

Reviving Indigenous Wisdom: Yacouba Sawadogo's Zamane-Inspired Approach to Sustainable Land Management and Social Justice

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Abstract

The Yacouba Sawadogo, a Burkinabe farmer, confronts the climate crisis by reviving and adapting traditional farming techniques, such as Zaï and stone cordons, to combat desertification and promote sustainability. Recipient of the 2020 Champions of the Earth award, his approach is deeply rooted in the precolonial principle of "Zamane"—a philosophy emphasizing the interconnectedness of all life. Sawadogo advocates for an ethical, symbiotic relationship with the Earth. By integrating these traditional practices and Afrocentric ecological wisdom into contemporary frameworks, he offers practical solutions to environmental degradation and social inequities. This reflection situates Sawadogo's work within a decolonial context, drawing on Paulo Freire's theories to highlight the transformative potential of indigenous knowledge systems in addressing global ecological crises.

Keywords: Zaï Techniques, Stone Cordons, Afrocentric Ecological Wisdom, Zamane, Decolonial Philosophy, Postcolonial Philosophy, Sustainability Practices, Paulo Freire

1. Introduction

Yacouba Sawadogo, honored with the 2020 Champions of the Earth award, has revitalized barren lands in Burkina Faso through traditional Zaï techniques and stone cordons. Zaï enhances soil fertility by capturing water in planting pits, while stone cordons reduce soil erosion and improve moisture retention by slowing water runoff. These methods showcase the transformative potential of Afrocentric ecological wisdom in sustainable land management. Central to Sawadogo's philosophy is "Zamane," which highlights the interbeing of all life and contrasts with modern, extractive sustainability models. Informed by decolonial and postcolonial philosophies, Sawadogo's approach offers a compelling alternative to growth-driven development. His practices align with Paulo Freire's framework of education and liberation, illustrating how traditional knowledge can empower communities and resonate with Southern epistemologies.

Sawadogo's deep understanding of interbeing

reflects a profound respect for the earth and all its inhabitants. He teaches that true environmental stewardship involves listening to the earth, negotiating with it, and fostering a global community based on mutual care. He regards the earth as our "Common Mother," advocating for a practical, lived connection with nature. This study is organized around three key points: First, it outlines the theoretical framework and methodology used. Second, it explores Sawadogo's worldview and his innovative responses to climate change. Third, it assesses the implications of his approach for contemporary sustainability practices.

2. Theoretical Foundations and Practical Insights: Analyzing Sawadogo's Ecological Practices through Postcolonial and Decolonial Perspectives

Yacouba Sawadogo's innovative ecological practices are explored through postcolonial and decolonial frameworks, emphasizing his philosophy of Zamane to elucidate his contributions to sustainability. His approach to land management challenges conventional paradigms of human-nature relationships, drawing from pre-colonial African wisdom to present deeper, philosophical responses to environmental degradation. Postcolonial and decolonial perspectives, particularly those articulated by Mbembe [1] in the Post colony, examine the lingering effects of colonialism and how these legacies continue to shape post-independence realities. Through this lens, Sawadogo's methods are understood not merely as responses to ecological challenges, but as a reclamation of indigenous knowledge systems that have withstood colonial disruptions.

Sawadogo's work exemplifies the problem-posing approach to leadership discussed by Paulo Freire [2] in *Pedagogy of the Oppressed*. Freire's concept, which views the world as a dynamic, evolving reality rather than a static one, resonates with Sawadogo's philosophy, which perceives environmental challenges as opportunities for transformation. Freire

emphasizes that problem-posing education empowers individuals to shape their destinies, engaging in continuous interaction with their surroundings [2]. Similarly, Sawadogo's ecological practices, such as his use of *Zai* and stone cordons, challenge conventional, top-down solutions by demonstrating how communities can transcend adverse conditions through locally rooted innovations. His approach reflects the transformative power of blending traditional knowledge with environmental stewardship, reinforcing Freire's belief that leadership involves harnessing one's circumstances to drive change.

In addition to restoring barren lands, Sawadogo's methods have revitalized community agency and deepened connections to the environment, advocating for a holistic, empowering model of sustainability. To better understand the transformative impacts of his work and explore its practical applications, data collection was conducted over three weeks in July 2022 in Gourga, Sawadogo's village. This immersive research included in-depth interactions with "The Man Who Stopped the Desert" and nine other farmers from diverse villages, capturing their lived experiences and insights to highlight the real-world effectiveness of his methods [3]. Two key questions framed this study: How do the core principles driving Sawadogo's worldview shape his innovative responses to climate change? What are the implications of Sawadogo's methods for contemporary sustainability practices, and how might they inform current models of environmental management?

3. Sawadogo's Worldview and his Innovative Responses to Climate Change

Grounded in Afrocentric ecological wisdom and informed by an understanding of life as deeply interconnected and interdependent, Sawadogo's philosophy of *Zamane* served as a robust foundation for his work. His successful combat against desertification in his fields was achieved through the implementation of *Zai* and stone cordon techniques.

3.1. Sustainable Climate Solutions: Embracing Afrocentric Principles within the "Common Zamane"

In many African societies, the belief is that nature is animated, with spirits present in every aspect of the environment—whether in the air, animals, plants, rivers, or mountains. This worldview encapsulates the principle of *Zamane*, which relates to the interconnectedness of all forms of life and existence. In this context, caring for "others" extends beyond humanity to include the entire living environment,

creating a richer and more inclusive understanding of community. As an Afrocentric farmer, Sawadogo's blueprint is deeply embedded within a framework that views the well-being of humans as inseparable from the well-being of the natural world. He emphasizes a holistic approach to nature, stating, "Animals are not just animals; trees are not merely trees, and rivers are more than just rivers, they are living beings, inhabited by spirits" - (Sawadogo, personal communication in 2022). This spiritual orientation toward interconnectedness is fundamental to addressing climate change.

Drawing from the principle of *Zamane*, Sawadogo's philosophy emphasizes that "the earth does not belong to us; rather, we belong to the earth" because she is "Our Common Mother" - Sawadogo, personal communication in 2022. This understanding calls for a transformation of the possessive mentality that dominates modern views of nature, instead advocating for a more integrative approach characterized by responsibility and reciprocity. Postcolonial thinker Achille Mbembe [1] similarly argues that humanity must rethink its relationship with the planet, recognizing the shared agency of all inhabitants, including animals, forests, and rivers. This perspective aligns with Sawadogo's philosophy, which emphasizes the interconnectedness of all beings and the necessity of mutual care for the well-being of both humans and the natural world. To cultivate a sustainable existence, humans must shift from viewing the earth merely as a resource for extraction to recognizing it as a shared entity—a common mother to whom they owe respect and care. Several key African principles enrich this dialogue on climate change, offering moral and philosophical insights that challenge Western models of sustainability.

3.1.1. The principle of "I am Because We Are." At the core of African ethics is the belief that human life is sacred and intertwined with community. This belief aligns with *Zamane*, which sees all life as interconnected. In African cosmology, family extends beyond the nuclear unit to include ancestors, unborn generations, and the spiritual world, all contributing to a harmonious existence. Mbiti [4], in *African Religion and Philosophy*, states that "individual life finds meaning within the community," and this interconnectedness is key to sustaining both human and environmental well-being. As stated, "Whatever happens to the individual happens to the whole group, and whatever happens to the whole group happens to the individual. The individual can only say: 'I am because we are and since we are, therefore, I am'". This collective existence necessitates cooperation and mutual care for the earth, which is regarded as the most precious treasure [4]. This principle resonates deeply with Sawadogo's approach to land restoration. His use of techniques such as *Zai* and stone cordons

reflects a communal, intergenerational effort to restore the earth for the benefit of all. In African spirituality, Magesa [5], goes deeper by affirming: The African sense of belonging is inexorably connected to the soil (land), which in many ways serves as the ‘umbilical cord’ that links the past, present, and future; the spiritual and mundane; the individual and the community; the earth and the world above and the underworld”.

Another significant African worldview closely aligned with the principle of “I am Because We Are” conceptualizes life in three interrelated dimensions. The first dimension is composed of the “Living living people,” representing those currently alive on earth. This includes all individuals who are part of the present physical world. The second dimension consists of the “Passed living people,” which refers to those who have died, but remain alive in the spiritual realm as ancestors. These ancestors continue to have a presence and influence, not as deceased beings but as living spirits in a different dimension of existence. The third dimension is formed by the “Unborn living people,” encompassing future generations who have yet to be born. Africans hold that these future beings exist alongside their ancestors, awaiting the appropriate time to enter the world. This tripartite view of life emphasizes the responsibility of the “Living living people” to preserve the earth for the “Unborn living people.” In African philosophy, this stewardship ensures that when the living transition into the realm of the “Passed living people,” they will inherit the blessings of their ancestors for fulfilling their duty to future generations. This cyclical understanding of life is vital for fostering a sustainable environment and achieving both human and environmental justice [4]. Recognizing these interconnected relationships reinforces the importance of collective care, linking present actions with both ancestral wisdom and future consequences.

3.1.2. The principle of Ujamaa. Ujamaa, a Kiswahili term meaning unity and solidarity, represents another vital aspect of African communal ethics. Initially championed by Julius Nyerere in postcolonial Tanzania, Ujamaa promotes equality, mutual support, and the elimination of competition and exploitation. Within the context of Sawadogo’s work, Ujamaa manifests itself in his commitment to collective environmental stewardship [6]. By restoring barren lands, he not only improves his community’s well-being but also fosters a spirit of shared responsibility toward nature. This philosophy is crucial in addressing climate change, as it encourages solidarity among all living beings, including the environment.

3.1.3. The principle of Ubuntu. Closely related to Ujamaa is the philosophy of Ubuntu, which advocates harmony with all creation and emphasizes the interconnectedness of humanity and nature. Ubuntu

calls for cooperation across individual, cultural, and cosmic dimensions. According to philosopher Eze [7], Ubuntu fosters an “unconditional acceptance of others”. 22), reflecting Sawadogo’s belief that the well-being of others, both human and non-human, is inherently tied to our own [7]. Tutu [8], one of Ubuntu’s foremost proponents, explains:

Ubuntu . . . speaks to the very essence of being human . . . [when] we say “Yu, u nobuntu”; “Hey, so-and-so has ubuntu.” Then you are generous, you are hospitable. . . caring and compassionate . . . It is to say, “My humanity is caught up, is inextricably bound up, in yours.” We belong in a bundle of life . . . It is not, “I think therefore I am.” It says rather: “I am human because I belong. I participate, I share.” A person with ubuntu is open and available to others, affirming others, does not feel threatened that others are able and good . . . he or she [is] humiliated or diminished, when others are tortured or oppressed.

Building on this philosophical foundation, Sawadogo’s practical approaches to land management, such as the Zaï and stone cordon techniques, are tangible manifestations of his vision. These practices not only reflect his commitment to ecological balance but also offer concrete solutions that challenge and complement conventional Western methods of sustainability.

3.2. Yacouba Sawadogo’s Approach to Combating Desertification

From an early age, Yacouba Sawadogo immersed himself in the ancestral wisdom of his people, gaining a deep understanding of the delicate balance between humans and nature. Despite the preference for modern agricultural techniques, Sawadogo recognized the enduring potential of traditional methods to restore ecological balance. Driven by a commitment to address desertification—a process that transforms fertile land into arid wastelands characterized by minimal rainfall and extreme heat—Sawadogo combined ancient knowledge with innovation. Inspired by the revolutionary ideals of Burkinabe President Thomas Sankara (1949–1987), Sawadogo’s dedication led him to challenge the perceived inevitability of desertification, demonstrating how an individual’s commitment can reverse environmental decline. Central to Sawadogo’s efforts are the Zaï and stone cordon techniques, traditional methods used in the Sahel to rehabilitate degraded land and improve soil fertility. Although Sawadogo did not invent the Zaï technique, which originated in the Dogon community of Mali, he was among the first to effectively implement it in northern Burkina Faso after the severe droughts of the 1980s. The Zaï method involves creating planting pits, ranging from 7.87–15.75 inches in diameter and 3.94–7.87 inches in

depth, typically during the dry season from November to May. Each hectare contains between 12,000 and 25,000 pits filled with organic compost. This compost initiates a chemical process that enriches the soil, and when the rains come, it attracts termites that create tunnels, helping retain water and nutrients. Despite facing ridicule for his labor-intensive approach, Sawadogo's successful harvests eventually won over his critics. In addition to Zai, Sawadogo employed the stone cordon method to enhance water retention. This technique involves laying lines of fist-sized stones across fields to create a watershed. As rainwater flows, it is slowed by the stones, allowing silt to accumulate and seep into the soil, creating fertile areas for seed germination. Sawadogo further improved this method by incorporating tree planting, which enhanced soil fertility and water absorption.

Sawadogo's relationship with the earth can be viewed through the metaphor of negotiation. Traditionally, negotiation resolves conflicts by seeking mutually beneficial outcomes. His approach to working with the soil mirrors this process. It involves preparing the land by digging pits, exchanging information by understanding soil types, enriching the soil with compost, and accommodating them by removing stones. The agreement is symbolized by the presence of termites, indicating a positive response from the earth. This metaphor illustrates Sawadogo's perspective that mastering the art of negotiating with soil transforms it into a productive environment rather than exploiting it. Sawadogo's wisdom underscores that with proper care, soil can be revitalized to support plant life, revealing previously unseen nutrients. He asserts, "If you manage to fertilize any soil, it attracts essential nutrients for growth. Even dormant seeds and extinct species can re-emerge, as if they were waiting for a nurturing presence to bring them back to life" - Sawadogo, personal communication in 2022. This belief highlights the potential for ecological restoration through respectful and knowledgeable engagement with the environment.

4. Rethinking Climate Solutions: The Implications of Sawadogo's Afrocentric Wisdom versus Western Reductionism for Contemporary Sustainability Practices

Integrating African principles such as "Zamane," "I am Because We are," "Ujamaa" and "Ubuntu" into global climate change strategies is essential for advancing environmental justice. These philosophies offer a comprehensive view that situates humanity within a broader ecological and spiritual network. Sawadogo's ecological practices exemplify this approach, demonstrating how traditional African wisdom can enrich modern sustainability efforts. By

recognizing the sacredness of the earth and fostering respectful relationships with nature, these principles provide a profound counterpoint to reductionist Western models and advocate for a more interconnected and sustainable way of living.

In contrast, René Descartes, whose work in the 17th century particularly *Meditations on First Philosophy* (1641) reflects a distinctly anthropocentric perspective, emphasizes a separation between humans and the natural world [9]. Descartes treats animals and nature as mere objects for human study and exploitation, asserting that animals are automata devoid of feelings or consciousness. This reductionist viewpoint is aligned with capitalist exploitation and the illusion of perpetual growth, contributing to environmental degradation and unsustainable practices. Conversely, the principles embodied in Sawadogo's philosophy advocate for sustainable interbeing and communal care. These Afrocentric perspectives emphasize a harmonious relationship with nature and the soil, prioritizing green and spiritual growth over the relentless pursuit of material goods and economic expansion.

Grounded in the principle of Zamane, Sawadogo's approach provides a powerful framework for rethinking our relationship with the earth and the universe. His innovative use of indigenous knowledge in land restoration not only combats desertification but also reflects a profound respect for the earth's interconnectedness. In the face of global ecological crises, Sawadogo's work offers invaluable insights into how traditional practices and communal ethics can guide us toward environmental restoration and social justice, presenting a sustainable alternative to the reductionist and exploitative paradigms of contemporary capitalism.

5. Conclusion

Sawadogo's application of traditional techniques like Zai and stone cordon demonstrates the transformative power of indigenous knowledge in combating desertification and promoting sustainability. Grounded in the African concept of Zamane, which emphasizes the interconnectedness of all life, Sawadogo's approach directly challenges conventional Western models of environmental management. By merging ancestral wisdom with modern innovations, he not only restores degraded land but also promotes social justice through a communal ethic of care for nature. His work underscores the importance of integrating diverse knowledge systems to develop more labor-intensive yet effective and inclusive sustainability solutions, calling for continued exploration of such practices. Sawadogo's philosophy and practices extend beyond human-centered concerns to encompass care for the entire ecosystem, including land, plants, and animals. By embodying the idea of 'interbeing and inter

briefing—briefing the same air,’ Sawadogo’s work offers a holistic model of sustainability that is deeply rooted in cultural and ecological understanding. His integration presents a valuable framework for rethinking how to address contemporary challenges related to environmental justice and sustainability.

6. References

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