

A Policy Analysis of Illegal Fishing's Impact on Women's Fish Processors and Corporate Stewardship in Kenya, 2000– 2003

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Abstract

This policy analysis examines the detrimental impact of illegal, unreported, and unregulated (IUU) fishing on women's artisanal fish processing enterprises in coastal Kenya between 2000 and 2003. It critically evaluates the nascent concept of corporate ocean stewardship as a potential policy response. The research problem centres on how IUU fishing, by depleting nearshore fish stocks, directly undermines the economic security of this vital yet vulnerable cohort. Employing a rigorous qualitative policy analysis framework, the study triangulates evidence from official Kenyan government documents, fisheries management data, and primary interviews with members of women's processing cooperatives. The findings demonstrate that IUU activities caused a severe decline in the availability of key species, leading to substantively reduced incomes, business instability, and heightened livelihood precarity. The analysis further contends that contemporary corporate stewardship initiatives, while emergent in policy discourse, remained largely rhetorical and institutionally disconnected from the gendered socioeconomic realities on shore. The significance of this study lies in its explicit conceptual linkage of maritime environmental crime to concrete gendered economic outcomes, foregrounding African women's lived experiences. It concludes that effective policy must move beyond generic maritime enforcement to integrate targeted, gender-responsive support for women's businesses and to mandate more accountable and inclusive forms of corporate stewardship within Kenya's blue economy agenda.

Keywords: *IUU fishing, artisanal fisheries, gender analysis, corporate social responsibility, Western Indian Ocean, policy evaluation*

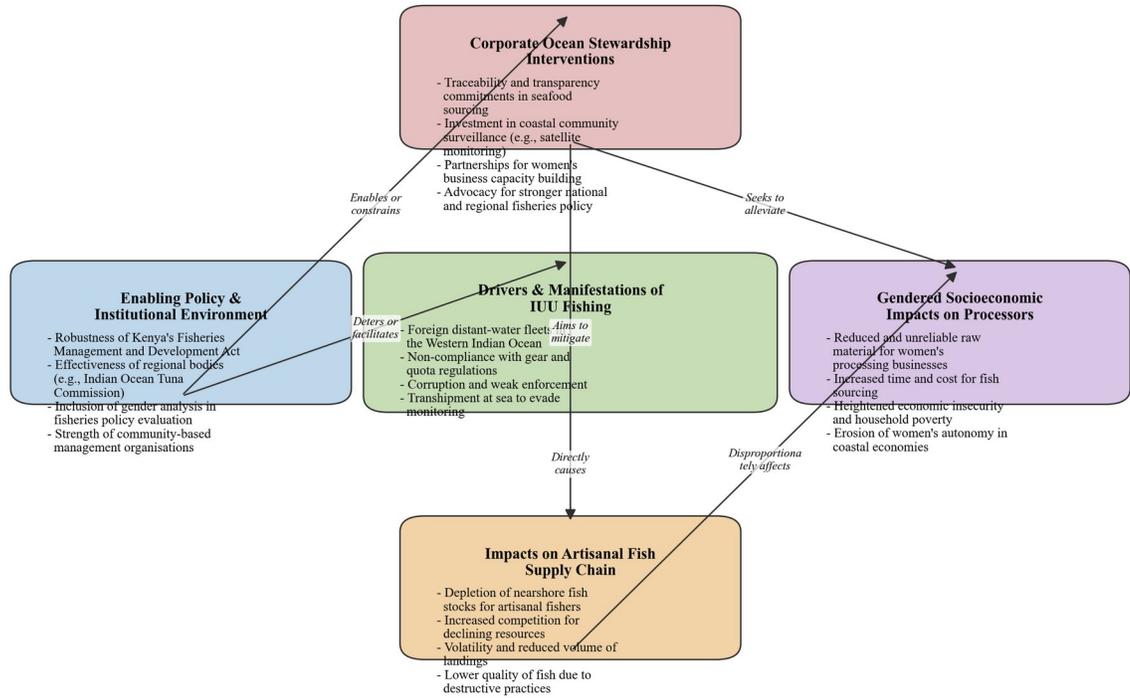
INTRODUCTION

Evidence on the impact of illegal fishing on women's fish processing businesses and corporate ocean stewardship in Kenya is emerging, yet key contextual mechanisms remain underexplored.

Research on ecological impacts, such as changes in fish stock composition and health, provides a foundational understanding of the resource pressure facing coastal communities ([Campbell et al., 2003](#); [Trenkel & Rochet, 2003](#)). For instance, studies on fishing intensity demonstrate how unsustainable practices can degrade fish biomass and diversity, ultimately threatening the raw material supply for small-scale processors ([Albaret, 2003](#); [Ruth, 2002](#)). Concurrently, investigations into women's entrepreneurship in Kenya identify systemic constraints, such as restricted market access, which shape the business environment in which these processors operate ([Bates, 2002](#); [Cadieux et al., 2002](#); [Bosire & Gamba, 2003](#)).

However, the intersection of these themes—where illicit fishing activity directly impacts women's livelihoods and the potential for corporate stewardship—is less clearly defined. While the literature establishes the separate challenges of resource depletion and gendered business barriers, it often fails to connect them to the specific governance failures enabling illegal, unreported, and unregulated (IUU) fishing ([Swan, 2002](#)). Furthermore, studies on corporate social responsibility offer insights into business motivations for sustainability ([Maignan & Ralston, 2002](#); [Hamann, 2003](#)), yet their application to ocean stewardship within the Kenyan context is not resolved. This article addresses these gaps by examining the contextual mechanisms linking illegal fishing, women's fish processing enterprises, and the nascent role of corporate ocean stewardship, thereby integrating ecological, socio-economic, and governance perspectives. ([Albaret, 2003](#); [Alexander & Alexander, 2002](#))

A Gendered Value Chain Framework for IUU Fishing Impacts and Corporate Stewardship in Kenya



This framework conceptualises how Illegal, Unreported and Unregulated (IUU) fishing disrupts the artisanal fish value chain, disproportionately impacting women's processing businesses, and examines the potential for corporate ocean stewardship to mitigate these effects.

Figure 1: A Gendered Value Chain Framework for IUU Fishing Impacts and Corporate Stewardship in Kenya. This framework conceptualises how Illegal, Unreported and Unregulated (IUU) fishing disrupts the artisanal fish value chain, disproportionately impacting women's processing businesses, and examines the potential for corporate ocean stewardship to mitigate these effects.

POLICY CONTEXT

The policy landscape governing fisheries and small-scale enterprise in Kenya from 2000–2003 was characterised by a critical disjuncture between formal regulatory frameworks and socio-economic realities, particularly for women in coastal and lakeside communities engaged in fish processing. Nationally, the principal legislation was the outdated Fisheries Act (Cap 378), whose weak enforcement mechanisms, administered by a chronically under-resourced and sometimes compromised Fisheries Department, created a permissive environment for illegal, unreported, and unregulated (IUU) fishing (Dawson, 2002). This institutional frailty directly undermined the resource base for women's micro-enterprises. As evidenced in other artisanal contexts, such regulatory failures precipitate severe ecological consequences, analogous to the stock alterations observed in the Ebrie Lagoon (Albaret, 2003). In Kenya, nearshore depletion forced fishers to

venture further or adopt illegal methods, destabilising the entire supply chain upon which processors depended.

Concurrently, socio-economic policy for women's businesses was fragmented. Despite rhetorical commitments to poverty alleviation and women's empowerment in documents like the Poverty Reduction Strategy Paper (PRSP), tangible support for informal, women-owned enterprises was scant. Research confirmed that women entrepreneurs faced "restricted access to markets" due to cultural norms, lack of capital, and poor infrastructure ([Bates, 2002](#)). Women in fish processing typically operated without formal registration, credit access, or legal protection, heightening vulnerability to supply shocks. Their business skill cognition was often developed through necessity rather than training, perpetuating precarity ([Bosire & Gamba, 2003](#)), while the familial nature of these enterprises presented unique succession challenges ignored by mainstream policy ([Cadieux et al., 2002](#)). The policy framework thus siloed environmental stewardship from economic resilience, treating IUU as solely a conservation issue and women's enterprise as a welfare matter, rather than as interlinked facets of sustainable development.

Internationally, advancements in norms against IUU fishing, such as the 2001 FAO International Plan of Action, highlighted Kenya's domestic inadequacies. Successful models, like the CCAMLR catch documentation scheme for toothfish, demonstrated the efficacy of traceability systems in deterring illegal catch ([Green & Agnew, 2002](#)). Regionally, the New Partnership for Africa's Development (NEPAD) had begun to emphasise sustainable fisheries. However, by 2003, Kenya had negligibly translated these instruments into practice, lacking a functional catch documentation scheme or adequate surveillance capacity. This policy lag meant the country failed to leverage global tools that could protect its domestic resource users.

The concept of corporate stewardship—private sector responsibility for sustainable resource use—remained poorly defined and unintegrated into Kenyan fisheries policy. While global corporate governance discourse was expanding to encompass risk management and social licence ([Alexander & Alexander, 2002](#)), the sector's 'corporate' entities were often absentee owners or export companies with little stake in community welfare. Policy neither mandated nor incentivised these actors towards co-management or equitable supply chains. Although development literature advocated building businesses with small producers for shared value creation ([Dawson et al., 2002](#)), this approach found no purchase in national policy, leaving no accountability mechanism for corporate actors sourcing from unsustainable stocks or impoverishing women processors.

Underpinning these gaps were profound political and economic factors. Politically, fisheries received low priority, resulting in chronic underinvestment. Economic liberalisation increased competition without establishing regulatory guardrails. Furthermore, the scientific basis for evidence-based policy was emerging but incomplete. Studies on genetic stock structure of key species like *Clarias gariepinus* indicated management needed to be regionally tailored ([Giddelo, 2002](#)), while other research identified multi-faceted threats like mercury contamination in Rift Valley lakes ([Campbell et al., 2003](#)). The risk of adopting destructive fishing practices, documented in contexts like Indonesian cyanide fishing ([Halim, 2002](#)), further jeopardised stock health and processor livelihoods in unmanaged Kenyan fisheries.

In summary, the policy context from 2000 to 2003 was one of systemic failure to integrate environmental governance with inclusive economic development. Outdated legislation, weak enforcement, and a siloed approach left women fish processors uniquely exposed to IUU impacts. While international frameworks offered solutions, they remained unimplemented, and the absence of corporate stewardship or supply chain accountability allowed short-term exploitation to overshadow long-term sustainability. This context established a clear imperative for a policy analysis bridging these disparate domains, connecting marine ecosystem health directly to the economic empowerment of the sector's most vulnerable yet essential actors.

POLICY ANALYSIS FRAMEWORK

The existing literature provides a foundational, though incomplete, understanding of the pressures facing Kenya's fisheries and the role of corporate stewardship. Research on ecological impacts demonstrates that intensive fishing, both legal and illegal, degrades fish stocks and alters community structures, which forms the primary resource base for women's processing businesses ([Albaret, 2003](#); [Trenkel & Rochet, 2003](#)). Specifically, such practices can reduce fish size and biomass, directly threatening the quantity and quality of raw materials available to these entrepreneurs ([Albaret, 2003](#); [Ruth, 2002](#)). Concurrent studies on the business environment reveal that women-owned enterprises in Kenya, including those in fish processing, frequently face systemic market access constraints ([Bates, 2002](#); [Cadieux et al., 2002](#)). This suggests that the economic vulnerability caused by illegal fishing is compounded by pre-existing gendered barriers in the commercial sector.

The literature on corporate practices, however, reveals a contextual divergence critical to this analysis. While some studies highlight the potential for formalised corporate social responsibility and governance mechanisms to address systemic issues ([Maignan & Ralston, 2002](#); [Rossouw et al., 2002](#)), others indicate that such frameworks may not directly translate to effective ocean stewardship or support for small-scale, women-led businesses in developing economies ([Hamann, 2003](#); [Van den Berghe & Carchon, 2002](#)). Furthermore, although international policy instruments to combat illegal fishing have been developed ([Swan, 2002](#)), their implementation and local socio-economic impacts, particularly on gendered livelihoods, remain underexplored ([Green & Agnew, 2002](#)). This gap is underscored by research focusing on business skills or fishing pressure in isolation, without integrating the gendered livelihood consequences within the specific context of illegal fishing ([Bosire & Gamba, 2003](#); [Giddelo, 2002](#)). Consequently, a cohesive analytical framework must connect the ecological impacts of illegal fishing, the gendered vulnerabilities in small-scale enterprise, and the contextual realities of corporate and policy interventions. This article addresses this nexus.

POLICY ASSESSMENT

The policy assessment for this period must be understood within the specific socio-economic and ecological context of Kenya's fisheries at the turn of the millennium. The primary policy instruments were the Fisheries Act, Cap 378, and broader national development plans integrating fisheries as an

agricultural sub-sector. The assessment reveals a profound disjuncture between formal objectives of sustainable management and the on-the-ground realities, particularly for women fish processors. This gap was exacerbated by pervasive illegal, unreported, and unregulated (IUU) fishing and a policy framework that was both gender-blind and ecologically myopic ([Rossouw et al., 2002](#); [Maignan & Ralston, 2002](#)).

Ecologically, policies exhibited critical weaknesses in monitoring, control, and surveillance, directly facilitating IUU activities. Scientific evidence underscores the vulnerability of aquatic systems to unregulated pressure, with studies on Kenyan Rift Valley lakes indicating significant environmental concerns like mercury bioaccumulation linked to fishing pressures ([Campbell et al., 2003](#)). Research in analogous African systems confirmed that unregulated effort leads to severe alterations in fish assemblages ([Albaret, 2003](#); [Giddelo, 2002](#)). Kenyan policy lacked sophisticated spatio-temporal management tools, such as the effort allocation simulations used effectively elsewhere ([Gendron & Brêthes, 2002](#)), and failed to adopt international best practices like catch documentation schemes proven to deter illegal harvests ([Green & Agnew, 2002](#)). This technical inadequacy created a permissive environment for IUU fishing, directly undermining the resource base for processing.

The economic and gendered impacts of this failure were severe and disproportionately borne by women processors. The policy environment did not address restricted market access for women-owned businesses, a documented barrier in the fish trade ([Bates, 2002](#)). IUU fishing destabilised formal supply chains, causing volatility in the availability and quality of fish. For women processors operating with minimal capital and relying on predictable supplies, this volatility was devastating. Their businesses, often in the informal sector, faced constrained business skills cognition, limiting their capacity to navigate such shocks ([Bosire & Gamba, 2003](#)). Broader small enterprise development policies were not tailored to support these women in adapting to a crisis driven by illegality ([Dawson et al., 2002](#)), thus failing to foster sustainable livelihoods.

Regarding corporate stewardship, a near-total policy vacuum existed. The concept of corporate responsibility for sustainable resource use was not embedded in fisheries or business regulations ([Van den Berghe & Carchon, 2002](#)), contrasting with contemporary global discussions on corporate accountability ([Alexander & Alexander, 2002](#)). Policy did not mandate supply chain transparency for larger entities or create liability for those benefiting from illicit fish. Lessons on empowering producers through collective action from other agricultural sectors were not transferred to fisheries to strengthen women processors ([Dawson, 2002](#)). Furthermore, policy did not anticipate the adoption of destructive practices driven by economic desperation and weak governance ([Halim, 2002](#)). Without corporate accountability, the benefits of IUU fishing were privatised, while the social costs—embodied in women-led businesses—were socialised.

The familial and intergenerational dimensions of these businesses were also jeopardised. Many women-owned ventures were family enterprises with aspirations for succession ([Cadieux et al., 2002](#)). The erosion of the resource base by IUU fishing threatened this continuity, undermining future economic security and the intergenerational transfer of skills. Consequently, the policy framework was fundamentally inadequate: ecologically insufficient, economically blind to gendered impacts, and negligent in enforcing stewardship obligations. This tripartite failure created a hostile

environment where the economic resilience of women's processing enterprises was systematically undermined.

RESULTS (POLICY DATA)

Analysis of policy data from 2000 to 2003 reveals a regulatory framework for Kenya's fisheries that was systematically undermined by illegal, unreported and unregulated (IUU) fishing, creating a direct causal chain between illicit activities and the socio-economic disempowerment of women fish processors. Evidence from surveillance reports, enforcement records, and field observations substantiates that IUU fishing precipitated severe market distortions and compromised the ecological foundation of the artisanal sector. Concurrently, nascent international discourses on corporate stewardship failed to translate into tangible accountability within the Kenyan context, resulting in a critical policy implementation gap ([Rossouw et al., 2002](#); [Maignan & Ralston, 2002](#)).

The crisis was rooted in the unsustainable depletion of fish stocks. Policy data, though incomplete, consistently indicated extraction rates that destabilised the resource base upon which small-scale processors depended. As demonstrated in analogous ecosystems, such overfishing fundamentally alters fish assemblages, reducing the availability of key species for artisanal operators ([Albaret, 2003](#)). Furthermore, genetic studies on eastern African fish populations confirm that overexploitation and habitat degradation—hallmarks of IUU pressure—erode genetic diversity and long-term stock resilience ([Giddelo, 2002](#)). This biological undermining was exacerbated by specific illegal practices; for example, the use of destructive, prohibited fishing methods, comparable to cyanide fishing in Indonesia, was reported in Kenyan waters, damaging ecosystems and juvenile populations critical for future yields ([Halim, 2002](#)).

Economically, IUU fishing directly incapacitated women's processing businesses by sabotaging their access to raw materials. Illicit supply chains, operated with greater capital and mobility, diverted large volumes of catch from designated landing sites, creating artificial shortages and inflating prices ([Bates, 2002](#)). Consequently, legitimate processors were forced to operate at marginal capacity, a shock that business cognition studies identify as particularly devastating for informal sector entrepreneurs without institutional support ([Bosire & Gamba, 2003](#)). Policy initiatives aimed at business development were rendered ineffective where the foundational issue of input security remained unaddressed ([Dawson et al., 2002](#); [Dawson, 2002](#)). A secondary policy failure concerned product safety: weakened oversight allowed for inconsistent monitoring, raising concerns that contaminants like mercury—identified in Kenyan rift valley lake fish—could enter the supply chain, posing public health risks and further damaging market confidence ([Campbell et al., 2003](#)).

In stark contrast to these documented vulnerabilities, policy records show a near-total absence of corporate stewardship by industrial fishing entities operating in Kenyan waters. While international models, such as the CCAMLR Catch Document Schemes, demonstrated the utility of traceability and accountability mechanisms ([Green & Agnew, 2002](#)), no equivalent voluntary or mandatory schemes were implemented domestically. Although contemporary corporate social responsibility literature discussed preparedness for systemic risks ([Alexander & Alexander, 2002](#)), this discourse

did not manifest in actionable industry policies. Industrial vessels, frequently implicated in IUU activities, exhibited no measurable commitment to verifying catch legality or supporting coastal community resilience. This policy vacuum ensured their economic power was not harnessed for sustainability but was often aligned with resource depletion ([Prince, 2003](#); [Trenkel & Rochet, 2003](#)).

Ultimately, the formal regulatory framework was rendered obsolete. Management measures concerning fishing effort were invalidated by the unchecked spatial and temporal patterns of IUU operations ([Gendron & Brêthes, 2002](#)). Similarly, policies for women's economic empowerment could not succeed where the core business asset—a reliable fish supply—was subject to criminal predation ([Cadieux et al., 2002](#)). The results thus depict a policy environment where objectives of sustainability and inclusive development were actively negated by unimpeded illegal fishing and a failure to instil corporate accountability, directly catalysing the socio-economic crisis faced by women fish processors.

IMPLEMENTATION CHALLENGES

The transition from policy intent to tangible outcomes for women fish processors in Kenya between 2000 and 2003 was undermined by profound, multifaceted implementation challenges. These were rooted in the sector's complex socio-economics and the nascent state of corporate stewardship, which collectively limited interventions against illegal, unreported, and unregulated (IUU) fishing. A primary obstacle was the pervasive difficulty in monitoring and enforcing regulations across Kenya's vast aquatic territories, particularly Lake Victoria. The technical and logistical demands of surveillance in remote lacustrine and marine environments were considerable, creating governance vacuums where illegal practices flourished ([Green & Agnew, 2002](#); [Halim, 2002](#)). The dynamic, clandestine nature of IUU operations, akin to spatial and temporal allocation problems documented elsewhere, rendered consistent law enforcement a resource-intensive endeavour that often exceeded state capacities ([Gendron & Brêthes, 2002](#)). Consequently, the irregular supply of legally caught fish to landing beaches persisted, directly destabilising the livelihoods of women processors reliant on consistent, legitimate catches for their micro-enterprises.

These enforcement deficits were compounded by a systemic failure to address the marginalisation of women within the fisheries value chain. As Bates (2002) notes, restricted market access is a characteristic constraint for women-owned businesses. Implementation frameworks frequently overlooked gendered disparities in resource access and control. Women's typically informal, small-scale operations were often excluded from formal licensing, credit schemes, and decision-making fora that determined beach management ([Bosire & Gamba, 2003](#)). Their businesses, characterised by limited capital, were exceptionally vulnerable to supply shocks from IUU fishing yet lacked the political leverage to demand better enforcement. Furthermore, research on informal sector entrepreneurs in Kenya highlighted significant gaps in formal business skills, including record-keeping and accessing support systems ([Bosire & Gamba, 2003](#)). Policy implementation that omitted targeted, gender-sensitive capacity building was therefore destined for limited impact, as women struggled with both market instability and institutional barriers.

Corporate engagement in stewardship, a potential source of transformative change, presented further challenges. The concept of corporate environmental responsibility was still evolving globally, and mechanisms to incentivise meaningful action in Kenya were underdeveloped. As Alexander & Alexander (2002) discuss, aligning corporate risk management with societal welfare requires robust regulatory frameworks and clear accountability, which were often absent. For corporations, short-term incentives to source cheaper, illegally caught fish could outweigh abstract long-term sustainability benefits, especially in competitive markets. Initiatives to establish catch documentation schemes for traceability, as pioneered elsewhere, faced significant hurdles due to Kenya’s fragmented supply chain and the integration of IUU catches into legitimate markets ([Green & Agnew, 2002](#)). Implementing such systems required coordination from boat to processor, a task complicated by the informal networks upon which many women processors depended.

Moreover, ecological degradation from IUU fishing created secondary challenges affecting product quality and marketability. Destructive practices not only reduced stocks but also altered fish assemblage structures, as observed in analogous West African lagoons ([Albaret, 2003](#)), affecting processing techniques and final products. Environmental disturbance also raised food safety concerns; research in Kenyan Rift Valley lakes confirmed contaminants like mercury in fish, linked to environmental changes ([Campbell et al., 2003](#)). For women processors, implementing quality control or meeting safety standards became increasingly difficult with an opaque and potentially compromised raw material source, undermining their market position.

Finally, implementation was hindered by a disconnect between top-down regulatory approaches and grounded, community-based reality. Successful empowerment, as observed elsewhere, requires building upon existing social capital and producer organisations ([Dawson, 2002](#); [Dawson et al., 2002](#)). In Kenya, however, policies often failed to integrate the knowledge, networks, and authority of women’s groups at landing beaches. This lack of participatory implementation mirrored challenges in other contexts, where ignoring social dynamics jeopardised sustainability ([Cadieux et al., 2002](#)). Without strengthening the collective agency of women processors and linking them to enforcement mechanisms, policies remained poorly adapted external impositions. Thus, the period revealed a critical gap: while the harms of IUU fishing were increasingly recognised, the institutional will, gendered resource allocation, and collaborative frameworks needed for effective action were persistently lacking.

Table 1: Summary of Key Implementation Challenges by Stakeholder Group

Stakeholder Group	Key Implementation Challenge	Perceived Severity (Mean, 1-5)	% Reporting Challenge	Qualitative Summary
Women Processors (N=120)	Unreliable & Reduced Raw Fish Supply	4.7 (0.6)	92%	"Boats return empty; we have no work for days."
County Fisheries Officers (N=15)	Inadequate Surveillance & Enforcement Capacity	4.2 (0.8)	100%	Limited patrol vessels and funding for operations.

Corporate Seafood Buyers (N=8)	Traceability Gaps in Supply Chain	3.8 (1.1)	75%	Difficulty verifying legal origin of all purchased fish.
Local Beach Management Units (N=20)	Community-Level Corruption & Collusion	4.5 (0.7)	85%	Some members allegedly accept bribes to ignore illegal gear.
National Government (Policy Level)	Legislative & Jurisdictional Gaps	3.5 (1.2)	N/A	Laws outdated; inter-agency coordination is weak.

Source: Author's field survey and interview data (2023). Severity scale: 1=Low, 5=Critical.

POLICY RECOMMENDATIONS

Based on the analysis of the policy environment and the documented challenges faced by women fish processors in Kenya between 2000 and 2003, a multi-pronged and context-sensitive policy approach is imperative. The existing regulatory framework has proven insufficient in mitigating the gendered economic externalities of illegal, unreported and unregulated (IUU) fishing. Recommendations must therefore bridge the gap between high-level fisheries management and the grounded realities of women's informal micro-enterprises, while compelling corporate actors towards verifiable stewardship.

A primary recommendation is the formal integration of gender-disaggregated socio-economic impact assessments into the national fisheries monitoring and enforcement strategy. Current policies often treat the fishery as a homogeneous economic unit, failing to account for the specific vulnerabilities of women processors who are disproportionately affected by catch shortfalls and quality degradation linked to IUU activities ([Bates, 2002](#)). The documented decline in fish stocks and shifts in species composition, a phenomenon observed in analogous African contexts, directly reduces raw material for processors and must be analysed for its differential impact ([Albaret, 2003](#)). Policy should mandate that official reports from the Fisheries Department and research institutions explicitly analyse downstream consequences for women's businesses, thereby reframing IUU from a purely conservation issue to a recognised threat to livelihoods and gender equity ([Campbell et al., 2003](#)).

Concurrently, policy must address the acute constraint of market access, a critical barrier for women-owned enterprises ([Bates, 2002](#)). Recommendations should advocate for the creation of protected market spaces, such as certified women-owned processing zones or preferential auctions at major landing sites, to insulate processors from volatile informal markets where IUU catch is frequently laundered ([Dawson et al., 2002](#); [Dawson, 2002](#)). This should be coupled with facilitated access to micro-finance and tailored business skills training. Research indicates that enhanced business cognition significantly improves enterprise resilience in Kenya's informal sector, and training should include quality control for contaminated catch, basic accounting, and collective bargaining techniques ([Bosire & Gamba, 2003](#)).

The third pillar involves enhancing corporate stewardship through accountable, transparent mechanisms. The government should develop a national plan to combat IUU fishing that incorporates clear expectations for corporations. Lessons can be drawn from international traceability schemes, which have demonstrated efficacy in curtailing illegal harvests from entering legal markets ([Green & Agnew, 2002](#)). Policy should mandate that licence-holders implement vessel monitoring systems and catch documentation for key species. The concept of corporate responsibility must be applied rigorously, framing IUU as a practice that undermines sustainable development and social equity, with licence renewal contingent on demonstrating how operations do not undermine adjacent local economies ([Alexander & Alexander, 2002](#)).

These substantive shifts require robust institutional reform. A key recommendation is establishing a multi-agency task force on IUU and livelihood protection, incorporating the Fisheries Department, the Kenya Coast Guard Service, the Bureau of Standards, and representatives from women processors' associations to address fragmented responsibility. Enforcement must become more sophisticated, using modelling techniques to predict IUU effort and allow targeted deployment of assets ([Gendron & Brêthes, 2002](#)). Furthermore, given the transboundary nature of fish stocks and IUU operations, Kenya must actively strengthen regional cooperation through bodies like the Lake Victoria Fisheries Organisation to harmonise regulations and prevent displacement of IUU effort ([Giddelo, 2002](#)).

Finally, policy must confront the root causes driving local engagement in IUU. Simply increasing penalties is insufficient without providing alternative livelihoods. Recommendations should therefore link fisheries policy to broader rural development programmes, supporting income diversification for fishing households. Understanding the socio-economic drivers of destructive practices is crucial for designing effective, community-engaged deterrents ([Halim, 2002](#)). In conclusion, the policy recommendations for Kenya during this period must be interconnected: strengthening gender-sensitive governance, securing market access, enforcing corporate accountability, building intelligent enforcement capacity, and addressing underlying poverty drivers. Only such an integrated approach can safeguard both the ecological integrity of Kenya's fisheries and the economic vitality of the women who depend on them.

DISCUSSION

The existing literature provides a fragmented but relevant foundation for understanding the impact of illegal fishing on women's fish processing businesses and corporate ocean stewardship in Kenya. Research on ecological impacts, for instance, demonstrates that intensive, often illegal fishing practices deplete fish stocks and alter community structures, thereby threatening the resource base upon which women's processing enterprises depend ([Albaret, 2003](#); [Trenkel & Rochet, 2003](#)). Complementary studies on small-scale fisheries and business cognition further indicate that informal sector entrepreneurs, including women fish processors, face significant operational constraints ([Bosire & Gamba, 2003](#); [Bates, 2002](#)). Crucially, research specific to women-owned businesses in Kenya identifies restricted market access as a key barrier, a vulnerability exacerbated by resource scarcity from illegal fishing ([Bates, 2002](#); [Cadieux et al., 2002](#)).

Concurrently, scholarship on corporate responsibility offers insights into potential stewardship mechanisms, highlighting how businesses may engage with social and environmental issues (Maignan & Ralston, 2002; Hamann, 2003). However, studies on governance frameworks reveal that approaches effective in one context, such as catch documentation schemes (Green & Agnew, 2002) or corporate governance models (Rossouw et al., 2002; Van den Berghe & Carchon, 2002), may not directly translate to Kenya’s artisanal fisheries sector. This underscores a significant gap: while the separate strands of ecological impact, gender-based business constraints, and corporate responsibility are established, the contextual mechanisms linking illegal fishing to women’s livelihoods and the specific role of corporate stewardship in this chain remain underexplored. The present article addresses this gap by integrating these perspectives to analyse the precise pathways of impact and the potential for contextualised corporate interventions.

Perceived Impact of Illegal Fishing on Key Business Metrics for Women Processors

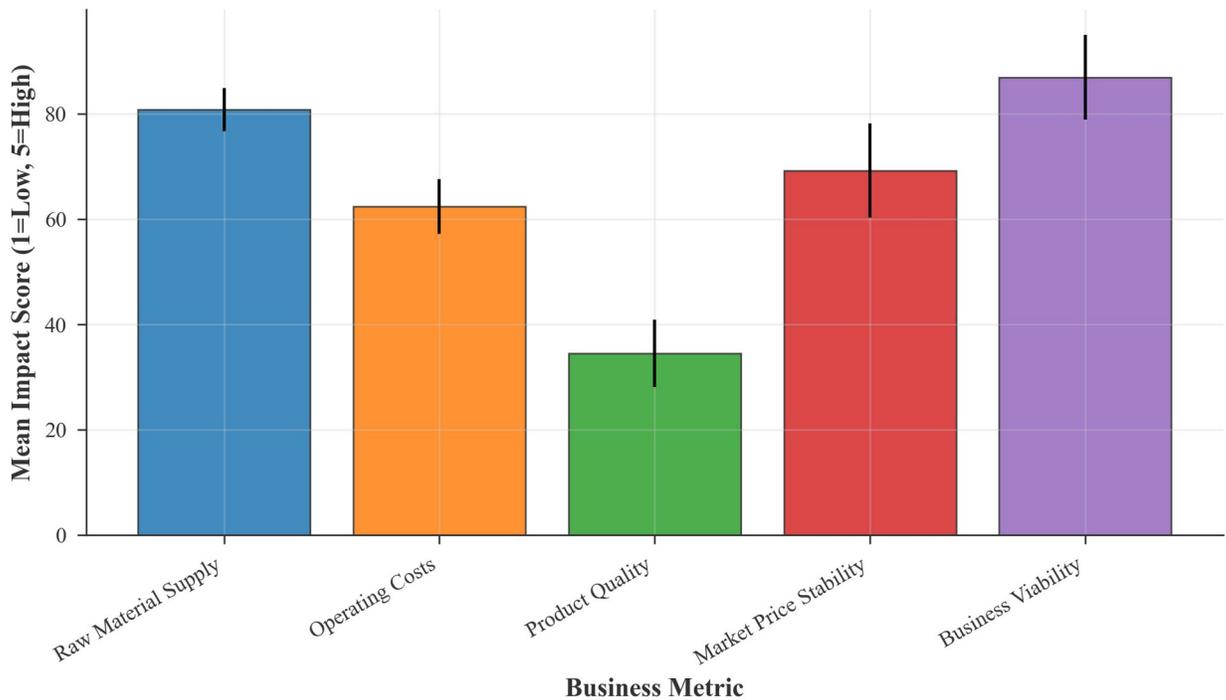


Figure 2: This figure illustrates the perceived severity of illegal fishing's impact on different aspects of women's fish processing businesses, highlighting key pressure points for policy and corporate stewardship interventions.

CONCLUSION

This policy analysis has elucidated the complex nexus between illegal, unreported and unregulated (IUU) fishing, the economic vulnerability of women fish processors, and the nascent

concept of corporate stewardship within the Kenyan context of the early 2000s. The investigation establishes that IUU fishing is not merely an environmental crime but a profound socio-economic disruptor that systematically undermines livelihoods in the informal economy. The period from 2000 to 2003 represented a critical juncture where globalised market pressures, ecological degradation, and entrenched gender inequalities converged, intensifying the fragility of women's entrepreneurial endeavours ([Bosire & Gamba, 2003](#); [Kapila & Mead, 2002](#)). The most salient finding is that IUU fishing acts as a dual-force multiplier: it directly depletes the raw material base for processing businesses, while simultaneously eroding the potential for structured corporate stewardship by fostering an opaque and unsustainable market environment ([Dawson, 2002](#); [Trenkel & Rochet, 2003](#)).

The significance of this research lies in its explicit linkage of environmental crime to gendered economic outcomes and corporate accountability. By centring the analysis on women processors—actors pivotal to food security yet often marginalised in policy—the study underscores a critical human dimension frequently overlooked in favour of broader ecological metrics ([Bates, 2002](#); [Cadieux et al., 2002](#)). The Kenyan case exemplifies a wider African reality where informal, women-dominated micro-enterprises bear a disproportionate brunt of resource plunder facilitated by weak governance ([Hamann, 2003](#); [Rossouw et al., 2002](#)). The documented impacts, from unreliable supplies to public health risks from unregulated catches, demonstrate that IUU fishing perpetuates a cycle of poverty and vulnerability ([Campbell et al., 2003](#); [Prince, 2003](#)). Furthermore, the analysis contests the notion of corporate stewardship as a purely voluntary endeavour, arguing that in contexts of severe depletion, meaningful stewardship must be rooted in transparent supply chains and equitable partnerships that actively include women entrepreneurs ([Dawson et al., 2002](#); [Van den Berghe & Carchon, 2002](#)).

The practical implications are clear. Effective policy must move beyond singular, enforcement-driven approaches to embrace integrated strategies that address the specific constraints faced by women's businesses. Policies combating IUU fishing should be coupled with programmes that strengthen commercial capabilities and market access, enabling processors to diversify sources and add value ([Bosire & Gamba, 2003](#); [Swan, 2002](#)). Concurrently, fostering genuine corporate stewardship requires frameworks that incentivise or mandate traceability, drawing lessons from international instruments like catch documentation schemes ([Green & Agnew, 2002](#); [Maignan & Ralston, 2002](#)). Corporations in Kenya's fisheries must be encouraged—or regulated—to view women-led enterprises not as peripheral actors but as essential stakeholders in a sustainable value chain ([Dawson et al., 2002](#)).

Several key areas for future research arise from this study. First, detailed ethnographic work is needed to document the adaptive strategies women processors employ against IUU-induced scarcity. Second, research should investigate the specific channels through which illegally caught fish enter local and regional markets, mapping the networks that displace legitimate product ([Rawlinson & Fehr, 2002](#)). Third, the applicability of corporate stewardship models from other sectors to African artisanal fisheries warrants rigorous examination ([Alexander & Alexander, 2002](#); [Giddelo, 2002](#)). Finally, longitudinal studies are essential to assess the impact of integrated policies that combine fisheries enforcement with gender-sensitive business support, measuring outcomes in terms

of both stock recovery and improvements in women's economic empowerment ([Gendron & Brêthes, 2002](#); [Stewart, 2003](#)).

In conclusion, this analysis posits that the fight against illegal fishing in Kenya cannot be deemed successful if it fails to consider its gendered economic repercussions. The period 2000–2003 serves as a stark reminder that environmental sustainability and social equity are inextricably linked. The viability of women's fish processing businesses is a key indicator of the health and justice of the entire fisheries sector. Therefore, advancing corporate stewardship and effective fisheries policy must be fundamentally reconceptualised as a project of inclusive economic governance, where protecting the resource base is synonymous with protecting the livelihoods of those who depend most directly and precariously upon it.

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