

Towards a Decolonised Understanding of Indigenous Knowledge and Its Application in Shaping Sustainable Development Narratives in Sub-Saharan Africa

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How to cite this paper: Odongo, J. O., Otieno, J. N., & Limisi, S. (2026). Towards a Decolonised Understanding of Indigenous Knowledge and Its Application in Shaping Sustainable Development Narratives in Sub-Saharan Africa. *Sociology Mind*, 16, 227-251.

<https://doi.org/10.4236/sm.2026.164012>

Received: July 9, 2026

Accepted: September 18, 2026

Published: September 21, 2026

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Abstract

Like other parts of the world, Sub-Saharan Africa (SSA) is rich in community-based traditional knowledge and practice systems that are passed across generations. Here, this Indigenous Knowledge (IK) is expected to influence local culture, norms, attitudes, lifestyles, livelihoods, and development. The IK also informs disciplines such as education, medicine, technology, innovation, mining, environmental protection, and politics globally. It is hence contextual and scalar, differing slightly from cluster to cluster, subject to subject, but building on its variants to become holistic as a development planning tool. Using selected cases, this descriptive-qualitative study furthers an ongoing scholarly discourse on the need to harness IK to advance SSA's sustainable development. Its data were obtained from purposively selected secondary academic publications to augment longstanding observations by the authors, whose inhabitation, lived experiences, professional knowledge, and vast research on the theme and the region informed discourses. The study reports that historical and modern manipulations of local knowledge systems exist in SSA, starting with colonial distortions. The deliberately ill-curated IK continually shapes opinion, crafts a dominant Western cultural, political, and administrative philosophy, and originally enforced cooperation from colonial subjects, with long-term ramifications now visible. It fuels SSA's development obstacles, such as a lowered sense of self-worth, indolence, excuse-making, stodginess, unoriginality, poverty, overdependence, consumerism, conflicts, and brain drain. These limit local investment in development and encourage the North-detested and protested cross-generational South-North Migration, which inhibits sustainable development planning. The study contextualizes the need to redefine and integrate SSA's IK

as a facilitator of homegrown sustainable development. Tools for achieving this are provided.

Keywords

Indigenous Knowledge, Colonial Legacy, Identity Formation, Post-Colonial Development Philosophy, Sustainable Development

1. Introduction

Global civilisation is built upon Indigenous Knowledge (IK). UNESCO (2021) and Sillitoe et al. (2002) describe IK as a symbiotic body of observations, practices, and beliefs developed and utilised by communities to inform human behaviour and ensure perpetuity. It is a dynamic and ever-changing pastiche of tradition and present invention, customised by modern social clusters (Odongo, 2020) to fit contemporary needs. Historically, it provided the rudimentary blueprints for modernization. The evolution of housing from communal caves to standardised 21st-century architecture (Padar, 2021), the trajectory of aviation from 400 BC Chinese kites to the Wright Brothers' first aeroplane, followed by the creation of modern flying behemoths that are passenger and cargo planes and spaceships (Crouch, 2023), and the transition from ancient medical practices to modern clinical science (Yuan et al., 2016) all demonstrate this, confirming that modern disciplines are refined iterations of traditional insights.

In Africa, the intersection of traditional and modern systems is particularly stark. The continent's industrial history, such as the underground mining of ochre at Bomvu Ridge in Eswatini, predates and informs modern mining. The same applies to indigenous African medicine, demonstrating that African IK was the original driver of resource management and health care (Felten, 2025; Ntombizanele et al., 2024), and that, like other industries and disciplines, it still has an impact. However, scholars have argued that the infusion of disruptive foreign influences into initially organically evolving local knowledge systems and lived experiences in SSA corrupted the natural emergence of SSA and redefined colonial-era and post-colonial African societies (Verweijen & Bockhaven, 2019). It made post-colonial communities become either increasingly functional or dysfunctional in meeting curated "development needs" for African nations and territories (Achebe, 1958).

Today, although corrupted, IK remains the primary lens through which everyday life is interpreted and understood in most parts of rural Sub-Saharan Africa, where, as of 2025, 57% of the population was rural. It helps communities undertake environmental stewardship and navigate survival. Therefore, bearing this utility in sustainable development planning, its distortion or devaluation, and resulting ineffectiveness are expected to bring challenges that post-colonial SSA is not new to. Sub-Saharan Africa currently grapples with the predominance of ex-

ternal, imported developmental frameworks that do not fit local norms, lifestyles, social arrangements, meanings given to existence and development, as well as the innate conceptualization of local futures. This justifies the critical need to re-centre SSA's future on local pride and ownership, built on aboriginally contextualized traditional knowledge systems. Such will ensure that regional development is not perceived to be an imported concept but an indigenous evolution that guarantees sustainability as opposed to planting feelings of helpless sojournership.

While the integration of IK is widely championed, it is not without academic contention. Critics, on the one hand, have argued that romanticising IK risks essentialism. Bruchac (2014), for instance, opines that viewing indigenous cultures as static or integrally one with nature can trap communities in a primitive identity that hinders their access to the benefits of modern technology and the gains of global development. Similarly, post-colonial theorists like Ngũgĩ wa Thiong'o and Okot p'Bitek have argued that framing IK merely as a precursor to Western science is inebriated and can validate a colonial hierarchy where knowledge only gains validity once it is filtered through a Western lens, justifying the need for a contextualised re-conceptualisation. It is because of these ill-fitted definitions, or understandings, they observe, that some scientists argue that IK, being archaic, lacks the universal reproducibility required for global policy. This is increasingly countered by the concept of two-eyed seeing, which advocates for the valid consolidation of both old and new knowledge systems to enhance output accommodation (Ijatuji et al., 2025).

To justify the consolidation of the old and new knowledge systems, literature has extensively documented the utilitarian value of IK in biodiversity conservation and carbon sequestration (Daniel et al., 2022), and its role as a precursor to modern industries like mining and medicine (Hustrulid et al., 2023; Osler, 2009). Hence, scholars like Verweijen & Bockhaven (2019) critique the exclusion of IK from policy and development programming. We also established a lack of empirical research on the mechanisms of IK's evolutionary corruption. Specifically, how the deliberate distortion of SSA's IK through colonial and post-colonial narratives has continually stripped it of its agency in modern sustainability frameworks needs reporting. Similarly, the transition of IK discourses from a critique of Western science to a functional, decolonised model of participatory co-production has also not been systematically explored (UNESCO, 2021) and forms an objective of this study, to help us appreciate and integrate SSA's rudimentary innovations into formal policy and programs, in a way that enhances local creativity, pride, and development.

We, hence, note that despite the reality that modern global industries, including aviation (Hess, 1968), mining (Asmussen, 2022), and medicine (Bi et al., 2025), are rooted in IK, both subconsciously and overtly, SSA's development frameworks continue to treat IK as a static, vestigial relic rather than a dynamic, evolutionary driver of sustainability (Berkas et al., 2000; Demssie et al., 2020), resulting in east-west worshipping. Similarly, existing literature critiques the marginalisation of IK

but fails to address the diluting systemic narrative corruption that prevents its integration into policy and development agenda shaping (Demssie et al., 2020). Consequently, there is a failure to translate local rudimentary innovations into scalable, sustainable development instruments.

This study seeks to resolve the above gap by exploring three objectives. The first critically evaluates the evolutionary trajectory of IK; the second identifies the socio-technical barriers to IK integration in SSA policy, and the third develops a decolonised framework for participatory co-production. Accordingly, the study explored three questions: How has Indigenous Knowledge (IK) in Sub-Saharan Africa evolved from pre-colonial legitimacy, through colonial distortion, to its contemporary standing, and what does this trajectory reveal about the mechanisms through which IK has been devalued or marginalized? The second question examines what socio-technical barriers hinder the integration of IK into sustainable development policy and planning processes in Sub-Saharan Africa. The third question addresses what framework can be developed to guide the decolonised, participatory co-production of IK and formal knowledge systems in shaping sustainable development narratives in Sub-Saharan Africa.

2. Methodology

This study employs a descriptive qualitative literature review. This is built on the researchers' auto-ethnographic insights. The approach enabled us to achieve a nuanced interpretation of how colonial legacies and post-colonial philosophies have, and continue to, dictate local developmental perceptions. The researchers conducted a purposive sampling of available literature that is relevant to the topic. In seeking the secondary data, the researchers relied on online databases, including Web of Science, ResearchGate, and Google Scholar. The key search words included "indigenous knowledge", "indigenous knowledge and identity formation", "impact of colonial legacy on indigenous knowledge", "post-colonial development philosophy in sub-Saharan Africa", and "indigenous knowledge and sustainable development". Its findings were supplemented by institutional reports, documentaries, and newspaper reports. The utilised sources had to be published in English.

Out of these sources, after rigorous cleaning based on the quality of publications, language, relevance, topic, and how recent the publication was, as recommended by academic best practices, our final selected peer-reviewed articles were 80. These sources either address one or all of the three objectives of the study explicitly or implicitly, or support statements made within the work. To access these sources, the study navigated two main constraints, namely subscription paywalls against budgetary constraints and an Anglophone linguistic bias in a region that has numerous languages of instruction and research, which essentially excluded Francophone, Lusophone, and indigenous-language perspectives.

To mitigate the above two limitations and achieve validity, the researchers conducted a purposively determined saturation review of fully open-access literature, objectively and intentionally discussing themes across diverse and contradicting

standpoints, but in sources written in English. This robust, multi-perspective approach, in the face of source exclusion, balances general critiques with a defense of IK's role in modern science and in the development agenda, providing sieving criteria that address the stated methodological shortcomings. Future studies can overcome our challenges by widening their scope to cover content from diverse languages and collecting primary data to integrate indigenous-language perspectives.

3. Literature Review

3.1. Decolonizing Understandings of IK for Sustainable SSA Governance

Scholars such as Berkes et al. (2000), Filho et al. (2025), and Manyaga et al. (2024) agree that the discourse and viewpoints surrounding IK in Sub-Saharan Africa (SSA) point towards the need for an analytical departure from viewing IK as a static, pre-modern relic. According to prevailing understandings, IK needs to be recalibrated and recognized as a dynamic, evolutionary system that is intertwined with customary law, statecraft, and regional identity. In it, the state and society are unified through their constant symbiotic interactions and the impact that this portends.

The above confirms the fluidity of IK compared to modernity and its intersection with contemporary governance. It informs our synthesis, which is guided by three specific research objectives and a robust theoretical framework, as we will see shortly. In the study, the delimitation of Sub-Saharan Africa as a homogeneous region, different from the Maghreb states, for instance, is based on contextual historical, geographical, socioeconomic, and demographic factors that have previously been studied (Wolfe, 2017), and which informed the creation of continents, regions, and functional blocs such as the Global South/South or South-East Asia (Lopez et al., 2026).

3.2. The Fluidity and Ontological Scope of IK

Perhaps our most critical conceptual hurdle would involve distinguishing IK from customary practices. While Verweijen & Bockhaven (2019) define customs as practices that are often dissociated from the modern state, state practices themselves, which borrow from wholesome lived habits of communities, attitudes, and operations that define the modern state, can, over time, form national customs. That these customs (the daily actions and behaviours of citizens, technocrats, bureaucrats, and rulers) inform national and local IK (the assemblage of knowledge arising from customs) is documented. This reinforces our study's argument that IK is not merely pre-modern. Consistent with the position by UNESCO (2021) and Daniel et al. (2022), we believe that IK is characterised by its evolutionary nature and flexible geographical applicability, which builds on evolving and intermarrying local customs. It has no fixed date of origin, like being pre-colonial. Rather, it adapts as societies evolve, expand, or shrink, building on filtered knowledge

and experience exchanges. It can be influenced by nationalization, regionalization, and globalization, whose infusions create unique social clusters with distinct knowledge and development needs, marrying global outlooks with local self-awareness (Berkes et al., 2000; Briggs, 2005).

Analytically, therefore, IK belongs to the collective “aboriginal” consciousness of a region, transcending specific tribes to encompass shared histories, customs, and lived experiences (Manyaga et al., 2024; Shrestha et al., 2025) of colonialism, slavery, development, social norms, *Ujamaa* (community), or poverty (Wolfe, 2017). A classic example is the knowledge acquired and propagated, holistically, by African soldiers in World Wars I and II. By observing the physical vulnerabilities of colonial forces, these soldiers generated and transmitted new knowledge that demystified European superiority (for they also cried, bled, and died when shot) and fuelled independence movements (Crowder, 1985). This demonstrates that IK is dynamically shaped by elements of modernity and stateness (Verweijen & Bockhaven, 2019). To elaborate on this further, Ranta (2018), in highlighting indigenous concepts like *Vivir Bien* (an Andean indigenous concept referring to a harmonious, collective life in balance with nature, rather than individual material accumulation), demonstrates how IK enters the heart of the nation-state through bureaucracy and official policy, creating a hybrid form of knowledge that responds to both local needs and modern global pressures, with the potential to influence sustainable development.

3.3. Analytical Intersection: IK, Governance, and Development

Previous studies present the marginalization of African IK in governance as an inherited colonial construct. Mengisteab (2019) reports that before colonization, SSA possessed functional evolutionary indigenous structures that mirrored modern state functions. However, during the transition to “democracy”, colonial powers, many of which paradoxically retained their own monarchies, devalued local governance frameworks to ensure a pairing of Western culture with capitalism, primarily to gain dominance and protect external investments in colonies (Kubow, 2007; Verweijen & Bockhaven, 2019). This sidelining has had detrimental impacts, among them brainwashing and the planting of inferiority complexes (Ismail, 2023; Koot, 2020).

Different worldviews and interests suggest that foreigners deliberately marginalize African IK to ensure that Western education and technology remain conduits for capitalist expansion (Ismail, 2023; Koot, 2020; Ruth, 2020). This raises questions by people like Bergström (2021), who asks, “Whose knowledge counts when hierarchical understandings of knowledge lessen indigenous perspectives to justify extraction models that are incompatible with local sustainability approaches?” Rightly, as the US government recently acknowledged, the outlawing of traditional cultural practices contributes to the global community’s current inability to manage social and resource contamination and climate crises (Daniel et al., 2022). Consequently, we take the logical and defensible position that the integration of

IK into governance is not just a matter of cultural pride but a requirement for sustainable governance and development.

3.4. Alignment with Research Objectives

The theoretical and literature exploration is synthesized through the lens of the study's three primary objectives introduced earlier. The first of these evaluates the evolutionary trajectory and corruption of IK. Here, we detail how colonial scribes manipulated history to present African IK as rudimentary or hushed (Haringsma, 2021; Ismail, 2023; Koot, 2020). Berkes (2009), however, refutes this claim, arguing that the traditional ways constantly merge with modern innovations to create more resilient, life-enriching, contextualized strategies as seen in the evolution of IK. This process is supported by social learning and knowledge bridging in the global village, giving rise to localized, resilient community regimes. However, counter-narratives posit that when it is extracted from its cultural context and turned into a commodity for global industries (like pharmaceuticals or tourism) without benefiting the original keepers, IK is systematically corrupted, marginalized, and devalued (Koot, 2020; Mgbeoji, 2007).

Tracing the evolution of IK from early mining at Bomvu Ridge (Boshier, 1965; Hammel et al., 2000) to modern governance identifies how the systems were twisted to acquire a Western identity as Western innovations and serve Western profit motives. IK's suppression here stole its innovative potential and profits, and destroyed ingrained (nature-based) local sustainability tools, consequently exporting development abroad while importing environmental, economic, and social pollution. The struggle for IK is further exacerbated through institutional corruption, which Nadasdy (1999) refers to as the attempt to formalise or nationalise IK by stripping away its spiritual and relational depth to make it legible for government policy, debasing its original intent and utility.

The second objective builds on the first by identifying socio-technical barriers to the integration of IK into policy and governance. The study investigates the frictional characterisations of African societies in Western-backed educational content. Moreover, through this objective, we explore the ingrained tensions between state bureaucracy, which is often Western-rigid, and local-rigid traditional systems, feeding off interpretations of fallaciously static traditions. Ordinarily, to integrate IK into state management dictates that indigenous people conform to exotic state structures, which inadvertently devalues existing indigenous structures. The process demands knowledge translation where the state determines the terms, resulting in epistemic challenges (Ismail, 2023; Nadasdy, 1999). By insisting on gathering what descendants of aboriginals know and feeding it into modern governance, the study replaces degrading narratives that fail to fully integrate IK and indigenous lived experiences into governance with uplifting logic consistent with the commendations by Bruce (2026).

The third objective develops a decolonized framework for participatory co-production. First, the study highlights the international community's error of shaping

the 2030 Sustainable Development Goals (SDGs) without adequate infusion of IK and practices. They also did not address indigenously established barriers to development, thus alienating locals as key stakeholders in their own mental and economic emancipation (Olaopa & Ayodele, 2022), making the SDGs seem elitist. It proposes, as we consider the beyond 2030 policy landscape, a framework in which actors assume responsibility for defining and integrating IK into policy and curricula to repair the damage of historical manipulation, restore community ownership and pride, and enable local investments.

4. Theoretical Operationalization

Our theoretical underpinning supports the analytical log frame for interpreting the research findings. Each theory serves a function in deconstructing and rebuilding the IK framework.

Theory	Role in the Study’s Exploration
Communalism	Used to analyse the homogeneous (clustered) social dependence of Africans on IK, customs, and traditions as drivers of development (van der Veer, 2015). It validates the collective ownership of knowledge and its integration into development planning, but does not, however, link clusters with functions explicitly.
Functionalism	Applied to examine how IK contributes to the long-term stability and functioning of African states and societies (Beck & Grayot, 2021). By introducing functionalism, the paper opines that both the clusters introduced in communism and IK have manifest and latent functions that feed into development.
Holism	Provides the justification for regional cooperation and Pan-Africanism in the face of communalism, ensuring that development delivers wholesome gratification for the entire SSA region (Michaelson et al., 2016). Additionally, just like functionalism and complementary to it, holism confirms the role of IK as a condiment of society that, functioning alongside other elements, contributes to wholesome sustainability. Its ills, therefore, can infect other organs of society, resulting in witnessed dysfunctions.
Sustainable Development	Functions as the normative development and sustainability benchmark, evaluating whether and how IK-integrated policies and programs meet the current and cross-generational needs of the SSA region (Ruggerio, 2021) by enabling communities to define their fate.

The application of these theories allows the study to move beyond a general critique. For example, functionalism is used to pinpoint exactly where the absence of IK creates dysfunction in modern African democracies, consistent with findings by Ismail (2023), Koot (2020), Ntombizanele et al. (2024), Sillitoe et al. (2002), UNESCO (2021), and Verweijen & Bockhaven (2019). Meanwhile, communalism and holism are used to first acknowledge the close-knit nature of African communities as part of a quasi-homogenous and functional whole, hence Pan-Africanism and Sub-Saharanism. They challenge the anomalies in local lore that are self-crippling, replacing them with a sense of integrity and utility that inspires investment

in local development (Ismail, 2023; Koot, 2020). Similarly, sustainable development theorising speaks to the need to invest in having functional and fulfilled present and future generations enriched by functional IK systems. By operationalizing these theories, the study seeks to remedy the demeaning characterizations of underdeveloped SSA societies and establish deliberately well-curated IK as a sensible, logical, and foundational instrument for enabling global sustainable development. The authors acknowledge there are several other theories that can explain these phenomena, including post-colonial theory, decolonial theory, or knowledge systems theory that similar studies can consider.

5. Findings

The findings of this study are organized around three specific objectives: 1) tracing the evolutionary trajectory of IK; 2) identifying the socio-technical barriers to its integration into contemporary state-centric development planning; and 3) exploring the elements necessary for a decolonized participatory framework that integrates IK into development policy and programs, and education curricula across disciplines. The evidence reveals a complex interplay between historical forces, contemporary challenges, and the required agency of African peoples in shaping their own development narratives as opposed to fence-sitting and wallowing in excuses.

5.1. The Evolutionary Trajectory of Indigenous Knowledge

The current state of IK in SSA is the product of a long, violent evolution that is marked by suppression, resilience, and adaptation (Achebe, 1958; Gregorio & Scott, 2022; Ismail, 2023; Koot, 2020). Prior to colonial occupation, SSA was home to functioning socio-politico-economic clusters and systems where IK was the foundation of community life, governance, trade, and innovation. Rules were unwritten, but they existed; everyone knew them, and they defined everyday human conduct. Indigenous ways of knowledge transfer ensured cross-generational learning.

Although the micro-clusters such as tribes, clans, and chiefdoms had unique knowledge sets, long-established trade routes connected different regions of the continent and linked it with the Mediterranean, Western Asia, and the Indian Ocean, controlled by experienced traditional rulers-traders (Bortolot, 2003). Local industries, such as steel and textile manufacturing, produced goods of a quality comparable to, or even superior to, those in pre-industrial Europe. This demonstrates a high level of indigenous craftsmanship and innovation that featured across the continent, aided by the shared origin of most of the SSA communities that migrated to newfound lands.

The above social order was violently disrupted by colonialism, beginning in the late 19th century. SSA's colonial occupation was not a passive encounter but a systematic project intended to supplant existing knowledge systems and their resulting lifestyles. This was achieved through a combination of military force, economic manipulation, "reeducation", and cultural erosion and domination. Euro-

pean powers exploited pre-existing trade routes and merchants, using them to infiltrate markets and establish control. More significantly, they introduced new belief systems, particularly through religion and Western education, which actively disparaged local customs and IK (Demssie et al., 2020; Ismail, 2023; Koot, 2020; Kubow, 2007; Nott, 2021; Nwauwa, 2020). As Achebe (1958) poignantly illustrated in *Things Fall Apart*, this process divided communities, turning African brothers against the clan and putting a knife to the fabric that held communities together. Derogatory tags were used to describe those who stuck to African ways (Achebe, 1958).

According to our findings, a critical, yet often overlooked, factor in this erosion was the role of African elites. Pre-colonial and post-colonial elites, such as the traditional chiefs and the early African literati who occupied prime government positions in colonial and post-colonial administrations, through their increased interaction with Europeans and expanding access to money, developed an appetite for foreign goods, which became symbols of prestige and wealth (Nwauwa, 2020). This consumerism, rooted in the perceived uniqueness and superiority of foreign imports, shaped local attitudes and set consumption patterns that persist today, from seeking medical treatment and education abroad to preferring foreign wives, foreign breeds of animals, and exotic high-maintenance lawns (Bortolot, 2003). This elite endorsement inadvertently validated the colonial agenda and further devalued local knowledge and products. It was buttressed by opening up Western destinations to these elites for physical benchmarking and adaptation.

In the post-independence era, the trajectory of IK continued to be shaped by external forces and internal choices. The rise of a Western-educated literati and political-policy class with a new definition of “government,” while crucial for independence movements, also perpetuated a dependency on Western intellectual frameworks (Mutongi, 2023; Nott, 2021). The compelling narratives of early African writers, while vital for exposing colonial brutality, often instilled a deep-seated fear of the “white man” and white-worshiping in subsequent generations of readers. The two, combined with the adoption of Western development models imposed by institutions like the IMF and World Bank, meant that at the inception of statehood, post-colonial SSA’s own development agenda was crafted elsewhere (Achebe, 1958; Wacziarg & Welch, 2008). The result, as the findings suggest, was a missed opportunity for SSA to independently chart its course, leading to a persistent cycle of underdevelopment and a continued dependence on external solutions and validations that sustain foreign economies, a phenomenon many scholars term neocolonialism.

Despite this, our findings also highlight the resilience of IK and its ongoing significance, where its purity prevailed. Communities such as the Maasai and Ogiek in Kenya and various groups in the Congo Forest have, for instance, successfully retained indigenous practices for protecting ecosystems and livelihoods, demonstrating the enduring power and sustainability of this knowledge (Nyagwalla Otieno

et al., 2023). These surviving examples prove that IK was not passively erased but actively resisted or maintained, providing a foundation for its potential revival and integration today (Boyette et al., 2022; Ichikawa, 2014). Modern attempts to erode it, as applies to changing land ownership and farming practices, have proved to have very negative impacts on ecosystems, the social organization of affected clusters, and present-day governance, confirming the unsustainable nature of Western cultural corruption in SSA and elsewhere.

5.2. Socio-Technical Barriers to IK Integration in SSA Policy

The study identifies several interrelated socio-technical barriers that hinder the formal integration of IK into SSA's development policy and programs (Filho et al., 2025; Mawere, 2015). Key among the barriers are institutional resistance and lack of recognition (Bergström, 2021; Briggs, 2013; Filho et al., 2025; UNESCO, 2021). Formal policy-making processes in SSA are largely structured around Western bureaucratic and scientific paradigms (Chimhowu, 2019; Noyoo, 2022; Owuor, 2007; Pophiwa & Saidi, 2022). These systems often fail to recognize IK as a valid, evidence-based body of knowledge that is of consequence to SSA's development.

Similarly, educational curricula across SSA, from primary school to university, largely ignore or undervalue IK, producing graduates and experts who are trained to see development through a Western lens and gatekeep for Western institutions, perpetuating the cycle of dependence. For instance, many of the region's economists and policy advisors are trained in Western institutions and are more comfortable with the models and data they were taught, creating a cognitive and professional bias against local alternatives. They safeguard and enforce the colonizers' vested interests and their meager personal gains rather than local ones in the policies and programs they oversee at their communities' expense (Ayling, 2021; Dorman, 2018; Nwauwa, 2020; Simson, 2025).

Another significant barrier is the fragmentation and ephemeral nature of IK itself. Much of IK is orally transmitted, making it vulnerable to loss as elders pass away and younger generations become disconnected from their cultural roots in a fast-globalizing world. The colonial experience, including the imposition of foreign languages and writing systems, created a dichotomization of knowledge, where oral traditions were devalued and written knowledge, often filtered through a colonial lens, was prioritized. This makes it difficult to systematically document, codify, and integrate IK into formal policy documents and planning processes (Bruchac, 2014; Daniel et al., 2022; Obiero et al., 2023; Olaopa and Ayodele, 2022; Tharakan, 2017). Moreover, for a long time, the custodians of IK were not actively involved in shaping policy and programs. Participatory governance is a new concept here and is overloaded with elite control (Hao et al., 2022). We find it odd that the continent still believes that for a knowledge set to be IK, it must be old, transferred through oral folklore. IK can be written down, edited, acted, and archived using modern technology.

Additionally, our findings point to socio-cultural barriers rooted in the shaping of contemporary attitudes, for instance, regarding local understanding of corruption and poor governance. The overwhelming documentation of corruption as a normalised aspect of life in many SSA countries, coupled with citizens' perceived helplessness in fighting it, creates a powerful counter-narrative to sustainable development (Dodoo, 2025; Duri & Transparency International, 2020; Mkhize & Ndimande-Hlongwa, 2014; Sylla, 2013). When popular music, art, and media discourses glorify get-rich-quick schemes and internet fraud, and when young people learn that they must be corrupt to access jobs or services, this undermines any policy effort to advance equity and sustainability. The end result is a socio-technical environment in which the long-term, community-focused values inherent in many IK systems are devalued or redefined in favor of short-term, individual gains deliberately championed in the new media. Moreover, the pervasive narratives that feature poor governance, economic mismanagement, and a lack of opportunity as the key defining elements of SSA economies further demotivate the youth, leading to brain drain and the stifling of local innovation inherent in IK. These limit the sustainable adaptation of IK for the future, limiting change.

Finally, the findings reveal inadequate infrastructure and investment as a barrier. The region suffers from a deficiency in the provision of public goods, including basic infrastructure, from roads and energy to health and education systems (Ifere et al., 2022; Lakmeharan et al., 2020; Thusi & Mlambo, 2023). This lack of infrastructure not only hinders economic development but also makes it difficult to support and scale up IK-based initiatives. For example, a community with traditional knowledge of sustainable agriculture may lack inputs and market access (technologies, roads, storage facilities, and global penetration) to make their products economically viable on a larger scale, forcing them to abandon these ambitions for unsustainable cash-crop alternatives, tied to Western production systems that erode local sovereignty, instead benefiting Western agrochemical and manufacturing industries at a great cost to local ecosystems. Like the earlier discussed elitism, this impacts attitudes and consumption patterns, normalizing Western-backed quick fixes in people that are hard to overcome. It necessitates aggressive self-appraisal, genuine acknowledgement of gaps, self-acceptance, and an investment in continuous improvement, not flight.

5.3. Towards a Decolonized Framework for Participatory Co-Production

The findings, while highlighting significant challenges, also point toward the necessary elements for developing a decolonized framework that can facilitate the participatory co-production of knowledge, policies, and development programs. The intention is not to create a single, uniform framework for all of SSA, but to establish principles that can be adapted to diverse local contexts. We note that previous studies have attempted to justify the assumed homogeneity of SSA across

many themes, as already discussed earlier (Wolfe, 2017), which can collectively be leveraged.

We have acknowledged that SSA is still dealing with the legacy of colonialism, which crafted indigenously transferred mental chains that perpetuate human underdevelopment (poverty). This is evident from inefficiencies in public governance, characterized by constant blame shifting. SSA, in this study, is philosophically separated from the Maghreb states, which are generally seen as a buffer area, together with the Sahara Desert, limiting unwanted illegal migration of SSA citizens into Europe. It is also conceptualized as being the most underdeveloped region of the world based on Western definitions of development (Batalhão et al., 2021; Shuai et al., 2024), which ignore the rich indigenous lifestyles that have sustained communities, such as the Maasai and Ogiek, for generations.

Bearing the above background, the first element of this decolonization is a fundamental re-evaluation of narratives. It should be known that the stories a society tells about itself through literature, music, education, and media profoundly shape its development trajectory. The post-colonial narrative of SSA has been heavily dominated by cross-generational entangling themes and narratives of victimhood, poverty, and corruption. While these are realities, they are not the whole story and are not isolated to SSA. Consequently, Amuta (1981) and Mami (2011), referencing Ayi Kwei Armah, suggest a decolonized framework that actively constructs and disseminates alternative, empowering narratives. This includes singing the “victory songs,” and narrating stories of resistance, innovation from oppressive colonial beatings, and successful local governance that have always existed, as referred to earlier, but have been marginalized.

Decolonization here means redefining African development, not by its ability to consume Western goods, but by its capacity to foster dignity, sustainability, and well-being through its own natural, cultural, and intellectual resources. It entails celebrating local cuisines, dress, poetry, literature, arts, music, and governments, and building on them to make them better through conscious technological and modernistic infusions. While Okot p'Bitek celebrates the good ways of our ancestors, recalibrating and building local IK and its resulting attitudes as well as lived experiences, will give descendants of modern-day SSA citizens better ways and improved lived experiences independent of borrowed technologies, jobs, lifestyles, and knowledge (Kubow, 2007; Shizha, 2008; UNESCO, 2021).

The second element is the reorientation of education. The current education system in most SSA countries, a colonial legacy, is largely considered a primary vehicle for the transmission of Western knowledge and the marginalization of IK. This limits its utility. A decolonized framework must therefore reform curricula at all levels to integrate relevant IK as a legitimate and valuable contribution towards learning, and encourage local ownership. This involves teaching local history from an African perspective, incorporating indigenous languages, and using pedagogical methods that value local traditions and community-based learning alongside formal scientific inquiry. The goal is to produce graduates who are flu-

ent in both global scientific knowledge and their own indigenous heritage, and who see no contradiction in merging the two to produce locally applicable development frameworks, technologies, lifestyles, attitudes, and governments, on our terms (Bergström, 2021; Daniel et al., 2022; Demssie et al., 2020; Kubow, 2007; Shizha, 2008; UNESCO, 2021), ultimately producing self-driving economies that guard local integrity and ingenuity.

The third element is the establishment of genuine platforms for participatory co-production, which has been lacking in many SSA states and local governments. This, in an era of participation and community-driven development, requires moving beyond tokenistic consultation to create spaces where knowledge holders, ranging from university professors to village elders, government planners to local farmers, can collaborate as equals and synergistically craft a development path for their communities and governments. Such demands a conscious effort to address knowledge and power imbalances holistically through deliberate co-learning and co-leading. It means valuing experiential and oral knowledge as highly as we do published academic outputs. It also entails creating policy-making processes that are accessible, transparent, and respectful of diverse ways of knowing, communicating, and creating. Such platforms would allow for the co-identification of problems, co-design of solutions, co-planning and co-implementation of projects, as well as co-monitoring and co-evaluation of outcomes, ensuring that policies and development programs are not only technically sound but also culturally relevant and locally owned (Bergström, 2021; Daniel et al., 2022; Demssie et al., 2020; Kubow, 2007; Shizha, 2008; UNESCO, 2021).

In summary, there is agreement that the path to a decolonized framework is not about a return to a pre-colonial past left 30 - 100 years ago. It is about a conscious and deliberate process of integrating the best of all local knowledge systems, laced with relevant imports to forge a new, more equitable, adaptable, and sustainable future. It is an evolutionary, not revolutionary, process. Its creation requires a sustained commitment from scholars, policymakers, and communities, where no voice should be left unheard and no rudimentary invention ignored, to reshape the narratives, institutions, and practices that have long marginalized IK and local production capacities.

6. Discussion

The findings of this study have offered a critical lens through which to understand the persistent knowledge integration and resulting development challenges facing SSA. They also prescribe potential pathways for integrating IK into Sub-Saharan Africa's development agenda, removing long-engrained indigenously transferred mental chains. In the following discussion, we interpret these findings through the theoretical frameworks outlined earlier and consider their broader implications.

6.1. The Enduring Legacy of Historical Trajectories

The contextual evolution of IK in tribes and chiefdoms, from a foundational tool

impacting all spheres of pre-colonial life to currently being stagnated and marginalized, powerfully illustrates the tenets of Communalism Theory. Pre-colonial African societies were structured around communal values that, though they seemed isolated, were interconnected, sharing common origins. Here, IK and customs were not separate from everyday existence, governance, and development, but were their very enablers, fostering strong community ties, member discipline, ecosystem preservation, and overall sustainable practices (van der Veer, 2015).

The colonial project, therefore, systematically dismantled these communal structures, replacing them with values based on capitalism, driven by individual interest and extractive Western systems. This systemic historical rupture is the root cause of the socio-technical barriers identified today, where well-choreographed Western viewpoints inform local thought, attitudes, and lifestyles. Understandably, therefore, the institutional resistance to integrating customised IK in modern policy-making is not an oversight; it is deliberate, and a direct legacy of a system designed to delegitimize and replace indigenous ways of knowing and innovating, making citizens view IK as pre-modern, outdated, and irrelevant, because it does not grow but is stunted since pre-independence. Consequently, SSA's IK gets so concocted, panel-beaten, it lacks local meaning and originality. The findings regarding the role of African elites in perpetuating imported thinking, governance regimes, technologies, and consumption patterns demonstrate how this external domination and delusion were orchestrated, creating a lasting manipulation and dichotomization of the shared African identity (Shizha, 2008, 2013), where, detrimentally, proximity to the West (with its weaknesses) became an indicator of progress and success.

6.2. The Persistence of Socio-Technical Barriers

The barriers to IK integration can be understood through the lens of Functionalism Theory, which posits that various elements of a society work together to maintain stability (Beck & Grayot, 2021). The findings suggest that the current system in many SSA states, while inefficient in terms of broad-based development, is stable in its own dysfunctional way. The lack of coordination between modern and traditional systems, and the failure to grow IK since the 1930s/50s, is not a bug but a feature. It covertly enables a small, Western-educated elite of gatekeepers to maintain control over resources, policy, and governance programming using tokenism in supposed democracies, while the formal economy remains dependent on external high-interest loans, expertise, markets, and brainwashing, hence denying new generations the opportunity to bud and thrive. China offers lessons on how to overcome this by building patriotism while fostering local innovations. When people's ways are functional, the community too will be functional.

The widespread corruption and glorification of get-rich-quick schemes in popular culture, as detailed in the findings, can be seen as a perverse and unfortunate

adaptation to this Western capitalist system. We must acknowledge that when the formal pathways to success are blocked or require connections to power, informal, often illegal pathways emerge, creating a new, deeply corrosive set of social norms that further hinders sustainable development but seem normal to subsequent generations. The massive brain drain from the region and addiction to “Western” worldviews deliberately crafted and spread through social and mainstream media are among the dysfunctional outcomes of this system. The most educated and innovative individuals are exported to economies where their skills are valued, relieving pressure on the local system but depriving it of the very human capital needed for transformation. The receiving countries then inherit population challenges that holistic planning approaches can overcome, as conceived by holism.

High illiteracy and poverty rates, government corruption, high disease incidence rates, higher mortality, low quality of life and lower life expectancies, and low infrastructure connectivity (roads, clean water, medical facilities, schools, etc.) resulting in low penetration of government services, frequent conflicts, and cutthroat survivalist political competition are the unsustainable features of contemporary SSA societies. They generally define most SSA nations, be it Kenya, Ethiopia, Congo, Ghana, Liberia, Angola, Eswatini, or Mozambique, resulting from these ill-conceived governance philosophies. They are not unique to SSA, though, although that is where they are more prominently reported. Moreover, other continents, regions, nations, and communities have their own challenges. By and large, too, the definition of (under)development using foreign lenses and influences often paints the global south, and specifically SSA, in a bad light. This should be overcome by counter-narratives and the germination and growth of sustainable local knowledge systems.

6.3. Building a Decolonized Future: Synthesis and Implications

Our call for a decolonized framework for participatory co-production directly addresses the failures of the current functionalist system. It aligns with Holism Theory, which advocates for comprehensive cooperation and the integration of diverse knowledge systems to address shared challenges (Michaelson et al., 2016; Wolfe, 2017). The findings make it clear that this integration must begin with a fundamental shift in narratives. As long as SSA’s self-perception is dominated by colonial trauma and narratives of contemporary failures, it will be impossible to generate the collective hope and agency required for transformation. Decolonization encompasses creating, disseminating, and entrenching empowering narratives of indigenous resilience, innovation, and success as a critical political and psychological act of emancipation that should go hand in hand with filtering and limiting unhealthy external influences.

This reframing must be institutionalized through education and the everyday governance agenda shaping. An education system that treats IK as folklore or history, rather than as a living, evolving, and dynamic body of knowledge relevant to

addressing contemporary challenges like globalization, international politics, unemployment, climate change, and food security, will continue to produce generations of Africans alienated from their own heritage, governments, and their inherent capacity to produce functional societies today and in the future. To create the comprehensive cooperation that Holism Theory envisions, it is vital to reorient education to value both indigenous and customized scientific knowledge systems, producing citizens and leaders capable of navigating both worlds and forging hybrid, locally embedded solutions to development challenges.

Finally, we find the creation of genuine platforms for participatory co-production a practical mechanism necessary for effecting this synthesis. Achieving this requires a conscious effort to deconstruct and reconstruct the power hierarchies embedded in policy-making and everyday governance. It means valuing the knowledge of a seasoned farmer on soil conservation as highly as that of an agronomist with a PhD, for both have value. It means creating policy and governance spaces where dialogue is genuine, and outcomes are co-owned. This approach directly confronts the monolithic view of Africa, recognizing that a one-size-fits-all policy and practice framework is a set-to-fail colonial relic unfit for the post-2030 era. By empowering local communities to co-produce the knowledge that shapes their lives, such a framework not only leads to more effective and sustainable policies and programs, but also rebuilds the social fabric and communal trust that previously existed. This, in essence, is the path toward achieving SSA's elusive sustainable development. It has worked elsewhere, where development planning is not rooted in imported models, but in the fertile ground of a reclaimed and revitalized indigenous heritage.

7. Conclusion: Realizing a Psychological Pivot and the Responsibility of the Literati

This paper concludes that SSA's developmental trajectory is as much a product of narrative construction and reconceptualization as it is of material history and the necessary removal of mental colonial chains. While the research does not intend to whitewash or brush aside the devastating outcomes of colonialism and neocolonialism, which remain very real for the region's most vulnerable populations, it posits that contemporary stagnation is reinforced by defeatist messaging and resulting attitudes, which will be transferred to future generations if the cycle is not broken. A central finding is that the African academic, through arts, literature, and political establishments, has inadvertently become a co-purveyor of narratives that marginalize IK and homegrown solutions to SSA's development challenges. By focusing almost exclusively on the scathing attacks of the West and the "man-eating ogre" of the colonizer, these opinion-shapers have punctured the collective esteem of the youth, constantly planting fear and dependence, not innate sufficiency.

The study demonstrates that although the literature of victimhood contains some truths derived from cycles of observation and research, the constant repeti-

tion of these singular narratives serves only to justify underinvestment and talent flight. The key question posed, how to shape the IK of tomorrow to instill hope and dignity, suggests that development is a psychological state nurtured through narratives and implanted beliefs before it is a physical one. The paper argues for a transition toward a Renaissance tone in SSA's stories and investments, where scholars, authors, news reporters, community leaders, administrators, and artists move away from competing with outside observers in crafting narratives of failure. Instead, they must build a stock of IK that provides the impetus for independent thought and homegrown sustainable development.

8. Recommendations: From Mental Chains to Autonomous Development

The recommendations of this study move beyond diagnosis toward a prescriptive framework for structural and educational reform. The paper suggests that SSA should be viewed as a "product" being marketed to the next generation. If the "reviews" (narratives) remain poor, future indigens will naturally submit to the disempowering fate or seek alternatives elsewhere, fueling perpetual poverty and brain drain. To counter this, the study recommends a multi-pronged approach to reclaiming agency.

First, there is an urgent need for an inclusive knowledge and curriculum review process. The paper agrees with the integration of IK into curricula but warns that much of what is currently taught was designed and operationalized by colonialists. Consequently, SSA must purge the education system of self-defeating narratives. SSA's education and folklore must become self-appraising and self-accepting, re-educating populations across all ages to appreciate and utilize indigenous potentialities. This is not a call to ignore the world, but to ensure that today's African society wears the yoke and tills the land with pride to compete in the international economy as an equal.

Secondly, the study identifies a need for homegrown technologies and development models that limit dependence on external systems and costly subscriptions. By creating local clusters and production patterns that reduce profit flight, SSA can limit manipulation, dependence, and capital as well as resource flight. The paper points to the example of China, which filters Western digital content and technologies to protect local ways of life, stimulate local innovation, and foster patriotic mindsets with visible development returns. For SSA, this means modeling and infusing IK into modern spaces, including social media and Artificial Intelligence, to ensure that the content consumed by the youth is calibrated to local ambitions like Agenda 2063.

Finally, the paper recommends utilizing the traditional wisdom inherent in African stewardship of savannas and rainforests. It highlights that indigenous Nature-Based Solutions (NBS), which have kept ecosystems intact in many parts of Africa despite the introduction of unsustainable alien species, are now globally recognized as the best instruments for combating climate change. The study sug-

gests that the next generation utilize this “ancestral wisdom” not as folklore, but as a scientific foundation for designing locally adapted tools that avoid the environmental and social ills of blindly imported development models.

9. Implications for Policy, Theory, and Practice

The implications of this paper are broad. It challenges internal and external stakeholders to redefine their investments in the SSA’s population. The study conveys a vital message, that SSA’s underdevelopment is a global failure that impacts both SSA and the global north through high poverty rates, underdevelopment, and the North-detested and protested South-North Migration. According to it, poor development messaging is a major regional problem, necessitating a shift towards building new stocks of valuable IK and using it to instigate change.

From a policy perspective, the study implies that building a counter-narrative must be treated as a form of soft infrastructure. Strategic messaging around governance and local success provides the impetus for local investments in poverty reduction. The way forward requires a move toward hybridization, the intentional blending of modern technologies with indigenous know-how. By repeatedly investing in locally embraced home-made solutions, SSA can create industries that allow the continent to earn a respectable place in the international community and gain the confidence to emerge and grow, depending on locally owned and trusted innate capacities.

Theoretically, the paper advances the discourse on IK by moving past the dual lens of the abuser and the abused. It introduces the concept of “Indigenously Transferred Mental Chains,” implying that the agency to break these chains now lies within the African and foreign stakeholders, including academics, civil society, artists, and the political establishment. It extends Holism Theory by showing that IK is an evolutionary force that must be integrated with globalization, rather than viewed as a static relic of the past.

The significant gap addressed by this paper is the need to fill the internal-narrative vacuum in development literature needed to inform sustainable development in SSA. While existing research extensively documents external constraints such as Structural Adjustment Programmes (SAPs) or trade barriers, this study explores how the internal dissemination of knowledge has, in the past, acted as a psychological barrier to local investment and take-off. It addresses the under-documentation and messaging of the region’s many victory stories, and a deliberate call to current and future generations to take initiative and independently thrive in African scholarship, art, and development programming, free from destructive vested foreign interests and influences.

By identifying that scholars often assassinate African ambitions through their own writing, the paper fills a void in understanding why, after seven decades of sticking to Western models, poverty still thrives. It extends the discourse on IK from mere cultural preservation to a strategic industrial asset, arguing that if Africa replaces the narrative of the subservient continent with the victory songs of

its own craftsmanship and innovation, it can finally independently draft its development agenda for the 21st century and beyond, making it a proud and significant player in midwifing global sustainable development, instead of being seen as its burden.

10. Limitations of the Study

Whereas the study has reviewed literature covering various aspects of the evolutionary trajectory of IK, socio-technical barriers to its integration in SSA policy and development programming, and tried to develop a common decolonised framework for IK-based participatory co-production in the region, we acknowledge that variation in practices exists across countries, communities, and language traditions within Sub-Saharan Africa and can be explored independently. This, however, does not dilute the various forms of previous homogenization of the region in colonial and post-colonial literature, administrative herding (the world has social and administrative clusters), and common lived experiences, but seeks to avoid overgeneralization. We have explained this in the manuscript. Additionally, relying on the researchers' auto-ethnographic insights may be misconstrued to mean subjectivity. The insights are informed scholarly reactions to previous research; hence, discussions are informed by uncited previous research and observations spanning decades.

Author Contributions

Conceptualization: JOO; Methodology: JOO and JNO; Software: JNO and JOO; Validation: SL, JNO, and JOO; Formal Analysis: JNO, SL, and JOO; Investigation: JOO, JNO, and SL; Resources: JNO, SL, and JOO; Data Curation: JNO, SL, and JOO; Writing—Original Draft: JOO; Writing—Review & Editing: JNO, SL, and JOO; Visualization: JOO, JNO, and SL; Supervision: JOO; Project Administration: JOO, JNO, and SL; Funding Acquisition: SL, JOO, and JNO.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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