



An African perspective on hamartology and ecology: Assessing Jesse Mugambi's contribution to the contemporary debate¹

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Abstract

Christian ecotheology² offers a Christian critique of ecological destruction while simultaneously proposing an ecological critique of Christianity. One aspect of Christian ecotheology entails ecumenical discourse on the content and ecological significance of the Christian faith. This involves a reinterpretation of the classic Christian symbols – in this instance the doctrine of sin, more specifically the nature of sin – explored in the light of ecological discussions. Taking into account the radical diversity in contemporary forms of Christian ecotheology and the contemporary ecological crisis, this paper presents African theologian Jesse Mugambi's contribution to such discourse. Following a brief overview of the Christian understanding of the nature of sin and how it is re-described in contemporary ecotheological terms, Jesse Mugambi's position on ecotheological discourse through a discussion of anthropocentrism, domination in the name of differences of species, consumerist greed, alienation of humans from the earth community and sloth (backwardness) is explored. Mugambi's African context is a key influencing factor in the formulation of his ecotheology. Science and technology, industrialisation, pollution and development are among the prominent emerging themes. The paper involves ecclesial scrutiny, namely Mugambi's assessment of Christianity's role in contributing to the current crisis and theological reflection on ecological sin, followed by alternative courses of action to appropriately attend to the issues in question. In closing, Mugambi's overall contribution to the current ecotheological debate is assessed.

Keywords: anthropocentrism, domination, consumerist greed, alienation, sloth.

Introduction

Creation is threatened by environmental problems such as toxic pollution, deforestation, over-population, climate change and loss of biodiversity. The environment as topic is addressed in a variety of disciplines, including Christian theology which has proven an established interest in studying the so-called "book of nature". "The historical roots of our environmental crisis" by Lynn White (1967) is a pioneering article that has prompted contemporary ecotheological debates. White (1967:1206) holds that Christianity "bears a huge burden of guilt" for ecological devastation in the sense that much of (Western) theology religiously supports the anthropocentric idea that the world was created for human benefit. While many Christian theologians responded to such claims by retrieving the tradition's ecological wisdom, others acknowledged that the Christian legacy is far more ambiguous than what such apologies may

¹ This article is formulated from my unpublished Masters and PhD dissertations.

² Ecotheology highlights the interrelationships between God, humanity and nature (see for example Brinkman, 1998:203).



suggest (cf. Santmire, 1985), and have called for an “ecological reformation” of Christianity.

As Conradie (2006:63) observes, the task of ecological reformation is addressed in all Christian theology’s traditional sub-disciplines. This article contributes to such discourse by reinterpreting the Christian doctrine of sin from an ecotheological perspective. Christian discourse on the environment makes the common assumption that the ecological crisis may be understood in light of the structural impact of sin. One may also suggest that the Christian doctrine of sin offers a historical, sociological and economic re-description of the crisis’ roots. This requires a basic understanding of the traditional Christian doctrine of sin – in particular the nature of sin – and its ecotheological interpretations.

Durand (1978:9) identifies six prominent themes in current discourse on sin, namely sin’s origin, the link between sin and demon possession, the link between sin and suffering, the concept of original sin, the knowledge of sin, and the nature of sin. The Christian tradition defines the latter in diverse ways. In classic terms, sin may be described as *pride (superbia)*, the desire to be like God and rejection of His divine superiority; *greed (concupiscentia)* or discontent relating to material possession; *moral failure (hamartia)* or “missing the mark”; “*hydra*”³, implying the mutation of sin in various forms; or sin as *deprivation of the good* – having no ontological status and only describable in negative terms – for example nothingness or a broken relationship with God (Heyns, 1978:175-178; Williams, 1985:198-204; Barth, 1958:102; 1960:349-355; Engel, 1990:163; Niebuhr, 1996:186-188, 228-230, 240).

Such narratives have been reinterpreted and redefined considering ecological threats, described here as “ecological sin”, or “human failings ... to relate to non-human creation in ways informed by justice and peace” (Horrell, 2010:134) and classified into various (often overlapping) categories. *Anthropocentrism* assumes human superiority and the related idea that nature solely exists for serving human purposes. These assumptions typically condone *domination in the name of differences of species*. *Consumerist greed* implies dissatisfaction with material possessions and an incessant desire for more. Sin is rooted in estrangement or broken relationships, expressed as *alienation of humans from the earth community*, meaning disaffection for nature and other living beings. *Sloth* implies moral failure, lack of development or backwardness. *Folly* suggests a lack of wisdom, and *denial* entails a refusal to accept the reality of the ecological crisis (Cloete, 2013:58-107; Conradie, 2017:29-60; 107-175).

A multi-contextual and multi-stakeholder approach is required to address the ecological crisis taking into account diverse contributions to contemporary discourse and how scholars from various geographical, confessional and socio-political backgrounds, genders, races, classes, etc. are influenced by such dynamics and respond to the crisis. This article makes a notable contribution to such literature by retrieving insights from African theologian Professor Jesse Mugambi.⁴

Anthropocentrism

Mugambi (2012:322-23) illustrates the intended relationship between God and creation within the framework of the doctrine of creation. He holds that everything was created by the Creator’s divine authority. While God is self-accountable, His creatures are not, and their well-being can only be attributed to Him. As such, humans ought to appreciate and respect this divine authority. Mugambi (2012:322-323) contends that the greatest sin is pride or blasphemy, whereby humans attempt to supersede God, causing estrangement between creature and Creator. Humankind may possess craftiness and intelligence, but cannot supersede the Creator, from whom the capacity for creativity, invention, and innovation

³ A popular Christian notion is the “seven deadly sins” which include pride, wrath and envy (spiritual sins), and greed, lust, gluttony and sloth (corporal sins) (see Aquinas, 1991:268).

⁴ Jesse Mugambi is a well-published Kenyan academic. His professional career covers various focus areas including philosophy, ecumenical studies, hermeneutics, missiology, ethics, liberation theology, reconstruction theology and ecotheology.



emanates. Humans are finite beings, while the Creator's divinity is infinite. Human humility is therefore the key to ideal relationships between humans and the Creator, fellow humans, as well as humans and creation. Mugambi (1987:16) indicates that by the beginning of the nineteenth century science had become the new faith – giving rise to a religion whereby God is dethroned and replaced by humanity.

According to Mugambi (1998:153), the church has grown rapidly from only twelve disciples to a global movement. Divine guidance would not be possible without a theocentric focus, and church growth without an anthropocentric focus. Mugambi (2012:323) argues that liberation and reconstruction theologies respond in several ways to social and ecological challenges, depending on the particular contexts and circumstances. Liberation movements, however, are often ecologically destructive as activists' political interests repeatedly override the need for ecological protection and preservation. It is therefore necessary for liberation struggles to be followed up with reconstruction initiatives to restore the destruction caused by conflict. Unlike liberation theology, reconstruction theology emphasises both economy and ecology.

Evolutionary development enabled humankind to alter their environment to meet their basic needs for survival. Instead of a process of creation out of nothing, they became the masters of the universe through natural selection (Mugambi, 1987:48-49). Culture is the visible accomplishment of humans in their effort to constantly improve their lives, comprising alterations to the social and natural environment, for example, planting certain grains to ensure food security, irrigation, selective breeding, plant gene manipulation, etc. Environment modification to improve human living conditions, for example the building of new settlements because of population growth, disables the natural environment from sustaining itself naturally. Furthermore, rural communities' lifestyles are daily altered by urbanisation, which in turn changes how these communities understand their connection to nature (Mugambi, 1996:29). Mugambi (2000a:86) claims that the modern Euro-American culture has constructed a worldview in which the entire universe is seen as the "city of man" – an area used for human endeavour and exploration. He further states: "The world has now become the task and responsibility of man", because "man has lost the awareness of being the priest for the whole visible world, turning the latter exclusively toward himself" (Pope John Paul II in Mugambi, 1991a:357).

Alternatives

God values creation and human redemption extends to redemption of the entire cosmos (Mugambi, 1991a:357). Mugambi (1998:143) reiterates that Jesus pointed all his followers to nature as a reminder that God not only sustains humankind, but is also concerned for and cares for all of creation (Matthew 6:25-30). According to Mugambi (1996:29-30), humans can choose to settle in a natural environment without modifying it. They may study the area's natural conditions (soil structure and weather patterns) and then adapt its environmental design to these. Humanity can therefore co-exist in harmony with the natural environment. Mugambi (1996:35) refers to the "existentialist motif" which holds that the past and future are not important, but what matters is the present and how humans cope with its demands.

Mugambi (1991b:36) called for reconstruction to follow liberation, referring to it as the "new priority for African nations" – something that theologians and churches should adequately respond to and which will require noteworthy efforts of reconciliation, confidence-building, re-orientation, as well as re-training. Mugambi (1996:40-44) defines "social reconstruction" as "the endeavour to *enhance life at personal, social and institutional and ecological level*". The need for ecologically sensitive reconstruction has driven humankind to be more sensitive to the earth's needs. A "New World Order" would thus require a reconstructive theology that is complementary, integrative, programme-driven, people-centred, deed-orientated, participatory, regenerative, co-operative, consultative and future-sensitive. Restoring ecological balance might be a long, costly process, yet the principles of precaution, mitigation,



and adaptation⁵ enable us to aspire for appropriate care amidst all challenges (Mugambi, 2012:326-327).

Domination in the Name of Differences of Species

Mugambi portrays contemporary forms of domination and exploitation of poorer countries and their (abundant) resources by the more affluent nations against the backdrop of the modern Christian missionary movement's settlement in these areas. Specifically focused on his home continent, he observes that African Christian history is inextricably bounded with European colonial history, as missionaries – protected by colonial powers – sought to “Christianise” Africans while simultaneously establishing colonial interests. Mugambi (1989a:35-36) notes that even after attaining constitutional independence, the former colonies are yet to attain economic freedom from their colonial masters who remain producers of raw materials exported to the former master countries – “in exchange for machinery and processed goods at exorbitant prices”. Developing countries thus increasingly become poorer and more dependent on these developed countries. Churches in Africa stemming from the modern missionary enterprise continue ties with their North American and European “parents”. In the 1970s, African theologians called on African churches to develop their own selfhood by refusing missionary funds and recruits. The donors perceived it as an effort to erase all ties and therefore did not support this stance – a clear affirmation of perpetual domination through neo-colonialism.

According to Mugambi (2012:323), the contemporary ecological crisis is the culmination of a very long history of human destruction of creation by successive civilisations. Furthermore, it is the consequence of reckless exploitation of nature for short-term benefit, which necessitates extensive and costly ecological restoration (Mugambi, 2012:327). Mugambi (2012:326-327) states that ever since the European Renaissance, “[T]he ideals of modernity and progress have been portrayed as the sacrificing of culture and nature at the altars of technology and imperial power”. He further maintains that modern technological development has increased human potential in relation to food production, telecommunication, agriculture, heating, etcetera, and that these inventions caused destruction rather than preservation of nature. There are indeed no ethical limits because scientists claim freedom to research and make prototypes on anything they want (Mugambi, 2009:6). He holds that human and animal settlement in various areas constitutes a significant contributor to ecological degradation. Compared to the seasonal migration of animals, human settlement has generated more damage to the environment through the establishment of cities, towns, villages, farms, industries, etc. Long ago, Europe, for example, was rich in birch, fir, oak and forests, yet over time, these became essentials used in the wood, furniture, and equipment industries. Subsequently, forests were replaced by cities, towns, farms, and industries. The damage done is vast and it passes through different ecological regions, national borders, and diverse generations (Mugambi, 2009:7-8).

Mugambi and Kebraab (2006:12-13) states that while population migration does not necessarily have to lead to destruction of the environment, rural-urban influx is generally a point of concern. Small-scale farming is replaced with the imports of large corporations. Cities continually grow as industrialisation and commercialisation of national economies grow. Furthermore, holding capacities of regions are often exceeded, placing pressure on the environment as well as service delivery.

Mugambi (2009:5-6) draws attention to how development of industries, which goes along with the abovementioned urban migration, has caused irreversible damage to the environment. Since the start of the industrial revolution, civilisations ceased to apply the principle of

⁵ See below alternatives to domination in the name of differences of species for a more detailed discussion.



precaution, i.e. assessing the possible harm to the natural environment, people, and animals, in dealing with the environment. Within the current development of science and technology, this principle is clearly ignored at the expense of the ecology of Planet Earth. Referring to the backbone of industrialisation, Mugambi (2001:39) states that “technology” does not imply industrial plants; however, it refers to the culture and knowledge in the framework of the invention, testing, manufacturing, installation, operation, maintenance, diffusion, updating, improvement, and replacement of machines and related systems. Thus, technology became for industrial countries what nature has always offered humankind.

According to Mugambi (2006), science confirms the reality of human-induced climate change primarily caused by pollution by energy-intensive industrialised countries. Pollution warms the atmosphere, leading to major climate changes. He opines that those who will experience the most suffering are the vulnerable and poor communities, as well as future generations. Mugambi (2009:4) claims that the chief contributions to these are carbon-based fuels like petroleum, coal, and natural gas. Although scientists recommend a move away from non-renewable technology to renewable technology, carbon-based industrialisation is on the increase across all continents. Non-renewable energy may be cheaper today, but in the long run, the damage will be permanent. He further states that the impact of industrialisation is the greatest on the continent of Africa, even though the industrialised countries are the main contributors of these cumulative emissions. Mugambi (2017a:109) finds it ironic that the African continent is the most adversely affected ecological region while its inhabitants are least responsible for the industrial pollution threatening their livelihood. Because clean technology is still experimental and more expensive, the least industrialised countries are at a disadvantage. The Kyoto Protocol of 1997 recognises that heavy industrialisation of some nations has been accomplished at the expense of others. It is therefore critical that clean technology replaces the polluting techniques of the past and present (Mugambi, 2009:4).

Mugambi (2017a:109) espouses that the impact of global warming is specifically experienced in those areas where settlement and pollution have destructed the natural environment. Climate scientists have proven that current climatic periods are significantly warmer in all continents and that this high average temperature corresponds with the high level of industrialisation in Europe and North America that started in the 1850s. Yearly seasons are “unpredictable, unreliable and hazardous” because of the increase in the average temperature. Consistent seasons are crucial for the survival of people, plants, animals, birds, fish and insects, yet the irregular weather conditions make it difficult for survival.

When periods of rainfall eventually occur, it is either too short or too long and agriculture thus became very unsafe – all because of this unpredictability in weather conditions (Mugambi, 2009:3-4). Temperature increases also cause the melting of permanent glaciers in polar regions and mountain ranges. Consequently, all the water in turn flows into the oceans leading ocean shorelines to rise, and ultimately, the affected coastlines are submersed, which threatens the survival of people and coastal flora and fauna. A few atolls and islands in India and the Pacific Oceans are already underwater and coral reefs have died. In tropical Africa, for example, lengthy droughts are enlarging the deserts; consequently, arable land is turned into arid and semi-arid zones (Mugambi, 2009:4).

As further illustration, Mugambi (2017a:113) paints a picture of the ecological degradation, caused by global warming in Africa: The seven mountain ranges – Kilimanjaro, Mount Kenya, Ethiopian Highlands, Ruwenzori Highlands, Drakensberg, and the mountain ranges in Western Africa and North Africa – which are considered the “water towers” of the continent, are headed for ecological disaster as the majority of permanent glaciers have melted during the previous century. The volumes of rivers and underground aquifers that originate there have been significantly reduced, threatening the livelihood of both humans and animals dependent on the water. Apart from the melting glaciers, the volume of African rivers has declined due to the decrease in rainfall precipitation. This has also adversely affected the populations dependent on these streams and rivers. Freshwater lakes, an essential source of livelihood in Africa, have also declined in volume. Furthermore, many tropical forests have



been cleared for urban settlement, timber, and agriculture. The latter primarily comprises cash crops for example sugar cane, sisal, cotton, coffee, tea, cocoa, pyrethrum, etcetera, to be exported for industries abroad. Timber is used in the large logging corporations outside Africa. The aforementioned factors leading to deforestation have resulted in a significant decline in vegetation, decreasing precipitation, and consequently also runoff reduction, the drying up of water on riparian valleys, as well as a decline in the recharge of aquifers.

On the availability of freshwater, Mugambi and Kebreab (2006:20) draw attention to three interrelated factors that are significantly contributing to the decline in this precious resource, namely the expansion of industrialisation, urbanisation, and population increase. They maintain that the contemporary global water crisis is considered the biggest twenty-first century challenge. The problem comprises not only water scarcity, but also floods, droughts, wastage, pollution, poverty, consumption, as well as natural resource management (Mugambi and Kebreab, 2006:25).

Alternatives

The WCC supports the principle that the entire earth community are entitled to benefit from the abundance of creation. It is possible to ensure equitable development for everyone, while simultaneously maintaining the integrity of the biosphere (Mugambi, 2006). Mugambi and Kebreab (2006:12-13) believe that if rural life is more highly valued than at present, the rate of urban population growth will be significantly reduced. Additionally, countries should assess the maximum holding capacity of each area and region, and also plan accordingly. If the problem of fresh water supply is eliminated, semi-arid areas can contain relatively high populations. They argue that improving the productivity of rural environments could prevent urban migration.

Mugambi (2009:5-6) suggests that all nations should seriously consider the principles of precaution, mitigation, adaptation, as well as the principle of common but differentiated responsibilities. *Precaution*, a principle applied by civilisations before the onset of industrialisation, requires science and technology to be applied in such a way that it does not harm human beings, other species, and future generations. Had this principle been applied throughout the years, significant damage to the environment could have been prevented. *Mitigation* refers to efforts to rectify the damage done and to compensate for this damage, as well as to eliminate the causes of destruction to the point where this goal is achievable. Industrialised nations should prioritise mitigation, as their industries were developed at the expense of other nations, peoples, and species (Mugambi, 2009:7-8).

Adaptation is the initiatives taken in attempt to survive under changing environmental conditions (global warming). This is especially advisable in areas severely affected, such as people in tropical Africa, islands in the Pacific Ocean, polar areas, and the coastlines of Asia. In the African context, soil erosion must be managed, and deforestation needs to be reversed. Agriculture should also be adapted to the changing climates, and per capita emissions by the industrialised nations should be reduced (Mugambi, 2009:8-9). In terms of *common but differentiated responsibilities*, Mugambi (2009:9-10) argues that the developed nations should admit their share in the international quest for sustainable development, and also honour the commitments they made to reduce per capita emissions, provide financial resources to facilitate adaptation in adversely affected regions, and also take mitigation measures by investing in clean technologies.

Apart from the numerous challenges, environmental degradation can be reversed if the human race's basic norms and attitudes are transformed. This comprises adding to nature instead of subtracting from it, working with nature rather than against it, increasing bio-diversity rather than reversing it, as well as small-scale and micro-level rather than large-scale and macro-level natural resource management (Mugambi and Kebreab, 2006:22).



Consumerist Greed

Mugambi (2002:17; 1989b:17) observes four reinforcing forces that invaded and eternally transformed Africa. Geographical curious *explorers* laid the path for *missionaries* who aimed to turn Africans into Christian converts. Interested in the social and political impact of the missionary enterprise and gaining protection and financial grants from the colonial office, *administrators* paved the way for *traders and settlers* who could then ultimately exploit both human and natural resources for the benefit of North American and European industries. According to Mugambi (2002:31; 1989b:31), colonial powers overemphasised technical progress while neglecting “progress in human personality”. The main foci were industrialisation, economy establishment and ever-increasing production. He accentuates the inextricable link between the missionary movement and the colonial governments who were more interested “in raw materials than in the welfare of African subjects” (Mugambi 2002:10; 1995:155-156, 213). The modern missionary movement also established a consumerist culture amongst Africans by teaching them new methods in trade, agriculture, and industry while integrating these with Christian doctrine (Mugambi, 2002:41; 1989a:30; 1989b:41).

After the continent’s decolonisation in the 1960s, African constitutions replicated their former colonial masters. While their main goal was the elimination of ignorance, poverty, and disease, colonial plunder ensured that Africa had no excess capital, so the first group of leaders couldn’t provide free basic services. Exploitation continued, and around the year 2000 more than three fourths of the world’s poor countries were located in tropical Africa. Indebted and bankrupt, these African nations were fragmented because of proxy wars. During the Cold War, they increasingly became disillusioned after their respective colonisers’ loans and grants no longer satisfied their expectations. Dictatorship became the norm and was rationalised by the notion that guaranteed economic growth justified the suspension of democracy. Ultimately, Africans attained neither (Mugambi, 2001:49-50).

The gap between the poor and rich is much greater today compared to the start of the twenty-first century, even though the world is richer than it was back then. This inconsistency is an ethical and theological matter and not so much a political or economic one (Mugambi 2001:38). Mugambi (2001:45) holds that political power and monetary accumulation form the basis for inequality in the world. “[C]onventional economic theory”, emphasising labour and capital maximisation to yield a profit on investment, determines human value in terms of production and consumption capacity with little or no regard for natural resources. Non-OECD countries – the majority of the world’s populace – are not deemed “producers nor consumers” and are therefore “economically non-existent”. OECD countries employ various technologies to exploit non-OECD resources causing environmental pollution without considering future generations (Mugambi, 2001:36-37). According to the Limits to growth discussion, affluent nations consider population growth in the destitute countries a pressing issue due to the insufficiency of natural resources supply to meet the required demand, while the latter argues that sustainability is possible if the affluent nations curbed their wasteful lifestyles (Mugambi, 2001:49).

Mugambi (2007:82; 2001:51-52; 2000b:16) contends that poor nations such as Africa are essentially raw material producers for and importers of manufactured goods from the OECD, who determines import and export prices. Africa, for example, produces a large percentage of essential resources used in global trade and industry such as gold, diamonds, and petroleum, yet the continent’s contribution to world trade and its industrial output is practically insignificant. Large amounts of luxury goods, including flowers, cotton, rubber, coffee, tea, cocoa, and palm oil are produced in Africa, but consumed by the OECD countries – an unjust economic system sustained by the Bretton Woods institutions⁶ (Mugambi, 2003b:181-182). Globalisation makes the African continent vulnerable to exploitation and various industries fail because these

⁶ Bretton Woods Institutions are the World Bank, International Monetary Fund (IMF), as well as the General Agreement on Tariffs and Trade (GATT). The latter was replaced by the World Trade Organization (WTO).



countries are forced to import due to tariff barriers constantly being raised (Mugambi, 2003a: 92, 1995:155). It is indeed distressing to note that Africa has sufficient agricultural land and produce to feed its population, yet its basic foodstuffs are imported (Mugambi, 2003b:196; Mugambi and Kebreab, 2006:12, 14). The USA and Europe are subsidised for their agricultural goods, resulting in developing countries receiving less money for the goods they produce, thus being excluded from the rich countries' food markets. They are exposed to the dumping of cheap food while their self-reliance and livelihoods are undermined (Mugambi, 2003a:92). Mugambi and Kebreab (2006:12) maintain that this policy is exploitative and unethical. Limits and punitive procedures like tariff hiking are implemented by the OECD countries to protect their markets against the poor nations, who are forced to be open for unlimited dumping of goods and services to ensure favour by the OECD and Bretton Woods institutions (Mugambi, 2001:51-52). Mugambi (2001:48) thus defines globalisation as an unequal system whereby the rich deeply infiltrates the culture of the poor nations while becoming more detached from the influences of the latter, who are progressively synchronised with the former's politics and economics. Nevertheless, there is no attempt by the industrial world to transform the relationship between the developed and developing nations as *economic apartheid* persists (Mugambi, 2007:82-83).

With regard to pollution and the dumping of waste and weapon testing in the destitute countries Mugambi (2001:48) observes a system of double standards, imbedded in the notion that some people are more deserving of a healthy environment than others. While pollution limits are strictly applied in OECD countries, different standards apply to areas such as Africa, Asia, and Southern America as profit is the main objective – at the expense of workers, neighbours, and consumers' health. Relaxed pollution regulations and labour laws, as well as grant approval for profits to be returned to investors represent some of the OECD countries' conditions for investing in Africa (Mugambi, 2001:42). Mugambi (2001:42-43) draws attention to environmental damage in Kenya, such as the melting of the ice-cap on Mount Kenya, caused by industrial pollution of foreign-owned companies. Most Kenyans' livelihood is dependent on this ice-cap, yet there is no willingness on the part of these companies to take the necessary pollution control precautions. In Mugambi's opinion the global environmental crisis is primarily the result of industrial pollution caused by affluent countries, and "global warming which is one of the symptoms of this crisis is attributable to the disproportionate exploitation of natural resources for industrial production to satisfy the consumerist tendencies in the affluent nations". He believes in order for the equity principle to apply, the world's primary polluters should pay proportionately for environmental restoration (2001:46).

The idea that some people deserve to suffer less pollution than others also underlies the injustice of emission trading, as Mugambi (2001:35) observes. Affluent countries – only a minority of the world's population – constitute the major source of pollution globally, yet they refuse to acknowledge this guilt. Emission trading promoters would prefer this unwillingness to be officially accepted as World Trade Organization procedures (WTO) by translating "ethical irresponsibility into monetary profitability". To continue receiving investments from the affluent, developing countries like Africa, Asia, and Southern America must be available for their dumping and outdated technologies.⁷ Economic progress is thus more important than ethical responsibility (Mugambi, 2001:46-47). Mugambi (2001:47) believes that carbon dioxide

⁷ Mugambi (2001:45-46) also refers to the economic control of poorer countries by the World Bank. Arbitrary devaluing of their currencies by the IMF – responsible for monetary stability – causes economic chaos instead. Mugambi (2001:52) believes there is much irregularity in the organisation of world trade, for example OECD members require political and economic changes from Africa before any bilateral or multilateral assistance are provided. Yet these members offer preferential trade terms to other non-OECD members, regardless of economic and political situations. Such inconsistencies cause Africa to lose confidence in the OECD as mentors. Nevertheless, it appears to be affluent countries' goal to portray Africa as "the loser" and afterwards make generous donations to its people, gaining much praise from the mass media.



emissions trading discussions are connected to broader dialogue on, for example, cultural autonomy, dumping, globalisation, national sovereignty and international trade. Pertaining to these, the poor nations suffer deprivation due to past General Agreement on Trade and Tariffs (GATT) and current WTO core provisions. Mugambi (2001:35) contends that the acceptance of emission trading by the Framework Convention on Climate Change (FCCC) and WTO will validate OECD countries' relocation of polluting industries to and dumping in other regions (Third World countries), deceptively labelling it "technological transfer" which he defines as a "tragedy of research and technology originating from other cultures and dumped ... as 'aid', or sold for use in cultural contexts for which it was not originally intended" (Mugambi, 2017a:117). Mugambi (2001:36-39) classifies this as a doubtful concept, as moving a polluting factory from an industrialised North Atlantic town to Africa or Asia does not constitute "technology transfer". Such approval will also allow emission traders to escape fines that would otherwise be issued. Mugambi (2001:39-40) comments that any US company, for example, will only transfer their technology if compensated. They would still exercise control over the technology and deny their competitors access to it. The three conditions for so-called technological transfer are thus "monetary gain, exercise of control, and competitive advantage over others".

An important issue highlighted by Mugambi and Kebreab (2006:19) is the issue of water scarcity with specific emphasis on poor countries like Africa. They hold that access to fresh water is probably the most reliable indicator of deprivation levels, and also state that individual daily water consumption indicates a person's standard of living. Water scarcity might not be a reality for the affluent, but the majority of poor people spend a significant amount of time per day in search of water. Mugambi (2017b) affirms that fresh water should be used for basic needs and not for excessive luxuries. While millions of people in Africa experience drought and hardly have fresh drinking water, it is recorded that individual daily water use in developed countries amounts to a staggering 380 litres per person.

Mugambi and Kebreab (2006:9-11) observe that the majority of poor people's access to freshwater supplies is restricted by privatisation of water sources. Wealthy countries tend to monopolise fresh water, leaving the poor powerless in defending their water rights. Global capitalism perceives human hunger and thirst as opportunities for economic exploitation. In the past fresh water sources, including springs, streams and rivers were available to the majority of people. With rapid industrialisation these water sources became polluted, drinking tap water became risky and fresh water supply became a massive industry. Mugambi and Kebreab (2006:11) state: "The cost of bottled water competes with the price of automotive fuels. This is lamentable, because fresh water, as a necessity for life, should not be a commodity for profiteering". It is not surprising that many twentieth century wars raged over water sources, and it is probable that conflict over water access is likely to multiply in the current millennium, leaving population sectors with the lowest purchasing power the most vulnerable (Mugambi & Kebreab, 2006:20).

Alternatives

According to Mugambi (2001:36), the damaging effects caused by profit-seeking industries are astronomical and will take centuries to correct. Calculating the damage will require considerable time and energy, however, he claims that it makes ethical sense to assess the damage and consider ways to reimburse those who suffered without enjoying the benefits.

Mugambi (2001:46) criticises the fact that poor nations are often blamed for global warming due to so-called "overpopulation" and "desertification". He suggests that the affluent consume less, establishing equilibrium, and that poor nations are empowered to use environmentally friendly technology. Industrialists should encourage the advancement of non-polluting technologies that will ensure environmentally friendly industrialisation on a global scale. This implies that all polluting industries worldwide are phased out based on agreed-upon international procedures (Mugambi, 2001:41). Mugambi (2001:41) suggests that polluters should be taxed in relation to the damage caused, and this money should be used to



compensate population segments adversely affected. In addition, he opines that it is imperative that the principles used by wealthy nations to enforce their will on poorer countries are questioned. The former ought to be leaders in a theological and moral sense, instead of economic and political “masters and tyrants”. Because spiritual and moral values constitute the basis of economic and political actions, theology and ethics should also offer guiding principles in micro- and macro-economics (Mugambi, 2001:38).

Mugambi (2001:52) believes that poverty will never be eliminated if exploitation is endorsed as a norm in world trade. Poverty among the destitute nations can only be efficiently addressed through fair trade instead of charity (Mugambi, 2007:82-83). To guarantee a decent livelihood for the producers of raw materials, international conventions should be structured in such a way that there is a set price for all primary products (Mugambi 2001:53). In addition, policies that drive peasant farmers out of business by the dumping of subsidised agricultural products from OECD countries’ large agro-business corporations should be firmly challenged (Mugambi and Kebreab, 2006:14). Mugambi (2003b:184) proposes relationships based on friendship between countries that will ensure mutual support and no exploitation with regard to trading of goods and services.

Considering the availability of fresh water, Mugambi (2017b) states that reducing its use to the bare minimum (as suggested by the World Health Organisation) is a prudent policy. Moreover, access to fresh water to sustain livelihood should also not be denied. Mugambi and Kebreab (2006:27-28) maintain that the right to water is the basis for a dignified life and it should therefore not be treated as a profitable commodity for exploitation. It is suggested that international financial institutions not impose cost recovery of water privatisation as a pre-condition for new or renewed loans by developing countries. In addition, water should be protected from commoditisation and should also be kept out of trade agreements, such as the general Agreement on Trade Services, the WTO, and other regional and multi-lateral trade agreements (Mugambi and Kebreab, 2006:18). They conclude that fresh water provision by affluent nations should be seen as responsibility and commitment toward fulfilling the Millennium Development Goals and not as charity, as all of creation have the right to life that is not threatened by human greed and destructiveness (Mugambi & Kebreab, 2006:15).

Alienation of human beings from the earth community

According to Mugambi (2012:323), human disruption of the divinely created harmony between humans and God, fellow humans, and humans and the rest of creation implies disobedience against the divine Creator – its effects experienced both within and beyond history. In the context of Africa, he draws special attention to the renunciation of traditional African values which gave rise to an alienated worldview, including missionary influence, Western education, and beliefs about land and property. In the global context he focuses on environmental and technological apartheid.

Mugambi (2002:39-42; 1989b:39-42) illustrates such a disturbance of order as described above through the modern missionary movement’s role in the religious and cultural alienation of Africans. Promoting the idea that salvation is only possibly through the Christian faith, they believed that Africans needed conversion as they seemingly possessed either no or distorted ideas about God. However, as Mugambi (2002:51; 1989b:51) explains, African religion comprises a mono-sectional worldview in terms of space, consisting of one world and no heaven nor hell. Death transforms a person from the physical to the spiritual mode of existence, who continues to live peacefully in the world, provided that their moral and social duties were fulfilled. It is believed that God – the present generation of human beings, ancestors, spirits, plants, animals, and inanimate objects, whether visible or invisible – exists in this one world. Ancestral spirits interact with and influence the present generation and manifest in places or objects like mountains, caves, trees, rivers, and lakes. God’s will manifests through particular people and events (Mugambi, 1989a:136). Whereas the classical Christian view emphasises salvation, African religion’s foci are moral righteousness and social



relationships (Mugambi, 2002:51-52; 2007:84-85). Considering these fundamental differences, it is not surprising that Christian missionaries perceived any other religion as flawed and regarded it their duty to spread the “Good News”, yet in the process alienated Africans from their traditional worldview and inevitably also the created environment to which they are inextricably bounded. Mugambi (2007:88-89) further observes that Western education also replaced traditional African values, beliefs, norms, and attitudes with secular philosophies focused on upward mobility, competition, opportunism, individualism and exploitation. It is also believed that Western ideologies transformed traditional beliefs about land and property to the notion of absolute ownership. In the traditional African worldview absolute ownership of land or the natural environment by an individual, society, or nation is not possible, and can only be claimed by God. Moreover, humans are considered connected with nature and not separate from it (Mugambi, 1987:34-35). Mugambi (1989a:137-138) thus concludes that Africans – pressured to accept an eschatological view of history, modern science and technology promising liberation from domination by natural forces, and alien Eastern and Western ideologies securing diplomatic and economic support – substituted their traditional worldview with Christian cosmological and modern empirical scientific ideas, with detrimental effects on the environment.

On the global level, Mugambi (2001:42-43) once again draws attention to the stricter environmental laws in white communities compared to communities of colour, quoting Rasmussen (1996:75):

Penalties under hazardous-waste laws at sites having the greatest white population were about 500% higher than penalties at sites with the greatest minority population...environmental laws aimed at protecting citizens from air, water, and waste pollution, penalties in white communities were 46% higher than in minority communities...abandoned hazardous-waste sites in minority areas take 20% percent longer to be placed on the national priority action list than those in white areas.

Emission trading in the above sense therefore depicts a double standard: OECD nations deserve to endure less pollution compared non-OECD nations. The former move factories to Africa, Asia, and South America due to their less stringent pollution control procedures while they do not intend on assisting these host countries to become industrialised. Besides escaping their own rigid standards, the other primary reason is profit maximisation. Moreover, these factories produce products for consumption by OECD countries, while the host countries are the victims of pollution (Mugambi, 2001:44). Mugambi (2001:44) also notes the existence of double standards concerning pollution regulation methods within OECD countries. He believes it is callous, ridiculous, and inhuman for industrialists to propose building health facilities providing health care to people who are sick because of these polluting plants.

Similar to “technological transfer” – the transferring of polluting industries – Mugambi (2001:40) also laments what the OECD nations refer to as “appropriate technology” – industries suitable for areas outside the OECD. This can be contrasted with “high technology” (“industrial technology”) – considered appropriate for industrialised and developed countries. Fossil fuel remains the energy source of choice, since it would require massive investment from industrialised countries in non-OECD countries’ renewable energies, such as sun, wind, biomass and water energy, to ensure a more environmentally sustainable future. From the target group’s viewpoint, the term “appropriate” is “derogatory and also demeaning”, as it is regarded “technology for the poor and marginalised” (Mugambi, 2017a:117). Mugambi (2001:40) rejects the notion that the rich and powerful can determine what is good and suitable for themselves and others. High technology is apparently not a possibility for the suppliers of raw materials – Africa and many other countries alike – who will seemingly remain unindustrialised and underdeveloped. He describes this as “technological apartheid”.



Alternatives

Mugambi (2012:323; 1987:25) affirms that humankind's ultimate purpose is living harmoniously with fellow humans, other species, and the rest of creation to sustain the divine order. His desire for all people is that "God help us to remove the huge logs blocking our vision, so that we might be able to see the tiny specks in the eyes of those whom we look down upon. In this way, we shall be able to see ourselves in our neighbour, and our neighbour in ourselves" (Mugambi, 2001:56).

Mugambi (2012:327) further argues that alienation between religions, cultures, peoples, and nations can be conquered through human discernment of divine guidance in creation that ensures the resonance of culture with nature. Challenging religious exclusion, he uses the "Mountain of Religions" analogy:

At the top of the mountain, each religion faces outward to one direction, and praises God for the wonders of creation. Some adherents insist that the follower of other religions must come to their vantage point to see the wonders of creation in that direction. If all the adherents of all religions ... would form a circle and tell one another of the wonders of creation, they would all, no doubt, agree that the world that God has created is wonderful indeed. They might then praise God together, and co-operate in witnessing to God's glory (Mugambi, 1996:16-17).

Hence, people should not be hindered from freely choosing their own beliefs, taking into account their own history, culture and religion (Mugambi, 2007:85; 2000a:91). Mugambi (1996:45) affirms that mutual respect, appreciation and reciprocation enhances co-existence and social cohesion. He concludes that justice, fairness, and proportionate sharing are crucial for harmonious living, and harmony among all members of the earth community implies peaceful existence. The environment includes the entire *Oikoumene*, reaching from outer space to the great depths of the land and oceans, the smallest particles to the largest galaxies. Peace cannot be experienced in isolation, but permeates the whole environment (Mugambi, 1987:17): "The peace of one part of humanity is inextricably bound with the peace of all. Likewise, Integrity of Creation means, among other things, the affirmation of the organic unity of all members of creation" (Mugambi, 1987:17).

Sloth

From an industrialised society's viewpoint, "sloth" or "backwardness" implies a lack of development, economic growth or progress, or even a lack of education. According to Mugambi (2004:16), the "aim of 'development' is often defined as 'catching up' with the West. In such a worldview, the failure to meet the standards set by the affluent industrialised countries thus essentially amount to sin". Africa, for example, is extremely vulnerable to the effects of climate change, has a low adaptive capacity, worsened by developmental struggles which include restricted access to capital, markets, technology, and infrastructure. In an industrialised worldview this represents sin on Africa's part – the sin of backwardness (Mugambi, 2017a:110). In light of Barret's (1968) observation that Africa is probably the most Christian continent, Mugambi (1997:43-44) questions whether this means that it is also the most *backward* continent, stating that the "benefactors and beneficiaries of imperial dominations" believe that God's favour is upon them, while they perceive the afflicted and exploited countries in, for example, Asia, Latin America, and Africa "as lazy, helpless beggars who are unable to repay their debt at exorbitant rates".

The aforementioned countries are indeed among the poorest, most destitute and underdeveloped areas in the world. Mugambi (2004:13) maintains that a lack of education, discipline and organisation are the root causes of destitution while their opponents employ their own citizen's education, discipline, and organisation to obtain resources from the destitute countries which are rich in essential natural resources, impoverishing them in the



process. Africa, for example, encompasses all sorts of vegetations and an abundance of natural resources, yet experiences the greatest food shortage worldwide (Mugambi, 1995:86).

Underdeveloped countries might be criticised for their so-called “backwardness”, but it is important to evaluate elements of domination and exploitation on developed nations’ part. Mugambi (2007:79-80) notes that previous colonies’ state of “development” is determined by the degree to which they implemented the governance, economy, and industrial production of the North Atlantic. The latter is considered “developed” and Africa as “developing”, yet it is unclear when development has been reached due to constantly shifting standards by pace setters. Mugambi (2001:44) comments on the underdeveloped countries’ difficulty to gain access to the markets of the industrialised world, yet it is required of them to open their markets for OECD goods and services. The former also seemingly possesses insignificant influence in international negotiations. Mugambi (2004:16) observes:

[T]he experts who come as expatriates do not really wish for Africa to ‘catch up’, because there are some achievements which Africans are forbidden from desiring – such as advanced technologies which are reserved for the dominant nations of the world. Thus the ‘development agenda’ is designed and implemented to ensure that Africans will never ‘catch up,’ and will never replicate their former colonial masters.

In global politics and economics they also only act as “mouth-pieces” for affluent countries (Mugambi, 2007:80). Mugambi (2001:54) draws attention to a 2000 Nairobi conference on future ivory trade. Some nations requested a total ban while others wanted the ban to be lifted. The European Union influenced the final decision by recommending a compromise: future ivory trade would be suspended while better methods of environmental preservation are developed, and in the meantime countries with ivory stocks would be allowed to sell it in the world markets. Ironically, there are no elephants within European borders.

Besides Western oppression intensifying the so-called backwardness of destitute countries, the affluent countries are also guilty of withholding assistance and refraining from providing the necessary means (which they possess) to aid development and to invest in reversal of damage done to these countries. Though in their power to act they fail to do so, which essentially amounts to sloth. Illustrating an example, Mugambi (2003b:191-192; 2007:82) refers to the Marshall Plan initiated by the USA after World War II to assist Europe (primarily West Germany) and Japan to restore societies, infrastructure, and economies ruined by the war. However, there was no reconstruction program for Africa after decolonisation in the 1960s and previous African colonies were left to their own devices. They instead encouraged the granting of loans at extreme interest rates, making repayment impossible. Mugambi (2003b:192) thus believes the OECD and Bretton Woods institutions lack moral and political will to aid Africa without setting certain conditions.

Another example depicting sloth on the part of industrialised countries’ is their lack of commitment to the following Kyoto Protocol requirements: reduction of their per capita emissions to a minimum of 40% below 1990 levels; considering their historical contribution to climate change, the allocation of financial resources to the most adversely affected countries for the purpose of adaptation strategies; and the implementation of mitigation strategies by investing in clean energy and a healthier environment. On the contrary, the industrialised countries’ emissions increased, there has been no tangible commitment for the provision of financial resources, and the extraction of coal and oil increased. While many of these extractions are in Africa, none of the wealth generated from it is directed towards investment in clean technologies (Mugambi, 2009:10). Mugambi (2009:10) concludes: “The Kyoto protocol is honoured more in breach than in compliance, and this is done with impunity”.

Alternatives

Mugambi (2004:19-20) believes that the onus is on Africa to re-invent itself, implying that its



ancient self-perception whereby its people's interaction was motivated by survival as opposed to abundance has to be revisited. A *common market* across the continent has to be established, consisting of free movement of goods, services and people in various directions. A *protocol* describing the terms of such movement should then be established and negotiated within the African Union framework.

Mugambi (2007:81; 2000a:77-78) is of the opinion that Europe, North America, Japan, India, and China didn't achieve economic and technological success due to external forces, nor international conference decisions, nor donations or grants received. He maintains that the solution lies in a particular nation responding to its own needs, challenges, and problems.⁸ With regard to the provision of loans by affluent countries, Mugambi (2000b:34-35) states that unjust terms and conditions are not entirely to blame. As with any lending institution there are certain terms and conditions involved. The borrower can either accept them and take up the loan or decline the offer and find alternative means of finance. Mugambi (2000b:35) thus urges Africa to start making use of their own resources and avoid loans and grants, as this is an important step towards reconstruction. He believes a society will eventually become extinct if it does not have the ability to make its own myths or reinterpret old ones. These should then indeed be Africa's focus: "The myth of a desperate people must be replaced by the myth of a people full of hope. The myth of a hungry people must be replaced by the myth of a people capable of feeding itself" (Mugambi, 1997:47).

Conclusion

Jesse Mugambi's ecotheology is shaped by history and experiences of the destitute and deprived African context, followed by an inevitable emphasis on liberation and reconstruction. In developing his theology, Mugambi notably offers limited insight into anthropocentrism as ecological sin. This could, however, be attributed to his concern for human well-being, especially that of African people, and the plights and injustices they face and liberation thereof. Furthermore, his encouragement and support of developing Africa and its people could be interpreted as anthropocentric in itself.

Mugambi's understanding of sin is predominantly influenced by social, economic and political injustices of less developed countries such as Africa in the context of exploitation, poverty, lack of development, as well as lack of investment in their development by affluent nations. His analysis of consumerist greed is constructed with considerable detail and he primarily holds industrialised countries responsible for the earth's devastation, making limited reference to the responsibility and guilt of non-OECD countries. Accentuation of the latter's greed and resulting exploitation of developing countries implies that issues of class are important to him. Mugambi also incorporates sloth as ecological sin into the environmental debate. In this context, he offers a twofold definition: on the one hand developing nations reveal lack of development, economic growth, progress and education, while on the other hand industrialised and affluent nations are guilty of domination and withholding aid and investment in the former's development. Mugambi is extremely critical of Christian mission as he believes it is the source of colonisation as well as other forms of societal domination. His theology widely focuses on social injustices which may be linked to and understood in an ecological framework, adding an element of uniqueness to his ecotheology.

While Mugambi maintains that Africa should take responsibility for its own internal development, he does not elaborate significantly on how this can be achieved. An important aspect stressed in this regard, however, is that Africa should refrain from increasingly becoming "indebted" to OECD countries. This includes, for example, rejecting aid, especially financial aid which comes with prejudicial terms and conditions, or unfair trade agreements.

Fischer (2013:296) perceives Mugambi as both a "good churchman" and a "good African",

⁸ Mugambi mentions the Industrial Revolution in Europe as an example.



which he believes are in conflict. Mugambi is notably critical of the Christian missionary movement in respect of its denunciation of ATR and its Christianising of Africa. On another note one could argue, however, that Mugambi's inclination to incorporate ATR beliefs and practices, particularly its mono-sectional worldview on space and existence, somehow reduces the critique of otherworldliness typically associated with the classical Christian three-sectional worldview.

While all humans in one way or another contribute to ecological devastation, one may not generalise as to the degree in which this occurs differs from one group of people or individual to the next. It is important, however, to note the influence of contextual factors in this regard: Scholars with lesser experience of injustice and deprivation appear to more easily critically distinguish and accept the burden of guilt for anthropocentric behaviour compared to those for whom the opposite holds true, for example, Jesse Mugambi. Such scholars may challenge the notion of anthropocentrism by avoiding a critique thereof, or even justifying its positive elements, for example Mugambi's encouragement and support of the development and progress of the African continent. Here the tension between ecological harmony on the one hand and social justice on the other hand is clearly discernible.

Finally, it is worth touching on the issue of reconstruction. Fischer (2013:294-301) maintains that Mugambi's theology must be indeed acclaimed for offering some answers to the issue of inequity in African society. Nevertheless, he challenges this theologian's notion of reconstruction on the grounds of favouring the material and social aspects of life, alleging that it primarily emphasises the community as opposed to personal responsibility and radical change on the part of the individual, which is imperative for genuine reconstruction. He further claims that Mugambi's theology portrays a new Africa, a new society, instead of reconstructing that which once existed. Wandera (in Gathogo, 1991:31) goes as far as questioning the relevance of reconstruction for Africa, making the following provocative statement:

There is still so much deconstruction to be done before reconstruction can start. There is a saying among the Africans that 'we should chase away the wild cat before we begin to warn the chicken against wandering carelessly'. Africa still suffers from marginalisation of all kinds, including its theology (Wandera in Gathogo, 1991:31).

Regardless of such critique, Mugambi indeed makes a noteworthy contribution to wider ecological discourse and presents fundamental groundwork for further research and discussion.

References

- Aquinas, (St.). T. (1991). *Summa Theologica: A Concise Translation*, Christian Classics: Allen, Texas.
- Barret, D.B. (1968). *Schism and Renewal in Africa*, Oxford University Press: London.
- Barth, K. (1958). *Church Dogmatics, Vol III/1: The Doctrine of Creation*, T. & T. Clark: Edinburgh.
- Barth, K. (1960). *Church Dogmatics, Vol III/3: The Doctrine of Creation*, T. & T. Clark: Edinburgh.
- Brinkman, M.E. (1998). Ecological Theology. In S. Maimela & A. Konig (Eds.), *Initiation into Theology: The rich variety of Theology and Hermeneutics*, J.L. Van Schaik: Pretoria, 203-213.
- Cloete, N. (2013). *Hamartology and Ecology: A Critical Assessment of Dietrich Bonhoeffer's View on the Nature of Sin*, Masters Dissertation: UWC.
- Cloete, N. (2021). *What on earth is wrong with the world?* Unpublished PhD Dissertation: UWC.



- Conradie, E.M. (2006). *Christianity and Ecological Theology*, Sun Press: Stellenbosch.
- Conradie, E.M. (2017). *Redeeming Sin?* Lexington Books: London.
- Durand, J.J.F. (1978). *Die Sonde*, N.G. Kerkboekhandel: Pretoria.
- Engel, M.P. (1990). Evil, Sin and Violation of the Vulnerable. In S.B. Thistlethwaite & M.P. Engel (Eds.), *Lift Every Voice*, Harper & Row: San Francisco.
- Fischer, J.H. (2013). *The Relationship between the Church and the Reign of God in the Reconstruction Theology of J.N.K. Mugambi: A Critical Analysis*. Unpublished PhD Dissertation: UWC.
- Gathogo, J. (1991). Jesse Mugambi's Pedigree: Formative Factors. In J.N.K. Mugambi, J.B. Chipenda, A. Karamaga & C.K. Omari (Eds.), *The Church of Africa: Towards a Theology of Reconstruction*, All African Conference of Churches, 29-50.
- Heyns, J.A. (1978). *Dogmatiek*, N.G. Kerkboekhandel: Pretoria:
- Horrell, D.G. (2010). *The Bible and the Environment*, Equinox: London.
- Mugambi J.N.K. & Kebreab G. (2006). *Fresh Water to Eradicate Poverty*, Norwegian Church Aid: Oslo
- Mugambi, J.N.K. (1987). 'God, Humanity and Nature in Relation to Justice and Peace', *Church and Society*, No. 2. WCC: Geneva.
- Mugambi, J.N.K. (1989a). *African Christian Theology: An Introduction*, Heinemann: Nairobi.
- Mugambi, J.N.K. (1989b). *African Heritage and Contemporary Christianity*, Longman: Nairobi.
- Mugambi, J.N.K. (1991a). 'Environment/Ecology'. In *Dictionary of the Ecumenical Movement*, 357, Eerdmans: Grand Rapids.
- Mugambi, J.N.K. (1991b). *Carry it Home*, East African Literature Bureau: Nairobi.
- Mugambi, J.N.K. (1995). *From Liberation to Reconstruction*, East African Educational Publishers: Nairobi.
- Mugambi, J.N.K. (1996). *Religion and Social Construction of Reality*, University of Nairobi.
- Mugambi, J.N.K. (1997). Problems and Promises of the Church in Africa. In J.N.K. Mugambi (Ed.), *The Church and the Future in Africa*, 41-78, AACC: Nairobi.
- Mugambi, J.N.K. (1998). Christological paradigms in African Christianity. In J.N.K. Mugambi & L. Magesa (Eds.), *Jesus in African Christianity*, Acton: Nairobi, Kenya, 137-161.
- Mugambi, J.N.K. (2000a). Christian Mission in the context of Urbanization and Industrialization in Africa. In A. Nasimiyu-Wasike & D.W. Waruta (Eds.), *Mission in African Christianity*, 76-101, Acton: Nairobi.
- Mugambi, J.N.K. (2000b). Theological Method in African Christianity. In M.N. Getui (Ed.), *Theological Method & Aspects of Worship in African Christianity*, 5-40, Acton: Nairobi.
- Mugambi, J.N.K. (2001). Emission Trading as an Aspect of Toxic Waste Dumping. In J.N.K. Mugambi & M. Vähäkangas (Eds.), *Christian Theology and Environmental Responsibility*, 35-56, Acton: Nairobi.
- Mugambi, J.N.K. (2002). *Christianity and African Culture*, Acton: Nairobi.
- Mugambi, J.N.K. (2003a). Religion in the Social Transformation of Africa. In L. Magesa & Z. Nthamburi (Eds.), *Democracy and Reconciliation*, 73-98, Acton: Nairobi.
- Mugambi, J.N.K. (2003b). *Christian Theology and Social Reconstruction*, Acton: Nairobi.
- Mugambi, J.N.K. (2004). Religions in East Africa in the Context of Globalization. In J.N.K. Mugambi & M.N. Getui (Eds.), *Religions in Eastern Africa under Globalization*, 3-29, Acton:



Nairobi.

Mugambi, J.N.K. (2006). 'Climate justice for all', A statement from the WCC to the High-Level Ministerial Segment of the UN Climate Conference in Nairobi (COP12/MOP2), WCC Working Group in Climate change.

Mugambi, J.N.K. (2007). Responsible Leadership in Education and Development. An African Perspective. In C. Stückelberger & J.N.K. Mugambi (Eds.), *Responsible Leadership*, 79-96, WCC: Geneva.

Mugambi, J.N.K. (2009). Adaptation to Climate Change in Tropical Africa. In Seminar on Climate Change, Copenhagen University, December, 2009.

Mugambi, J.N.K. (2012). Theologies of Liberation and Reconstruction. In E.M. Conradie (Ed.), *Creation and Salvation, Vol. 2*, 321-327, LIT Verlag: Zurich.

Mugambi, J.N.K. (2017a). African: African heritage and ecological stewardship. In W. Jenkins, E. Tucker & J. Grim (Eds.), *Routledge Handbook of Religion and Ecology*, Taylor & Francis: London.

Mugambi, J.N.K. (2017b). 'Why Waste Water: Lenten Meditation for 2017 World Water Day', Ecumenical Water Network, Geneva, 21 March 2017 <https://water.oikoumene.org/en/whatwedo/sevenweeks-for-water/2017/why-waste-water> (June 2019).

Niebuhr, R. (1941/1996). *The Nature and Destiny of Man*, Vol. 1, John Knox: Westminster.

Rasmussen, L. (1996). *Earth Community. Earth Ethics*, Orbis Books: Maryknoll.

Santmire, H.P. (1985). *The Travail of Nature*, Fortress Press: Philadelphia.

White Jr., L. (1967). The Historical Roots of Our Ecological Crisis, *Science*, 155, 1203-7.

Williams, R.R. (1985). Sin and Evil. In P.C. Hodgson & R.H. King (Eds.), *Christian Theology*, Fortress: Philadelphia, 194-219.

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