



## A Critical African Dialectics on the Question of Climate Sustainability

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**Abstract.** The study sought to identify the contradictions, tensions, and possibilities that foreground Africa's indigenous knowledge systems and their potential to inform climate change mitigation and adaptation strategies. The qualitative method of dialectics was used to interrogate African traditional cosmologies, mythologies, and philosophies while interjecting the intricate relationships between humans, nature, and the spirit world. The study identified the principle of "ubuntu" (humanity towards others) as an African dialectical nexus, where individual and communal interests intersect with environmental sustainability. The study employed a dialectical approach in its exploration on the relationship between African traditional worldview and climate change sustainability. The study aimed to demonstrate how African traditional worldview in its emphasis on interconnectedness, reciprocity, and reverence for nature, can inform innovative climate change solutions. The findings of the study showed the significance of the African traditional worldview in addressing the complex and somewhat contradictory relationships between climate change, sustainability, and development, while advocating for an all-inclusive approach to the universal quest for climate sustainability.

**Keywords:** Dialectics, Climate change, Environmental sustainability, traditional African worldview, Humanity, Nature, Conservation

### 1. Introduction

The Intergovernmental Panel on Climate Change (IPCC) warns that "the planet is on a trajectory toward irreversible ecological damage unless immediate and transformative action is taken" (IPCC, 2021, p. 12).

Africa, despite contributing less than 4% of global greenhouse gas emissions, "bears some of the most severe impacts of climate change, including prolonged droughts, erratic rainfall patterns, desertification, and rising sea levels" (Serdeczny *et al.*, 2017, p. 528). Amidst these crises, Africa possesses a wealth of indigenous knowledge systems rooted in traditional worldviews that have historically nurtured resilience and sustainability. These systems, however, remain underutilized in mainstream climate discourse, "often dismissed as anecdotal or incompatible with modern scientific approaches" (Sillitoe, 2009, p. 36). This marginalization not only undermines the potential contributions of African philosophies but also perpetuates a one-dimensional approach to climate sustainability that fails to address the sociocultural dimensions of environmental stewardship.

Western-centric models of climate change discourses dominate global climate policy and prioritizes technocratic solutions over culturally embedded practices that align with local contexts. For instance, while international frameworks like the Paris Agreement emphasize mitigation and adaptation, they often overlook the epistemological diversity required to tackle climate challenges equitably. This disconnect is particularly evident in Africa, where colonial legacies have disrupted indigenous modes of environmental governance, "creating tensions between traditional values and contemporary development paradigms" (Mawere, 2016, p. 45). The absence of culturally relevant strategies not only alienates communities from participating in climate action but also risks implementing solutions that are ecologically and socially unsustainable. Mbiti (1990) notes that, "African societies view humanity as inseparable from nature, with both existing in a

symbiotic relationship" (p. 49), underscoring the need for approaches that recognize this interconnectedness.

This study seeks to bridge the above-mentioned gaps as it explores the dialectical interplay between African traditional worldviews and climate sustainability. Its primary objective is to critically analyze how African dialectics which is rooted in principles such as ubuntu, cosmological foundations, and communal ethics can inform innovative strategies for addressing climate change. The significance of this study lies in its potential to contribute to more inclusive and effective climate solutions. Similarly, ubuntu philosophy, which emphasizes interconnectedness and reciprocity, "offers a moral framework for fostering collective responsibility toward environmental stewardship" (Metz, 2011, p. 532).

## 2. Conceptual Clarifications

To establish a solid foundation and a clear direction for this study, it is essential to clarify certain key concepts that will guide the exploration of the interplay between African traditional worldviews and climate sustainability below:

### 2.1 Dialectics and African Dialectics

Dialectics refer to a method of reasoning through dialogue, where opposing arguments (thesis and antithesis) are critically examined to arrive at a deeper truth (synthesis). In Plato's works, it is a form of cooperative argumentation that seeks to uncover universal truths by questioning and refuting hypotheses (Plato, 1992, p. 533a). Plato's concept of dialectics was built upon his critical ideas about knowledge, reality, and truth. Dialectics then becomes a way of questioning and dialogue that aims to reveal universal truths and understanding. Hegel view dialectic as a process of historical and logical progression; a way of understanding the conceptual progression and reality itself. It is a philosophical method of reasoning that investigates the relationships and contradictions between opposing forces or ideas to achieve a synthesis or higher understanding (Hegel, 1975). In the context of this study, African dialectics specifically refers to the analytical framework that examines the dynamic interactions among human actions, natural environments, and spiritual beliefs.

### 2.2 Climate Change

Climate change refers to long-term shifts in temperatures and weather patterns primarily driven by human activities, especially the burning of fossil fuels like coal, oil, and gas which release greenhouse gas

emission like carbon dioxide and methane (United Nations, 2022). Climate change is caused by both natural and anthropogenic (human-induced) factors. Natural factors include volcanic eruptions, and changes in solar radiation while anthropogenic factors include greenhouse gas emission from fossil fuel combustion, deforestation, industrial processes, agriculture, transportation, energy production, and land use. Climate change has consequences including rising global temperatures, extreme weather events, sea-level rise, and loss of biodiversity with various responses from the United Nation. The consequences of climate change are still very profound, posing significant risks to ecosystems, food security, and livelihoods, particularly in vulnerable regions such as Africa, where adaptive capacity is often limited.

### 2.3 Environmental Sustainability

Environmental sustainability is a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while maintaining ecological balance to ensure the health and viability of ecosystems for both present and future generations (United Nations, 2015). This principle advocates for responsible resource management, conservation practices, and equitable development that respects the rights and needs of all stakeholders. It accentuates the importance of integrating ecological, social, and economic dimensions to fostering resilience in the face of environmental challenges.

### 2.4 African Traditional Worldview

The African traditional worldview is founded in a holistic understanding of existence, where the spiritual and physical realms are interconnected. Life is seen as a continuum comprising the living, the ancestors, and the unborn (Mbiti, 1969, p.15). The African traditional worldview encompasses a diverse range of indigenous cosmologies, mythologies, and philosophies that articulate a holistic understanding of existence, where humans, nature, and the spiritual realm are seen as interconnected and interdependent. This worldview is characterized by principles such as ubuntu, which emphasizes communal responsibility, mutual respect, and the interconnectedness of all life forms.

## 3. Literature Review

The discourse surrounding climate change and indigenous knowledge mix has gained significant traction in recent years, showing a growing recognition of the value of traditional ecological knowledge in addressing contemporary environmental challenges. Nyong *et al.* (2007) assert that African

indigenous knowledge systems offer practical and context-specific solutions for climate adaptation. For example, traditional farming techniques, such as intercropping and agroforestry, have been shown to enhance flexibility to drought and improve food security in vulnerable communities. These practices are often developed through generations of experiential learning and are intimately connected to local ecosystems providing a rich source of knowledge that can inform effective climate adaptation strategies.

However, despite the potential and actual contributions of indigenous African knowledge, Western scientific approaches tend to dominate climate policies and interventions. This marginalization can be attributed to a prevailing bias towards empirical, reductionist methods that prioritize quantitative data over qualitative intuitions. Such an approach can overlook the holistic and relational understandings that indigenous communities possess regarding their environments.

Central to the understanding of indigenous African philosophies is the concept of ubuntu, which emphasizes interconnectedness, communal responsibility, and the intrinsic value of all life forms (Tutu, 1999). Ubuntu serves as a guiding principle that advocates for sustainable living and ethical stewardship of the environment.

Murove (2009) evaluates how ubuntu can foster environmental ethics by promoting harmony between humans and nature, suggesting that this way of thinking could enable a more sustainable relationship with the environment. However, the integration of ubuntu into modern environmental discourse is not without its challenges. Tensions often arise between the necessities of modernization, which typically prioritizes economic growth and technological advancement, and traditional practices that advocate for ecological balance and sustainability (Gyekye, 1997). This conflict underscores the need for a thorough understanding of how to blend traditional knowledge with contemporary practices in a way that respects and preserves indigenous values.

Dialectical approach has been relatively underemployed in climate studies, yet it offers valuable insights into the complexities of human-nature interactions. While Hegelian dialectics primarily focus on resolving contradictions to achieving a synthesis of ideas, African dialectics, as articulated by Wiredu (2000), embrace relationality and synthesis in a manner that is particularly relevant for sustainability discourse. African dialectics further emphasizes the interconnectedness of various

elements within a system which allows for a more holistic understanding of environmental issues. This approach also recognizes the complementary strengths of both indigenous and scientific knowledge systems. This approach not only empowers local communities but also fosters a sense of ownership and responsibility towards environmental stewardship.

The literature examined captures the critical role of indigenous knowledge systems, particularly African traditional worldviews, in informing climate change adaptation and mitigation strategies. The integration of concepts such as ubuntu and dialectical reasoning presents opportunities for reexamining the relationship between humans and nature. This is where this study will build on in its exploration of how these African traditional worldviews can inform and enhance climate strategies, which will contribute to more inclusive and effective responses to the pressing challenges posed by climate change in the world today.

#### 4. Methodology

The study employs a dialectical inquiry to critically analyze the intersections between African traditional worldviews and climate sustainability. The methodology is designed to interrogate the contradictions, tensions, and opportunities inherent in African traditional worldviews while at the same time emphasizing their potential to inform innovative climate solutions. Dialectics, as articulated by Plato, Hegel and Marx and adapted for this study, involves identifying contradictions such as those between tradition and modernity, individual and collective interests, or development and sustainability. This methodological approach is germane in examining how traditional African worldview can contribute to the ongoing debate on curbing climate change.

#### 5. Theoretical Framework

African eco-philosophy brings a theoretical foundation for understanding the intricate relationships between humans and nature, stressing an ontological standpoint that views the environment as sacred and imbued with intrinsic value. The concept of "Mother Earth," personifies nature as a nurturing force that sustains life and demands reverence. Critical theory and decolonial approaches can also show the power dynamics inherent in climate discourse, particularly the marginalization of indigenous knowledge systems by dominant Western paradigms. Decolonial scholarship as employed in the study seeks to dismantle these structures by centering African voices and philosophies, challenging the universal

applicability of Western models and advocating for context-specific solutions.

### 5.1 The Question of Climate Change

Africa is responsible for less than 4% of global greenhouse gas emissions (IPCC, 2022), yet it is excessively vulnerable due to a combination of geographic exposure, socio-economic fragility, and limited adaptive capacity. Rising average temperatures, erratic rainfall patterns, prolonged droughts, and an increasing frequency of extreme weather events such as floods and cyclones are already disrupting key sectors like agriculture, water supply, health, and infrastructure (Serdeczny *et al.*, 2017). For a continent where agriculture employs over 60% of the population and contributes meaningfully to GDP, climate changeability poses a direct threat to livelihoods and food security. In regions like the Sahel and the Horn of Africa, desertification, dwindling water resources, and declining crop yields are triggering humanitarian crises, including malnutrition, conflict over natural resources, and large-scale displacement. Climate-induced migration, both within and across borders, is also becoming a pressing issue, as communities are forced to abandon increasingly uninhabitable environments.

Despite the urgent need for adaptation and mitigation strategies, the prevailing global discourse on climate action is largely shaped by Western models, which often fail to account for Africa's unique ecological, cultural, and socio-political contexts. The solutions are modeled on Western experiences and tend to marginalize local knowledge systems which does not appreciate the resilient strategies that African communities have employed for generations. For instance, communal land tenure systems—common in many African societies prioritizes shared stewardship and collective access to resources, a tradition that contrasts with privatized land ownership dominant in the Global North. Traditional adaptation practices such as those observed among nomadic pastoralist communities in East Africa reveals the ingenuity and flexibility of indigenous systems. These groups have historically responded to environmental fluctuations through seasonal mobility, rotational grazing, and inter-community resource sharing, enabling them to cope with variability long before the term "climate change" entered global discourse (Nori & Davies, 2007).

Therefore, the study advocates for a decolonized approach to climate governance one that respects and integrates African indigenous knowledge with modern scientific approaches. Such an integrative model

would not only enhance the relevance and effectiveness of adaptation strategies but also empower local communities as active agents in building climate resilience. The question, then, is not merely how to combat climate change, but how to pursue sustainable development in ways that are equitable, culturally appropriate, and environmentally just.

### 5.2 Nurturing Nature in African Traditional Worldview

African traditional worldviews x-ray the relationship between humans and the natural world with deep understandings that resonate with contemporary calls for environmental sustainability. Unlike dominant Western paradigms that often perceive nature as a resource to be exploited, African cosmologies views nature as a living, sacred entity, deeply interwoven with spiritual, communal, and ancestral dimensions of life (Mbiti, 1990). In many indigenous African belief systems, natural elements such as forests, rivers, mountains, and animals are not just physical entities, but spiritual beings or the abodes of deities and ancestral spirits.

This spiritual reverence translates into concrete ecological practices that function as traditional conservation measures. For example, certain groves or rivers may be designated as sacred spaces where hunting, fishing, or logging are strictly forbidden. These cultural taboos serve an ecological purpose by preserving biodiversity, allowing renewal, and maintaining ecosystem balance. What modern environmental science borders as "protected areas" or "conservation zones" have, in many African communities, long been entrenched within spiritual traditions and social norms.

Ubuntu as an African principle emphasizes interconnectedness, community, and mutual care not just among humans, but between humans and the natural world. In the ubuntu ethics, harming the environment is tantamount to harming oneself and one's community. This sense of relational responsibility contrasts with individualistic, extractive models of development that often prioritize profit over ecological wellbeing. Among the Yoruba people of Nigeria, the concept of *ayé*, literally "the world" also reflects a cosmological vision in which human beings coexist with deities (*orisha*), ancestors, and natural forces in a delicate balance (Abimbola, 2006). Disruption of this balance through environmental degradation is believed to incur spiritual consequences, prompting rituals of atonement and ecological restoration. Similarly, the Akan people of

Ghana maintain the notion of sunsum, which attributes a spiritual essence to all elements of nature (Gyekye, 1997). This belief system discourages ecological harm, not simply as a matter of practical necessity, but as a moral and spiritual transgression.

These indigenous African worldviews and practices it is believed are able to offer an alternative framework for environmental responsibility which will integrate ethics, spirituality, and sustainability. They can also challenge dominant models of development that treat nature as inert or a commodity advocating instead for a model rooted in harmony, reciprocity, and respect. In an era marked by ecological crises and climate concern.

### 5.3 Mitigating Climate Change Effects through African Dialectics

African dialectics as rooted in indigenous worldviews and oral traditions is a way of reconciling the often-conflicting demands of economic development and environmental sustainability. Unlike binary modes of thinking that view progress and preservation as mutually exclusive, African dialectics emphasizes synthesis, fluidity, and the resolution of contradiction through balance and dialogue. This traditional intellectual tradition provides an avenue for addressing the multifaceted challenges posed by climate change in ways that are both culturally grounded and pragmatically effective.

In African dialectical reasoning lies the ability to harmonize individual and communal interests. This is closely aligned with the ethical principle of ubuntu, which prioritizes collective well-being, mutual respect, and coexistence. In the context of climate change, this means creating solutions that do not sacrifice local livelihoods for environmental goals, but instead find pathways that serve both. A notable example of dialectics in practice is Zimbabwe's CAMPFIRE (Communal Areas Management Programme for Indigenous Resources) initiative which is a community-based natural resource management program that empowers local communities to steward wildlife and land resources while benefiting economically from eco-tourism and sustainable hunting (Frost & Bond, 2008).

African dialectics also serves as a tool for critical interrogation of socio-environmental contradictions such as the tension between industrialization and ecological preservation. This is vividly illustrated in the case of the Ogoni people of the Niger Delta in Nigeria. Their resistance to oil exploitation most prominently as championed by environmental activist

Ken Saro-Wiwa represents a dialectical struggle against environmental degradation, social marginalization, and corporate injustice (Saro-Wiwa, 1995). The Ogoni case challenges dominant development paradigms that prioritize extractive industries while externalizing environmental costs onto vulnerable communities.

Rather than an imposing top-down solution, African dialectics encourages inclusive dialogue and co-creation of knowledge. Communities become active agents in designing interventions that echo with their lived realities and cultural values. For instance, indigenous practices such as agroforestry, intercropping, rainwater harvesting, and sacred ecological zones offer low-cost, sustainable solutions that are already embedded in local wisdom systems. The bringing in of African dialectics into climate policies will reframe climate action not as a technical challenge alone, but as a moral, cultural, and political endeavor that requires deep listening, cultural sensitivity, and collaborative problem-solving. It will also get policymakers, scholars, and practitioners to engage more with the complexity of African societies not as passive victims of climate change, but as holders of rich traditional epistemologies capable of shaping transformative solutions.

## 6. Findings and Discussion

One important finding of the study is that of traditional African cosmological understanding of the intrinsic bond between humans and the environment. Here, nature is not viewed as an inert external resource but rather as an active, living system with which humans share an inseparable relationship such that this sense of unity naturally fosters conservation-oriented practices. Ubuntu often simplified by the phrase "I am because we are" came about as a critical nexus that bridges personal and communal responsibilities. The ethical and social dimensions of ubuntu promote a collective approach to environmental challenges which emphasizes that individual well-being is tightly interwoven with the health of the community and its surrounding ecosystem. This interconnectedness encourages collaborative approaches to resource management and environmental stewardship with communal decision-making and shared responsibilities leading to more resilient and adaptive responses to climate change.

The dialectical approach adopted in the study allows for a critical interrogation of contradictions within development initiatives which promotes solutions that assimilate the strengths of traditional wisdom such as agroforestry, water harvesting, and community-based

resource management with modern scientific and technological advances. Such a synthesis presents an inclusive strategy for climate adaptation and mitigation, where indigenous practices are not merely preserved as cultural relics but are actively integrated into broader sustainable development policies.

## 7. Evaluation and Conclusion

African epistemologies, especially those articulated through worldview as ubuntu, possess an inherent ecological consciousness. It does not treat the environment as separate from human life, but rather as an extension of the self and the community. This worldview promotes an ethics of care, collective responsibility, and sustainability. In practice, this translates into behaviors and traditions that have long promoted environmental stewardship, such as communal land management, seasonal farming techniques, water conservation rituals, and sacred natural sites protected through spiritual and cultural customs.

The study upholds the power of African dialectics to navigate complex contradictions, particularly the tension between the demands of economic development and the imperative of ecological preservation. Rather than choosing one at the expense of the other, dialectical reasoning encourages synthesis and integration. It seeks how to draw from both modernity and traditional epistemologies to create sustainable futures that are locally grounded and globally relevant. However, the research also identifies critical challenges.

While the value of indigenous knowledge is increasingly acknowledged in academic and development circles, its meaningful integration into global climate governance models remains limited. Indigenous voices are still frequently marginalized, and traditional practices are often dismissed as antiquated. This gap underscores the need for systematic advocacy, institutional recognition, and policy support to ensure that indigenous knowledge systems are not only preserved but actively mobilized as part of the climate solution.

As climate change continues to affect urban and rural areas alike, future research should focus on the practical application of these indigenous frameworks, particularly in rapidly urbanizing African societies. Exploring how traditional principles such as ubuntu, ecological taboos, and community stewardship can be adapted to urban planning, climate-smart agriculture, and renewable energy initiatives will be critical in forging inclusive and sustainable pathways forward.

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