living and the dead, and through the accumulation of indigenous wealth in the such forms of pigs and shells. ³⁹ Thus, community members engage in activities promoting physical and spiritual well-being, reinforcing the importance of maintaining stability. It is crucial to create and perpetuate satisfactory relations within the inner circle of kin, to cope with the dangers from outside, and to ensure a prosperous existence for the group and the individual in the group. ⁴⁰ Traditional hunting, fishing, and agriculture practices are designed to be sustainable. These activities are conducted with an understanding of natural limits and cycles, ensuring that resources are used in a way that does not deplete them.

Celebrating life is central to PNG's traditional beliefs. Festivals, dances, and ceremonies honor life-giving forces, nature's abundance, and the interconnectedness of all beings and the spiritual world. Seasonal festivals align agricultural and hunting activities with natural rhythms through feasts, dances, and spirit invocations. Ceremonies for births, initiations, marriages, and funerals celebrate life's cycle, strengthen social bonds, transmit cultural knowledge, and affirm the community's cosmic connection.⁴¹

³⁸ Philip Gibbs, "Indigenous Spirituality," 54.

³⁹ Whiteman, "Melanesian Religions," 93.

⁴⁰ Robert B. Lane, "The Melanesians of South Pentecost, New Hebrides," in *God, Ghosts, and Men in Melanesia*, eds. Lawrence and Meggitt (Melbourne: Oxford University Press, 1965), 276.

⁴¹ Donald E. McGregor, *The Fish and the Cross*, 2nd edition (Point No.1) (Goroka: Melanesian Institute, 1982), 1.

3. Synthesis of Eco-spirituality in PNG's Traditional Beliefs and Christianity

3.1. Brief History of Christianity in PNG

Most of PNG remained largely unexplored by Europeans and Asians until the early 16th century when Portuguese and Spanish explorers arrived. Despite these early encounters, the dense jungles, rugged terrain, and diverse, often isolated indigenous communities posed significant challenges to exploration and mapping. Thus, they did little to penetrate the vast and complex interior of the island until the late 19th century when the British and Dutch colonized PNG. 43

The first Catholic missionaries came to PNG in 1847, but malaria and influenza severely afflicted the missionaries, leading to the mission's abandonment by 1852. The London Missionary Society came to PNG in 1871 and established missions in the southeastern regions of Papua. ⁴⁴ Other denominations, including Lutherans, Methodists, and Anglicans, also established missions and schools, contributing to the widespread growth of Christianity across PNG.

Initially perceived as conflicting with traditional beliefs, Christianity has, over time, found common ground with the indigenous respect for nature, becoming deeply integrated into PNG's society. Today, it is the dominant religion in the country, with the majority of the population identifying as Christian. However, introducing Christianity also led to significant cultural changes, including suppressing traditional beliefs and practices. Despite these changes, the faith is practiced alongside traditional

⁴² Philip Gibbs, "Papua New Guinea," in *Globalization and the Re-shaping of Christianity in the Pacific Islands*, ed. Manfred Ernst (Suva: Pacific Theological College, 2006), 81; John Dademo Waiko, *A Short History of Papua New Guinea* (Melbourne, Oxford University Press: 1993), 17.

⁴³ "Papua New Guinea History," Papua New Guinea Embassy in Japan, accessed July 1, 2024, http://en.png.or.jp/about-png/history-of-png/

⁴⁴ Gabriel Pinda, "The Early Years," in *Alive in Christ: The Synod for Oceania* and the Catholic Church in Papua New Guinea, 1998-2005 (Point No. 30), ed. Philip Gibbs (Goroka, PNG: The Melanesian Institute, 2006), 14-15; Paul B. Steffen, Sios bilong Yumi long Niugini: Catholic Mission History in Mainland New Guinea, 1896-1945 (Madang, PNG: Society of Divine Word, 2022), 32.

beliefs, creating a unique religious landscape where indigenous spirituality and Christian doctrines coexist and influence one another.⁴⁵

Pope John Paul II observed that the Oceanian peoples had a profound and ancient sense of the sacred long before the arrival of missionaries. Their religious practices and rituals were integral to their daily lives and deeply embedded in their cultures. Therefore, the Pope emphasized the need to discern what aligns with the Gospel and does not, identify what is essential and secondary, and purify authentic indigenous traditions from external influences ⁴⁶

3.2. Integration of Cosmic and Biological Realms

PNG's traditional beliefs deeply integrate the cosmic and biological realms, creating a worldview where the natural and supernatural are intertwined. Within this framework, humanity inhabits a tangible realm encompassing the physical environment, animals, and fellow humans. Simultaneously, individuals navigate the intangible influence of gods, spirits, ancestors, demons, and totems. This interplay between the visible and invisible realms is intricately tied to the cosmic order, emphasizing their interconnectedness. PNG people believe that all those elements influence each other, and they explain the phenomenon in an integrated way. For instance, Whiteman illustrates how healing practices in PNG encompass herbs and medicinal plants and involve spiritual dimensions such as witchcraft and sorcery.⁴⁷

The concept of interconnectedness between humans and nature is deeply embedded in Christian teachings. This idea emphasizes that humans are not separate from nature but are part of a larger, divinely created ecosystem. The Bible's creation narrative in Genesis depicts God creating the heavens, the Earth, and all living beings, highlighting that humans, made in God's image, are given responsibility to steward the creation (Genesis 1:26-28; 2:15). The Psalms celebrate the beauty and majesty of creation, affirming that the Earth belongs to God and praising the diversity and complexity of life (Psalm 24:1; 104). In the New Testament, Jesus

⁴⁵ Some local religious movements, such as the Pomio Kivung Movement, integrate Christianity with indigenous beliefs. Cf. Whitehouse, *Inside the Cult*, 41-47.

⁴⁶ John Paul II, *Ecclesia Oceania: On Jesus Christ and the People of Oceania* (Vatican City: Libreria Editrice Vaticana), no. 7.

⁴⁷ Whiteman, "Melanesian Religions," 88-91.

often uses nature in His parables to illustrate spiritual truths, emphasizing God's provision and care for all creatures, thus fostering a perspective that values and respects all life as part of God's creation (Matthew 6:26-30). In *Laudato Si*, Pope Francis confirms that human life is deeply rooted in three essential and interconnected relationships: with God, our fellow human beings, and the natural world.⁴⁸

PNG's traditional beliefs and Christian teachings emphasize the profound interconnectedness between humanity, the natural world, and the spiritual realm. This perspective fosters a harmonious coexistence and respect for all creation, urging a shift from human dominance over nature to stewardship and reverence. It emphasizes the importance of recognizing the intricate relationships within ecological systems and extending this understanding to encompass the divine. Therefore, harming one aspect of the environment can have far-reaching consequences. This vision of nature challenges anthropocentric worldviews and advocates for a more sustainable and ethical relationship with the Earth, recognizing that the planet's health is inseparable from the well-being of humanity and the fulfillment of spiritual principles.

3.3. Sacredness of Life and the Universe

In PNG cultures, everything is seen as living and imbued with the divine, reflecting a vision of the universe where all elements are interconnected. This perspective emphasizes the sanctity of existence and the interconnectedness of all cosmic elements. Stones, trees, flora, and fauna are viewed as manifestations of spiritual entities, treated with profound respect, and often regarded as kin. Traditional knowledge and spiritual practices guide the sustainable use of natural resources, recognizing the landscape, including rivers, forests, and mountains, as living entities with spiritual dimensions. Animistic beliefs underscore a reverence for all life forms, shaping rituals around hunting and agriculture to honor nature spirits and emphasize gratitude and respect in environmental interactions. Symbolic representations in totems and cultural artifacts highlight the sacred significance of certain animals and plants, reflecting their integral role in the community's worldview. Across cultures, natural landscapes are revered as sacred realms inhabited by

⁴⁸ Francis, *Laudato Si'*, nos. 66-67.

⁴⁹ Tukidia, "Oceanian Indigenous Religions and Christianity."

potent spirits, with sacred sites serving as vital conduits between the tangible and spiritual realms. ⁵⁰

While Christians do not view nature as divine, they believe that the world is God's creation, imbued with His love and care (cf. Genesis 1:1; Psalms 24: 1-2; 104: 24). God created the universe through the Word of God, who became human flesh and dwelled in the universe (cf. John 1: 1-3; 1:14; Colossians 1:16). Jesus Christ is the only source of life (John 1:4; 10:10; 14: 6) and the ultimate purpose of the universe (Colossians 1: 16-17; Hebrew 1: 1-3; Revelations 22: 13). According to the Christian faith, creation is fundamentally an act of divine love, with God's love being the driving force behind all created things (cf. Wisdom 11:24). Every creature, regardless of its size or lifespan, is an object of the Father's tenderness, each having its rightful place in the world. This perspective highlights that all creation is cherished and valued by God, recognizing it as a reflection of divine love and care. It leads us to see creation as open to God's transcendence, within which it evolves. Faith enables us to interpret this unfolding process's meaning and mysterious beauty.⁵¹

The convergence between PNG's indigenous beliefs and Christianity lies in their reverence for life and the environment rooted in their religious beliefs. In PNG traditional culture, life in trees, animals, and especially humans is sacred. All lives participate in the Life of the Universe. Harming the life of an animal or plant is harming the Life of Cosmos. Thus, PNG people approach life and nature with reverence. This attitude is close to the Christian faith in viewing life and nature as sacred because life comes from God, and nature is God's creation. Both PNG traditional beliefs and Christian teachings promote environmental care firstly not because of utilitarianism but because of the intrinsic value of the environment. Caring for the earth becomes a spiritual way of living religious beliefs. In the Message for the 1990 World Day of Peace, Pope John Paul II reminds the Christians to "realize that their responsibility within creation, and their duty towards nature and the Creator, are an essential part of their faith." 53

⁵⁰ Whiteman, "Melanesian Religions," 93

⁵¹ Francis, *Laudato Si'*, nos. 76-79.

⁵² Whiteman, "Melanesian Religions," 92-93.

⁵³ John Paul II, *Message for the 1990 World Day of Peace*, 15, quoted in Francis, *Laudato Si'*, 64.

3.4. The Role of Humans in the Universe

In PNG's traditional beliefs, humans perceive themselves as integral components of nature, deeply interconnected with the surrounding environment. This worldview emphasizes a profound sense of harmony and respect for all living beings and elements of the natural world.⁵⁴ Within this integrated universe, humans occupy a central position, serving as the focal point of cosmic life. However, this centrality does not isolate humanity but acknowledges its interdependence with the diverse array of beings that comprise the universe. From plants and animals to spirits and ancestors, rocks and rivers to mountains and oceans, every entity is regarded as part of the intricate tapestry of existence, where humans play a vital yet inclusive role.⁵⁵

The narrative of Genesis reveals that God created humans in the image of God and entrusted humans the authority (dominion) over the creation (cf. 1: 27-28). However, authority over creation should be understood as caring for creation: cultivating and guarding the land (cf. Genesis 2:15). Care for creation includes preserving, protecting, and maintaining the land. The *Compendium of the Social Doctrine of the Church* explains: The Lord entrusted all of creation to their (humanity's) responsibility, charging them to care for its harmony and development. This special bond with God explains the privileged position of the first human couple in the order of creation." In other words, by the command of the Creator, humans have the responsibility to care for the environment. And when humans fail to care for the creation, they fail to live their faith fully. Thus, the North Carolina Council of Churches sees that all environmental problems are moral and spiritual. Similarly, the African bishops'

⁵⁴ Mantovani, "A Fundamental Melanesian Religion," 163.

⁵⁵ Whiteman, "Melanesian Religions," 92.

⁵⁶ Fred Van Dyke *et al.*, *Redeeming Creation: the Biblical Basis for Environmental Stewardship* (Downers Grove IL: IVP, 1996), 39.

⁵⁷ Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church*, 451,

 $https://www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_p c_justpeace_doc_20060526_compendio-dott-$

 $soc_en.html\#II.\%20MAN\%20AND\%20THE\%20UNIVERSE\%20OF\%20CREATED\%20THINGS$

⁵⁸ "The Environmental Crisis Is not Environmental. It is Spiritual," *NC Interfaith Power & Ligh*t, October 25, 2017, https://ncipl.org/environmental-crisis-not-environmental-spiritual/

statement describes climate change as "a tragic and striking example of structural sin." ⁵⁹

In reality, humans significantly impact the physical environment with freedom and creativity through various activities such as overpopulation, pollution, burning fossil fuels, and deforestation. Global environmental risks from human activities are becoming increasingly complex and interconnected, profoundly impacting people, economies, and ecosystems. Recognizing the special position in the creation, according to PNG culture and Christian faith, PNG people should be aware of their responsibility in the environmental crisis resulting from their activities. They adjust their behaviors based on their awareness of their unique role in the universe to maintain harmony within the natural world and secure the stability of the environment.

4. Practical Suggestions for the Environmental Crisis in PNG

4.1. Reviving and Educating Traditional Beliefs

In PNG, the essence of cultural preservation lies in the oral traditions maintained by the elders, such as chiefs, grandparents, and community leaders. These figures are the caretakers of the rich tapestry of stories, legends, and myths that define the cultural and moral fabric of their tribes. Through engaging narratives, they impart essential moral lessons and values, fostering a deep connection between the people and their environment.

However, modernization has introduced significant challenges to this age-old tradition. Though the PNG people appreciate their Indigenous

⁵⁹ Symposium of Episcopal Conferences of Africa and Madagascar, *African Climate Dialogues Communiqué*, Nairobi, October 17, 2022, quoted in Francis, *Laudate Deum*, 3,

 $https://www.vatican.va/content/francesco/en/apost_exhortations/documents/20231~004-laudate-deum.html$

⁶⁰ Nathanial Matthews and Patrick Keys, "Humans Have Caused This Environmental Crisis. It Is Time to Change How We Think About Risk," *World Economic Forum*, September 9, 2019,

https://www.weforum.org/agenda/2019/09/humans-have-caused-this-environmental-crisis-it-s-time-to-change-how-we-think-about-risk/

⁶¹ Pontifical Council for Justice and Peace, *Compendium of the Social Doctrine of the Church*, 459-60.

identity, smartphones, social media, and the Internet have connected them to the global world. Global cultures increasingly influence the younger generation in the urban areas of PNG. Consequently, the knowledge of their ancestral teachings in traditional myths and legends, which once played a pivotal role in shaping their identity and ethical framework, is now at risk of fading into obscurity.⁶²

Understanding and preserving these traditional stories is not merely about cultural heritage but also about maintaining a respectful and sustainable relationship with nature. The legends often encompass themes of respect for the land, the importance of community, and the intricate balance of ecosystems. These narratives offer valuable insights into sustainable living and environmental stewardship, which are crucial in today's global environmental challenges. Thus, young people need to be educated about their traditional values.

Collecting, publishing, and incorporating local legends and myths into the school curriculum can give students a rich understanding of their cultural heritage. Schools can offer a holistic education that respects and preserves traditional knowledge by including these stories alongside conventional subjects. Storytelling sessions, where elders are invited to share their wisdom, can link generations directly, fostering a sense of identity and continuity. These sessions can be integrated into history, literature, and social studies classes, making learning more engaging and relevant to the students' backgrounds. Additionally, involving elders in the educational process can instill respect for their role as cultural custodians and strengthen community bonds.

Community centers dedicated to cultural education can preserve and share traditional knowledge. These centers can host interactive workshops and storytelling events that engage community members of all ages. By creating spaces for regular cultural activities, communities can ensure that traditional knowledge is continuously passed down. Mentorship programs that pair elders with young people can facilitate intergenerational dialogue and learning. These programs can include activities like traditional crafts,

⁶² Alex Golub, "Crisis and Identity in Contemporary Papua New Guinea," *Society for Cultural Anthropology*, October 27, 2016, https://culanth.org/fieldsights/crisis-and-identity-in-contemporary-papua-newguinea; Nicole Polier, "Culture, Community and the Crisis of Modernity in Papua New Guinea," *Political and Legal Anthropology Review* V22, No. 1 (May 1999): 55-65.

music, dance, and language lessons, providing a comprehensive cultural education. Such initiatives can also foster a sense of community pride and solidarity, reinforcing the value of traditional practices in contemporary society.

4.2. Integrating Ecological Spirituality in PNG's Christian Education

Christianity offers profound teachings on ecological spirituality, emphasizing the interconnectedness of all creation and the responsibility of humans to care for the Earth. These teachings can significantly enrich the faith of Christians by guiding them in their relationship with nature. In other words, caring for the environment is an integral part of living one's faith, urging Christians to respect and preserve the natural world as an act of worship and gratitude to God. Ecological spirituality education should be integrated into Christian education in Christian schools and other formation programs in church-based organizations.

In PNG, a shortage of religious educators hinders the spread of Christian values, including environmental stewardship, especially in remote areas. This shortage leaves young people needing to be more connected to the ecological aspects of their faith. Programs to train local catechists, pastors, and community leaders in ecological spirituality are crucial to address this. In addition, environmental education is more science-oriented. Thus, teachers and catechists should be trained in basic knowledge of ecology, besides biblical and theological stewardship foundations and traditional beliefs promoting caring for the environment.

Due to rapid modernization and secularization, many PNG people forget their environment as sacred. They are worried that the environmental crisis will cause a social and economic crisis. ⁶³ Young people are ignoring traditional beliefs and the Christian faith. Thus, faith education is the foundation for caring for the common home, which becomes ecological spirituality. Christian schools and churches form an ecological conscience for the young people through education of PNG traditional beliefs and Christian faith. So, ecological spirituality is part of Christian education.

⁶³ Timothy Kwara, "Toward an Ecotheology for PNG: Relating Biblical Environmental Stewardship with the Melanesian Cultural Concept of Inseparability and Interrelatedness of Humankind and Nature," *Melanesian Journal of Theology* 30, no. 2 (2014): 60.

Christian education must be directed to forming attitudes and behaviors of sustainable development based on the Gospel teachings. The teachers and catechists may show movies and pictures about environmental disasters, particularly in PNG, such as ocean pollution, landslides, and plastic rubbish. The educators must raise the students' concerns about the ecological problems in PNG. Then, Christian educators help students become aware of their responsibility in ecological crises so that they may have a concrete vision and plan. Besides the theory classes, students need to practice some activities to improve the quality of their environment.

4.3. Fostering Community Engagement

Traditionally, PNG people have a strong sense of community among those who speak the same language (*wantok* – "one talk" in the country's *lingua franca*) and have the same culture. Those kinship-based communities formed a system of leadership, rules, and disciplines. Most leaders of the traditional communities are the chiefs, who strongly influence the community. ⁶⁴ Thus, it is crucial to raise awareness among the chiefs and community leaders of the ecological crisis and its consequences to communities. Through the workshops, training programs, and meetings with the community's leaders, the church and non-government organizations provide them with information on the global environment and orientations to have concrete plans for their communities.

However, due to colonization, decolonization, Christianization, and nationhood, the PNG communities have changed from a "wantok" traditional group to a mixed and open society. For example, the parishes are divided into sub-parishes or Basic Christian Communities (BCC), including members from different tribes. In towns and cities, the people live with their neighbors from different provinces, speak different languages, and have different cultures. Building and strengthening newstyle communities and fostering community engagement is a big challenge to PNG people. The new style of leaders is challenged more in their leadership by calling for collaboration among all community members. Therefore, good leaders with ethics, skills, visions, and approaches are

⁶⁴ Murray Prideaux, "Leadership in Papua New Guinea: Exploring Context and Barries," https://www.anzam.org/wp-content/uploads/pdf-manager/2233_PRIDEAUX_LEADERSHIPPNG.PDF, 4-8.

⁶⁵ Michael Unage, *Community Empowerment Policy Research Framework* (Port Moresby: The National Research Institue, 2011), 4.

necessary in fostering community engagement rather than kinship-related concerns.

The PNG people recognize that they belong to a bigger family besides their blood family (*wantok* family) through the new institutes and organizations such as schools, parishes, devotional groups, and associations of youth, mothers, and fathers. Teachers and church leaders should help the people to extend their concerns to national and global problems, including ecological and social issues that directly or indirectly affect their lives, families, and communities. At the same time, the action plans of parishes, BCC, and associations include caring for the environment, such as cleaning the streets and communities, collecting rubbish, and planting more trees on parish grounds in the community.

During the apostolic journey to PNG, in the meeting with the Authorities, Civil Society, and the Diplomatic Corps on Saturday, September 7, 2024, Pope Francis calls for great responsibility in protecting PNG's environmental and cultural treasures. That great responsibility requires "everyone, civil authorities and all citizens, to promote initiatives that develop natural and human resources in a sustainable and equitable manner." ⁶⁶ Nobody is excluded from this responsibility of fostering environmental sustainability because natural resources benefit and affect everyone.

4.4. Advocating a Policy of Integration

The government of PNG oversees mining, logging, fishing, and other impactful projects. The government needs to maintain sustainable development and biodiversity preservation in its policies. Integrating traditional ecological knowledge with modern environmental science is crucial to creating effective resource use and conservation strategies, honoring cultural heritage, and utilizing local ecosystem understanding.

Protecting sacred natural sites is vital to preserving cultural heritage and environmental integrity. These sites often hold profound spiritual significance for local communities and are crucial for maintaining cultural identity and practices. Support for legislation that safeguards these areas is essential. PNG government should recognize the cultural importance of these sites and ensure that they are preserved from industrial activities such

⁶⁶ Francis, *Address of His Holiness*, handout, Meeting with the Authorities, Civil Society, and the Diplomatic Corps, September 7, 2024, Port Moresby, PNG.

as mining, logging, and development projects. By legally protecting sacred natural sites, the government can demonstrate respect for indigenous cultures while also preserving critical habitats and biodiversity centers. These protected areas can serve as refuges for various species and act as criteria for ecological health.

Sustainable land and resource use policies are fundamental to balancing economic development with environmental conservation. Advocacy efforts should focus on promoting legislation that encourages responsible practices in industries such as mining, logging, and fishing. Those efforts include implementing strict environmental regulations, enforcing sustainable harvesting quotas, and requiring companies to conduct thorough environmental impact assessments before initiating projects. Policies should also encourage the use of renewable resources and sustainable methods. PNG can ensure long-term prosperity and environmental stability by fostering an environment where economic activities do not compromise the region's ecological health.

Policies must align economic activities with environmental sustainability to protect ecological harmony. Those policies include preserving habitats, restoring ecosystems, protecting wildlife corridors, and promoting sustainable agriculture like agroforestry and permaculture. Responsible tourism that respects ecological limits and benefits local communities is also vital. Prioritizing these practices ensures that PNG's natural resources are used sustainably and equitably.

Effective environmental governance in PNG needs the involvement of local communities, capitalizing on their traditional ecological knowledge. Collaborative governance with indigenous leaders ensures policies reflect community needs. Community-based monitoring empowers locals, fostering ownership and responsibility and enhancing conservation efforts.

5. Conclusion

PNG stands at a critical point where environmental degradation threatens its rich biodiversity and the well-being of its people. As highlighted, deforestation, climate change, and unsustainable mining practices have worsened the ecological crisis. Nevertheless, amid these challenges lies a profound opportunity: the potential synergy between traditional indigenous

beliefs and Christianity to foster a sustainable and harmonious relationship with the environment.

This paper underscores the intrinsic connection between PNG's traditional beliefs and their reverence for nature. With its deep-rooted ecospirituality, indigenous spirituality views the natural world as a sacred entity interwoven with the cosmos and human existence. This perspective is a cultural treasure and a vital blueprint for environmental stewardship. Similarly, Christian teachings, emphasizing stewardship and respect for God's creation, complement the traditional reverence for nature, offering a unified front against ecological degradation.

The intersection of traditional and Christian eco-spirituality encourages a holistic view that transcends mere resource management, advocating for a deeper, spiritually informed engagement with the environment. In addressing the ecological challenges, governments, schools, churches, and other organizations should collaborate to revive and educate traditional beliefs and Christian teachings on ecological spirituality. The local communities and parishes need to engage more in environmental conversation and urge the government to develop and maintain sustainable and biodiversity preservation policies.

In conclusion, this research highlights the potential synergistic relationship between indigenous and Christian eco-spiritualities in addressing PNG's environmental challenges. When harmonized with Christian values, indigenous knowledge's enduring significance provides a robust framework for fostering environmental sustainability and spiritual well-being. By honoring the sacredness of nature and committing to the principles of stewardship and reverence, PNG can address its ecological crisis with a unique and holistic approach, paving the way for a sustainable and harmonious future. Finally, this paper also calls for further research into the practical implementation of these integrative spiritual perspectives and for policymakers to incorporate these insights into environmental strategies.

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