



ECOWAS and inverted sacrifice zones: towards a new regional paradigm for sovereignty and sustainability in West Africa

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ABSTRACT

This paper examines how ECOWAS can leverage mangrove ecosystems to build regional ecological infrastructure and foster economic integration. Anchored in the West African coast where 2 million hectares of mangroves store 854 million metric tons of carbon it critiques the region's extractive neofunctionalism. Through a conceptual and theoretical intervention using theoretical synthesis, the paper introduces the Inverted Sacrifice Zone (ISZ) to theorise carbon territorialisation and propose nature-as-asset governance. Findings show that blue carbon markets and mangrove conservation can yield up to \$460 per hectare, reinforcing state legitimacy and regional cohesion. Thus, a regional ISZ managed by ECOWAS could bring 'grey zones' under ecological control, functioning as an economic/security apparatus. The paper recommends a shift from commodity dependency to a non-extractive neofunctionalism rooted in reciprocal environmental exchange, calling for ecologically attuned regional strategies to map, restore, and govern mangroves as unified infrastructure – anchoring regional sovereignty in stewardship rather than exploitation.

Introduction

Established through the Treaty of Lagos in 1975, the Economic Community of West African States (ECOWAS) is a fifteen member state bloc that was conceived as a bold project of pan-African economic unity aimed at transcending the political and economic fragmentation left by colonialism (Ogbonna 2024, 54; Nwokedi 1992). Envisioned as a mechanism for 'collective self-sufficiency,' ECOWAS's fifteen member states sought to harmonise trade, promote free movement, and pool developmental resources within a unified regional bloc (Ogbonna 2024, 56). Over the past five decades, ECOWAS has secured notable institutional achievements, including the ECOWAS Trade Liberalization Scheme, a common external tariff, and the introduction of the ECOWAS passport, which has enhanced regional mobility (Essien 2006 and Ukaoha 2008 as found in Ogbonna 2024, 55). Its proactive engagement in peacekeeping, most prominently through ECOMOG interventions in Liberia, Sierra Leone, Côte d'Ivoire, and most recently the Gambia, has earned it a reputation as a stabilising political force (Adebajo and Rashid 2004; Francis 2010).

Despite notable successes, the project of West African integration remains fundamentally tethered to vertical hierarchies driven by extractive forms of neofunctionalism. Traditionally, neofunctionalism refers to the idea that cooperation in one sector such as coal or steel 'spills over' into others, like trade or security, thereby generating momentum

for deeper political unity under supranational institutions. However, an alternative model is possible: a non-extractive neofunctionalism, in which spillover effects emerge not from industrial production or resource extraction, but from regional blocs organised around environmental preservation. Still, because of an extractive neofunctionalist foundation ECOWAS continues to inhabit a region marked by uneven economic development, persistent political instability, and entrenched sovereignty rivalries (Obi 2008; Akokpari 2016). As a result, intra-regional trade remains under 15%, external debts are soaring, and dependency on primary commodity exports exacerbates environmental degradation (Ogbonna 2024, 59). Security crises, especially in the Sahel and northern Nigeria, have further revealed ECOWAS's institutional weaknesses and inability to decisively address transnational terrorism and insurgency (Mazrui 2018). These overlapping – economic, environmental, and territorial – crises have exposed the limits of both extractive neofunctionalist integration and raw export driven development.

However, these institutional failures are not merely administrative; they are symptomatic of an ontological misalignment between West African governance and the material realities of global carbon release. This is because, we stand at the precipice of the Holocene's disintegration, witnessing the Sixth Mass Extinction not as a distant hypothesis, but as a material unfolding. Current biological assessments indicate that species extinction rates have accelerated to over 100 times the natural background rate, signalling a biospheric unravelling unparalleled since the Cretaceous period. Yet, this historic event was not scheduled on a geological or evolutionary calendar; it was marked by the hand of the state with the ink of capitalism. The ongoing Late Quaternary Mass Extinction (LQME), distinct from all preceding extinctions, is the direct consequence of modern human activity spanning the last five centuries.

Despite the complexity of mass extinction events, their proximate mechanisms are remarkably standardised, typically driven by carbon-release or carbon-burial processes that radically alter the global environment. The LQME follows this carbon-release paradigm, characterised by greenhouse gas emissions, global warming, and massive terrestrial erosion that cascades into marine productivity collapse. Within this context, the West African coast and its mangroves emerge as an appreciating carbon sink amidst a carbon-release era. These mangroves represent a strategic asset, currently under-utilised and undervalued despite their status as extremely efficient carbon-sequestering systems on a planet defined by atmospheric excess.

This reality opens a new avenue for development in historically 'underdeveloped' regions in West Africa. The sixth extinction crisis of the future thus becomes the opportunity of the present, in that: nations attempting to revolutionise their economies can reorient their sovereign logics to conserve and commodify nature through state action. On a planet that continues to produce and pollute, 'nature in place' becomes a viable and appreciating economic asset – one that is held and secured by the state for global stability.

As such, ECOWAS stands at a pivotal juncture: it must either transform its governing logic or continue to drift as a weak regional entity amid intensifying ecological, political, and economic disruptions (Goto et al. 2025).

This paper argues that ECOWAS's successes and shortcomings are not only institutional but epistemological. ECOWAS has failed to integrate a lasting regional economy and security apparatus because it attempts to develop by sustaining the very elite-led,

oppressive systems it inherited from the West even as it simultaneously seeks to escape them. As a point of calibration, however, it is worth noting that ECOWAS has already committed itself theoretically to ecological development. Its current regional economic growth policies, articulated in the 'Vision for 2020' strategy (ECOWAS 2010), position sustainable development and environmental preservation as guiding principles for national policy – particularly in relation to mangrove management across the region (Bryan et al. 2020, 7).

The paper then asks: how can ECOWAS leverage mangrove ecosystems to create regional ecological infrastructure and foster economic integration?

Building on this ecological mandate, this paper introduces the concept of inverted sacrifice zones (ISZs): territories of ecological preservation that are securitised and commodified by a sovereign state (or a collection of states) not for extraction but, for the productive stabilisation of global capitalism's ecological contradictions (Da Silva 2025). ISZs reframe conservation as an economically driven, state-sanctioned act of exclusion, where on the West African coast, blue carbon-rich mangroves and their surrounding forests/grasslands function as ecological infrastructure, generating state revenue through carbon credits and debt-for-nature agreements, with gains redistributed via government entitlement programmes (Da Silva 2025). The proposal here is to expand the logic of ISZs – first observed and articulated in the Brazilian state of Acre – to the West African mangroves. Although geologically and materially distinct from the Amazon rainforest, these coastal ecosystems share the inherent value of being critical carbon assets on a planet experiencing a carbon-release event.

Central to this project is ECOWAS's ability to assert and sustain member state sovereignty. By leveraging ISZs as platforms of regional ecological sovereignty, ECOWAS can securitise regional 'grey zones' of insecurity along the coast not merely to reestablish control, but to generate post-extractive value. So, just as mines and resource sites can be managed by regional suprastate bodies for their strategic value, so too can large, bio-diverse ecosystems be secured for their intrinsic worth as an increasingly scarce asset on the modern planet. In this sense, ISZs offer a framework for horizontal integration rooted in shared ecological stewardship: one that simultaneously sustains global capitalism and regional cohesion yet remains physically detached from capitalism's extractive and destructive frontiers.

ECOWAS has a strategic opening precisely in the vacuum because of the absence of coherent, sovereign management over West Africa's mangroves. Presently, there exists no binding regional policy specific to mangrove management; national efforts are fragmented, under-resourced, and in many cases constrained by poverty and limited institutional capacity (Naidoo 2023, 11–12; Feka and Morrison 2017). This lack of coordination offers ECOWAS a rare point of intervention: by stepping into this policy void, it can define and enforce a unified regional framework that maps, restores, conserves, and governs mangroves not as isolated ecological fragments but as a regional continental infrastructure.

In doing so, ECOWAS positions itself not simply as a regulatory body, but as a sovereign ecological authority – not as a return to centralised colonial command, but an inversion of it: a post-extractive logic of value creation that anchors member state sovereignty in the stewardship of ecosystems, rather than their exploitation.

The paper follows as such: first, a discussion on methods, followed by a further development on what inverted sacrifice zones are, that sets the stage for exploring the value of West African mangroves and their integration as regional inverted sacrifice zones (ISZs). Next the paper presents two separate sections that focus on 1. the parallel ecological and economic value of mangroves beyond their blue carbon markets and 2. How mangroves structured around an ISZ framework would function as an instrument of regional security, and territorial governance, by bringing territories under regional ecological sovereign control. The paper concludes with reflections on the obstacles to implementation, and the urgent need for new regional development paradigms in the Global South. Specifically, advocating for paradigms that fit in the space between states, environments, and infinite economic growth.

Method

The manuscript is a conceptual and theoretical intervention, rather than a formal policy analysis or empirical study. Its methodological contribution lies in the development of the novel concept of the Inverted Sacrifice Zone (ISZ) as an analytic framework for understanding emerging forms of state-led environmental securitisation and carbon-based territorial governance.

The concept of ISZs is developed through comparative theoretical synthesis rather than primary empirical data collection. Specifically, the manuscript draws on critical political ecology, scholarship on sacrifice zones, and theories of environmental governance and securitisation to invert the conventional logic of sacrifice zones. The case of Acre, in Brazil, is used as an anchor and inspiration for the operational logic of ISZs, it represents a real material example of a domestic state with the ability to create sovereign exception on its territory engaging in inverted sacrifice (Da Silva 2025). The selection of sources prioritises interdisciplinary scholarship that engages state territoriality, carbon markets, and conservation-based accumulation, alongside policy documents and secondary analyses that support and illustrate the validity of the proposal.

The manuscript advances ISZs as a concept intended to illuminate a structural transformation in how states may manage ecological value under conditions of climate crisis. The discussion of West African mangroves and ISZs identifies a regional 'void' in operationalising the value of blue carbon in developing regional state blocs. The manuscript does not claim that ISZs are already fully operational in West Africa; instead, it proposes the framework as a means of theorising the political possibilities and obstacles of large-scale carbon territorialisation.

The inverted sacrifice zone

Inverted sacrifice zones (ISZs) are not national parks, wildlife preserves, or localised conservation initiatives oriented towards tourism, species management, or ecological restoration alone. While ISZs may incorporate elements of these practices, they are fundamentally distinct in scale, purpose, and political logic. ISZs are territories made exceptional by the state, brought under centralised sovereign control. They are managed as revenue-generating/security assets, much like coal plants, uranium mines, or other extractive/military infrastructures.

But, inverted sacrifice zones are preservation areas that do not merely greenwash extraction elsewhere, but instead explicitly bring territories and the populations within them under state control during a period of unfolding ecological crisis (Da Silva 2025). Their purpose is not environmental protection as an end in itself, but the conservation of natural resources and climatic stability necessary for the indefinite reproduction of the modern state system. As observed in Acre, Brazil, ISZs are constructed through familiar sovereign logics of territorialisation, exclusion, and management. What changes is not the structure of power, but its appearance. Where traditional sacrifice zones are produced through processes of 'wastelanding,' ISZs are produced through the conservation of old-growth forests – what might be understood as a form of pristine landing.

The political economy of inverted sacrifice zones thus lies in their productive inversion of extractive logics. Classic sacrifice zones are defined by extraction, displacement, and visible ruination. Inverted sacrifice zones, by contrast, are defined by conservation, assemblages, and regeneration. Their productivity does not derive from the extraction of raw materials, but from preservation-as-commodity, or 'accumulation by conservation' (Büscher and Fletcher 2015). In these zones, carbon offsets function as the bridge through which preserved territory is translated into monetary value for states. This process requires centralised control over forested territory, not to extract from it directly, but to engage in the technocratic management of non-extraction.

Preservation, in this sense, becomes not a challenge to modern capitalist development, but a mechanism for extending its viability under conditions of ecological crisis. Within this framework, mangrove forests take on a familiar yet altered role. As greenhouse gas emissions continue to rise and global populations grow, the conservation of remaining mangrove forests becomes increasingly vital, particularly given that many of the world's major forest systems have already been destroyed through centuries of colonial and capitalist development. At the same time, the technological solutions promised in the late twentieth and early twenty-first centuries have failed to deliver meaningful progress in addressing mass carbon-release. ISZs therefore emerges not as an alternative to extractive capitalism, but as one of its last viable frontiers for development.

In this light the maximisation of mangrove forest diversity within ISZs means that both people and forests are reconfigured. The forest as habitat disappears and is replaced by the forest as an economic resource to be managed efficiently and profitably. What once appeared too chaotic for controlled study now becomes the ideal ecological asset.

Old-growth mangrove forests, previously resistant to simplification, can be increasingly remade as sites of scientific authority. Although these spaces appear to be the opposite of traditional laboratories, they are gradually transformed into new kinds of laboratories themselves. It is precisely the forest's entanglement with climate systems that enables the emergence of new, state-sanctioned regimes of management, that reproduce familiar logics of control and accumulation.

What is a mangrove and what is blue carbon

Mangroves are unique coastal ecosystems composed of woody trees and shrubs that thrive in intertidal zones – regions where land and sea converge. Unlike any other forest type, mangroves exist in saline, brackish waters along low-energy coastlines such as estuaries, deltas, and shallow lagoons. Spanning latitudes between 30° N and 30° S,

Table 1. Mangrove coverage in ECOWAS member states (Naidoo 2023).

Country	Mangrove area (km ²)
Nigeria	8442.43
Guinea-Bissau	2688.32
Guinea	2211.45
Sierra Leone	1529.03
Senegal	1269.74
The Gambia	609.72
Liberia	183.37
Ghana	179.52
Côte d'Ivoire	54.48
Benin	28.77
Togo	0.50
Cape Verde	0.00

they are represented by approximately 70 species and flourish across tropical and subtropical climates (Giri et al. 2011; Alongi 2002; Duke et al. 2007). Their ecological roles are diverse and indispensable: they stabilise coastlines, buffer storm surges, reduce erosion, and serve as nursery grounds for commercially significant species such as shrimp, crab, and various finfish. In some areas of West Africa, notably along rivers like the Gambia, Casamance, and Niger, mangroves extend over 150 kilometres inland due to strong tidal influences (Naidoo 2023). The porous boundary between the sea and land which mangroves inhabit extends their significance inland to the surrounding forest and grassland ecosystems from which they also rely on to replenish the sea and guard the coastlines from erosion.

Mangroves beyond their active ecological functions are also central to what is known as blue carbon – the carbon which is stored in coastal vegetated ecosystems including mangroves, salt marshes, and seagrasses. Blue Carbon ecosystems are among the most efficient carbon-sequestering systems on the planet, storing three to four times more carbon per hectare than tropical terrestrial forests (Donato et al. 2011; Alongi 2014). And, although they occupy just 0.2% of global ocean area, they account for approximately 50% of carbon burial in marine sediments (Feng et al. 2023). Carbon is stored in both plant biomass and sediment, contributing significantly to climate mitigation strategies.

In West Africa these blue carbon infused Mangroves are located all along the coast. With Nigeria's mangrove stand being the largest in Africa and 3rd largest in the world (Table 1).

The value of west African mangroves as inverted sacrifice zones

As we have seen, recent ecological research now underscores the potential of the West African mangroves' largely untapped resource to reconfigure ECOWAS's regional trajectory. Empirical assessments estimate that West Africa's 2 million hectares of mangroves sequester approximately 854 million metric tons of carbon in biomass and soil (Bryan et al. 2020). But, to understand the economic viability of the West African mangroves, we must return to the materiality of the mangroves themselves not as passive environmental assets but as active producers of value within an emergent regime of state-led ecological capitalism. The money speaks for itself: globally, mangrove ecosystems provide an estimated \$2.7 trillion annually in ecosystem services (Barbier 2016), while

their destruction at a rate of 1.9% per year results in carbon emissions equivalent to 588 million barrels of oil or 50 million passenger vehicles (Pendleton et al. 2012 and Herr et al. 2015, as found in Bryan et al. 2020, 2). This is not an abstraction. It is a fiscal and planetary reality, one that inserts mangrove conservation squarely into the economic ledger of regional state governance.

Most importantly, the valuation of blue carbon reveals a paradox of land use: even at voluntary market rates of just \$4–10 per tonne, mangrove conservation in West Africa already shows positive net returns in most cases with some countries seeing average benefits as high as \$460 per hectare (Bryan et al. 2020, 7). These calculations are conservative; they exclude additional benefits like fisheries, flood control, and soil health. If such benefits were internalised, and if carbon markets matured towards compliance-grade pricing, the economic case for mangrove preservation becomes undeniable. Yet even the current value remains largely unclaimed in West Africa – trapped behind infrastructural barriers such as inadequate valuation methodologies, limited technical capacity, and the absence of a coordinated state apparatus for market entry (Naidoo 2023, 2).

Here, ECOWAS becomes the necessary regional supraplural intermediary in facilitating state exceptions. Not merely as territory, but as a fiscalised regional ecological product. In doing so, the sovereign member states through ECOWAS produce nature for capitalism. Projects like the African Carbon Markets Initiative (ACMI) which was launched at COP 27 to accelerate voluntary markets across the continent, signal the emergence of a new political economy where carbon itself becomes currency, and mangroves are its central mint (Naidoo 2023, 2).

Similarly, REDD+ (Reducing Emissions from Deforestation and Forest Degradation), a framework developed under the COP process, aims to reduce emissions by assigning financial value to the carbon stored in forests. It promotes conservation, sustainable management, and the prevention of forest degradation as mechanisms for slowing climate change. Crucially, policymakers are now being called to explicitly include mangroves within national and regional REDD+ plans, recently recognising their carbon value and ecological function as essential components of this emerging market logic (Ajonina et al. 2014; Naidoo 2023, 6; NOAA Office for Coastal Management n.d.).

Additionally, debt-for-nature swaps also represent an emergent mechanism for acknowledging and leveraging ecological value, particularly for countries burdened by unsustainable debt. These arrangements allow a portion of a nation's foreign debt to be forgiven in exchange for domestic investments in environmental conservation. A case in point is the Seychelles, where a successful debt-swap redirected external debt payments towards marine conservation, including the establishment of marine protected areas (Bryan et al. 2020, 12). For many countries in West Africa, especially former French colonies perpetually ensnared in cycles of debt and austerity such instruments offer a potential exit. Not only can these nations negotiate partial debt relief, but they can also secure long-term payments by maintaining undisturbed, biodiverse ecosystems that are rapidly disappearing elsewhere under the pressures of global market production. In this way, preservation becomes leverage: a fiscal strategy through which ecological sovereignty is transformed into a negotiable asset, capable of inverting the economic hierarchies historically imposed by imperial financial systems.

Yet, despite the development of carbon markets, West African mangroves represent a 'void' in this territorial logic: they remain undervalued and underutilised,

despite their immense carbon-sequestering potential. No programmes of sufficient scale or institutional architecture currently exist in West Africa that position a regional state bloc as the primary mechanism for this kind of comprehensive crossborder territorial valuation. This absence represents a strategic opening for innovative, regional development. While initiatives like the African Carbon Markets Initiative (ACMI) and scattered REDD + programmes demonstrate the growing value of carbon markets, they remain fragmented and lack the cohesive sovereign authority necessary for regional transformation.

The current absence of a unified regional framework for West African mangroves is precisely why this vacancy holds such potential for ECOWAS. While the Inverted Sacrifice Zone (ISZ) model is operational in Acre, Brazil, and 'inklings' of similar logics appear in smaller African offset projects, nothing yet exists at a regional scale under the joint authority of states acting in concert to securitise an entire territory as an ISZ.

Still, there are programmes and analyses at smaller scales that validate the profitability of blue carbon sequestration along the West African coast. For example, Vasconcelos et al. (2015) 'analyzes the extent to which the revenues generated by carbon-rich ecosystems retained in standing mangroves can cover the cost of avoiding their clearance in Guinea-Bissau' (Vasconcelos et al. 2015, 1361–1362). Like us, they note that 'data, technology, and capacity are still mostly absent' (Vasconcelos et al. 2015, 1361–1362), and part of their project involved gathering novel, previously unavailable quantitative data on deforestation trends and the biomass content of Guinea-Bissau's mangroves. They find concretely that 'if the price of avoided carbon dioxide (CO₂) emissions is above the United States Dollars (USD) 6.69 to USD 7.20/t range, it is possible to delineate cost-effective activities to avoid deforestation of mangroves and promote climate change mitigation activities in Guinea-Bissau using carbon revenues alone' (Vasconcelos et al. 2015, 1361–1362). These findings are especially notable given that carbon markets are still maturing. We should expect the premium for nature to rise, as the dynamics of the carbon-release event increasingly pressure markets to commodify environmental preservation at the regional scale.

Programmes like, West Africa Blue in Sierra Leone and Guinea, echo these findings and ambitions specifically along the West African coast. While on the opposite side of the continent, ISZs are also already emerging in Kenya through the 'Mikoko Pamoja' project. The project is a mangrove restoration and reforestation initiative that is currently being implemented in Gazi Bay, Kenya that encompasses 117 hectares of nationally owned mangroves, with potential for expansion (Wylie, Sutton-Grier, and Moore 2016). The large-scale public holding by the national government signals a strategy akin to that employed in Acre, Brazil: leveraging state apparatuses to channel resources and labour towards equitable preservation and diversification of critical carbon assets – for the benefit of the state, its people, and the global economy. This community-led project redistributes benefits locally and is financed through carbon credits, specifically a Payment for Ecosystem Services (PES) agreement with Plan Vivo, which has proven successful during its first crediting period (Wylie, Sutton-Grier, and Moore 2016). Under this logic, inverted sacrifice zones managed by ECOWAS are not merely symbolic refuges of conservation, but they are active instruments of regional accumulation and integration which allow ECOWAS member states to build/sustain state sovereignty into the ecologically tumultuous future.

With ECOWAS guiding member state institutions and political wills towards regional mangrove preservation, the region could begin to produce nature as a managed surplus – or a growing, appreciating ecological asset on a planet suffering from environmental decline. In the name of resisting biotic collapse, the West African states can jointly turn to conservation not as opposition to capitalism, but as its ecological, albeit technocratic saviour.

Beyond blue carbon: preserving extractive economies through inverted sacrifice

While the financial value of blue carbon sequestration presents a compelling rationale for mangrove preservation, it is only one dimension of the broader economic potential that inverted sacrifice zones (ISZs) could unlock. Beyond their function as carbon sinks, mangrove ecosystems are deeply embedded in West Africa's extractive and subsistence economies, especially through fisheries, aquaculture, timber, and coastal floodplain productivity. These extractive sectors, however, face a growing contradiction: they are simultaneously dependent on and destructive of the very ecosystems that sustain them.

This is because mangroves function as critical nursery grounds for fish, crustaceans, and mollusks, offering habitat complexity, nutrient cycling, and shoreline stability that underpin regional food systems. An estimated 39% of capture fisheries globally are dependent on mangrove ecosystems at some stage in their life cycle (Huxham et al. 2015), and in West Africa alone, mangrove-related fisheries contribute over US\$400 million annually to the regional economy (USAID 2014). Local communities rely on these ecosystems not only for commercial seafood exports like shrimp, crab, and prawns, but also for subsistence-based nutrition and informal market income (Naidoo 2023). Yet, despite this economic value, mangroves are rapidly being sacrificed to short-term extraction: converted into aquaculture ponds, cleared for timber and charcoal, or poisoned by urban sewage and agricultural runoffs. In this context, what is profitable in the short term is ultimately self-liquidating.

The logic of ISZs intervenes in this contradiction. By transforming mangroves into zones of regionally state-protected and commodified ecological value, ISZs provide a governance mechanism to sustain the long-term productivity of extractive economies. Rather than halting fishing or aquaculture, ISZs reconfigure the terms under which these activities occur: under a planned, unified, regionally sovereign union, that regulates extraction in ways synergistic with preservation. Mangrove health becomes a condition of future profitability, not an expendable barrier to present extraction. In this sense, preservation under the ISZ model is paradoxically the most efficient extractive strategy available. It allows the West African region to both secure carbon credits in the international market and extend the productive lifespan of traditional commodities like fish, wood, and shellfish, that remain vital to the regional economy.

This vision runs counter to the dominant model of coastal development in West Africa, where high urbanisation rates and infrastructure expansion have placed enormous stress on mangrove forests (Feka 2015; CILSS 2016). The proliferation of industrial fishing fleets and shrimp aquaculture has driven the destruction of 20–50% of global mangrove coverage (Primavera 2005), while untreated sewage and pollution from urban and industrial sources further compromise coastal ecosystems. ISZs reorient these pressures by inserting

the ECOWAS as an ecological broker, ensuring that industrial activities align with long-term conservation outcomes rather than short-term export driven depletion.

Moreover, preservation itself is productive. Mangroves enhance floodplain resilience, water purification, and sediment stabilisation. These are services that increase the profitability and sustainability of both rural agriculture and urban expansion. Yet these co-benefits remain largely unmonetised in conventional development models. Through ISZs, ECOWAS member states can internalise the ecological dependencies of their economies into institutional frameworks, ensuring that economic growth does not come at the cost of ecological collapse. Importantly, this does not mean banning extraction; rather, it means governing it through ecological foresight.

In this light, ISZs are not merely ecological sanctuaries; they recalibrate the relationship between extraction and sustainability. They offer a model of post-extractive¹ governance in which preservation is not the antithesis of productivity but its precondition. As West Africa contends with deforestation, overfishing, and the degradation of natural capital, ISZs represent one of the few spatial strategies capable of stabilising the present while safeguarding the immediate future.

From fragmented threats to collective stewardship: the ISZ security paradigm

In West Africa, security challenges increasingly stem from a confluence of global and regional pressures, including rapid population growth, internal and cross-border migration, deepening inequalities, extractive industry expansion, and the proliferation of trafficking and criminal networks. Additional stressors such as climate change and urbanisation, while often framed as peripheral, are critically expressed through issues like land scarcity and migratory pressures (Marc, Verjee, and Mogaka 2015, 4). As a result, conflicts are increasingly concentrated on the peripheries of state control², led by factionalised and often militarily weak armed groups (Marc, Verjee, and Mogaka 2015, 7, 23). This shift complicates traditional responses and exposes the limits of West African state sovereignty in managing decentralised threats – both economic and environmental.

Carbon release during the sixth mass extinction further intensifies these instabilities, by accelerating extreme weather, depleting natural resources, and undermining the resilience of states and communities (UNDP 2022). Despite these visible effects, regional discourse often underestimates the scale of climate-induced insecurity. A major blind spot is the limited recognition of how climate-related phenomena, like mangrove depletion and the resulting resource loss, disrupt border stability/security.

ISZs in this context would not only function as both a tool for environmental preservation and revenue, but as a vehicle for regional security by linking the effects of carbon release and the sixth mass extinction to the economic disparities that exacerbate regional violence. Yet, rather than addressing these as shared regional problems driven by ecological disintegration and exploitation, ECOWAS member states presently often treat them as domestic issues, thereby weakening collective action (Aning, Albrecht, and Nielsen 2021, 37–38). This framing is particularly inadequate given the proven links between resource scarcity, climate pressures, and the rise of violent non-state actors, especially in the Sahel and Lake Chad basin (Hårsmar 2021, 88). Thus, ECOWAS as a

regional body of fifteen member states, is positioned perfectly and exemplifies a much needed collective logic, responding jointly to shared insecurities (Obamamoye 2020, 162).

And so, given that many of these conflicts are fundamentally rooted in struggles over environmental resources, ECOWAS must further step into overlapping spaces of security and the environment as an institutional mechanism capable of:

- Refocusing the region's fragmented policy landscape through the environmental framework of inverted sacrifice zones (ISZs).
- Designing environmental problem-driven solutions rather than abstract solution-driven policies.
- Building institutional resilience around research-defined and commodified mangroves.
- Moving from primary commodity dependency to reciprocal exchange grounded in the growing value of environmental markets.

These strategic interventions position ECOWAS not merely as a convener of states, but as a regional actor capable of operationalising sovereignty through environmental governance. But, ECOWAS, as a fifteen member state bloc, does not currently possess sovereign power. As such, it may need to begin with policy recommendations and smaller-scale initiatives. As these projects generate legitimacy and revenue, ECOWAS can gradually expand its authority within the region and potentially gain greater sovereign rights from member states for the purpose of direct ecological control. While this is not yet the case, it remains the long-term objective of the ISZ framework.

Simply put, ECOWAS must overtime negotiate, expand, and use the sovereign power of its fifteen sovereign member states in order to secure and develop the region's borders and economy. While ECOWAS is not itself a sovereign state, it operates with delegated authority from its members, potentially allowing it to exercise the sovereign right to exclude on behalf of those states. In this way, ecological sovereignty and state sovereignty become inextricably linked. Meaning that the survival and development of both ECOWAS and its member states depend on this cooperation and the mutual sharing of the sovereign right to exclude for a common ecological/economic cause.

Without such integration, mangrove projects may continue to proliferate in isolation – present yet fragmented, and ultimately ineffective in countering the totalising effects of the carbon-release-driven sixth mass extinction. The power of ISZs and supranational institutions like ECOWAS lies in their scale, only they can encompass expansive and interconnected ecosystems, which allow for the holistic preservation of entire regional biomes.

Similarly, West African Mangroves, by their very nature, stretch inland and across coastal boundaries, blurring the lines between land and sea, between national and regional jurisdiction. Despite covering relatively small land areas, their ecological reach justifies extensive regional preservation through sovereign exclusion. Protecting mangroves becomes a legitimate means of regional security across member state borders, expelling non-state threats such as terrorists. Thus, the logic of ISZs, affirms sovereignty by exemplifying it in commodified preservation. Ultimately, through the preservation of the environment, ECOWAS can legitimise a broader regional order that links ecological protection to military coordination, political sovereignty, and economic development.

Conclusion

This paper, in a relatively short space, has covered considerable ground offering an exposition of ECOWAS, mangroves, and blue carbon through the novel framework of inverted sacrifice zones (ISZs). As ECOWAS marks its 50th anniversary, it has much to celebrate and even more to anticipate; especially as the landscape of the global economy and politics rapidly transforms in response to the constraints of the sixth mass extinction. Amid the disappointments lies the enduring hope for a prosperous West African coast.

In that spirit, this paper has turned to mangroves and blue carbon as vectors of inverted sacrifice. The argument advanced here is that unified sovereign efforts to preserve and diversify West Africa's mangroves can serve as a launchpad for post-extractive economies. These efforts supply the global capitalist system with a stable climate infrastructure, offering environmental maintenance in exchange for compensation that reflects the true value mangroves provide to the industrial production that supports global systems of food distribution, medicine, housing, education, and beyond. The effect is a double benefit of carbon storage value and resource production maximisation in the long term.

The successes of mangrove conservation inevitably spill over into regional security, much like the mangroves themselves extend into surrounding terrestrial and marine ecosystems. Reorienting development in West Africa around mangroves as inverted sacrifice zones allows ECOWAS to: (1) refocus the region's fragmented policy landscape; (2) design ecologically problem-driven policies; (3) build institutional resilience around research-defined and commodified mangrove ecosystems that reach inland; and (4) redefine international relations from extractive dependency towards reciprocal exchange grounded in the rising value of environmental markets.

Yet, inverted sacrifice zones (ISZs) and West African Mangroves do not resolve the fundamental contradiction of infinite capital expansion on a finite planet. Nor do they guarantee the emergence of benevolent states or the sudden disappearance of corruption. As their name implies, they remain spaces of sacrifice. ISZs sustain the illusion that capitalism can manage its own ecological crises – that environmental degradation can be offset through rational, science-led governance and green markets. Just as traditional sacrifice zones obscure and contain the violence of extraction, ISZs obscure and concentrate the production of preservation. Their value to the state-led capitalist system lies precisely in their ability to consolidate territorial and population control under conditions of ecological crisis, conserving select natural resources and climatic conditions for the prolonged reproduction of global capital. In this sense, the ISZ is a spatial strategy of inverted slow violence: it delays ecological collapse not by undoing extractivism, but by reconfiguring it under the logic of preservation, reviving the symbols and spaces of historically extinguished indigenous ecologies for the sake of sustaining capitalist pollution in the present.

Still, what ISZs also do, paradoxically, and perhaps redemptively is offer historically marginalised people and places a pathway to participate in the only system currently available. While far from a radical break, ISZs provide a pragmatic mechanism for navigating the contradictions of our moment. In an ideal world, we would possess, more just, ethical frameworks, institutional arrangements, and modes of governance to meet the challenges of digital modernity and looming resource depletion. But for now, managing exclusion through the apparatus of the state remains the best tool at hand. ISZs create

space within the market for ecological flexibility while maintaining alignment with prevailing political, economic, and sovereign norms – even as we continue to search for a more robust and inclusive form of Democracy, capital D.

Furthermore, acknowledging the pragmatic utility of ISZs does not mean embracing naïve optimism. We are not suggesting that ECOWAS can realise such a transformation overnight or without resistance. The intent here is not to oversimplify or trivialise the profound challenges West African states face in pursuing regional development. Rather, it is to underscore that the current trajectory demands reconsideration.

If, fifty years from now, ECOWAS still wishes to be remembered as a visionary project of African regionalism it must radically rethink its foundational pillars around extractive neo-functionalism. ECOWAS must confront the colonial legacy that continues to haunt the region like a nightmare. It is precisely in the midst of uncertainty, amid climate crisis, economic fragmentation, and geopolitical flux that the organisation has the opportunity to extend its relevance. Again, the path forward cannot be built on extractivist, export-oriented models. But as no human crisis has ever been immune to the currents of transformation, West Africa, with its long history of empires, civilisations, and resistance, remains a promising wellspring of the ideas and people needed to lead the way.

Moving forward, three uncertainties shape the capacity of blue carbon (BC) projects to scale within global carbon markets. First, there is the question of whether adequate policy frameworks will emerge to support markets of sufficient scale and breadth. While these policies may not yet be fully realised, their development appears inevitable. The expansion of carbon trading mechanisms, seen in increasingly prominent COP summits and growing financial agreements between major emitters and offsetting states, signals the maturation of these markets. Second, skeptics may question whether BC conservation and restoration will gain full credibility in these markets. Yet evidence suggests otherwise: pilot projects and established offset protocols already include blue carbon, and as global awareness of ecological limits deepens, mangrove and coastal ecosystems are gaining strategic prominence. Third, some raise concerns that the influx of new offsets might ‘flood’ the market and drive down prices. But this misunderstands the nature of ecological value. Unlike fiat currency, ecosystems cannot be fabricated or expanded by central decree. There is no ‘Federal Reserve of Nature’ to inject liquidity into a depleted planet. This is not a market in the abstract – it is a zero-sum reality. The earth’s carbon sinks are finite, and without sustained investment, they will vanish like oases in a growing desert of global capitalist pollution.

There are real structural barriers ahead. But transformation has never been free. ECOWAS must not shy away from this horizon – its relevance and survival depend on it.

Notes

1. Economies whose value is predicated on maintaining nature in place to balance economies reliant on natural extraction.
2. Often in resource rich or environmentally critical areas that are hard to reach such as mangroves.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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