

Examining Policy Coherence for Advancing SDG 14.b Marine Access for small-scale fisheries in Kilifi and Kwale County, Kenya.

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Abstract - Policy coherence is essential for the successful realization of Sustainable Development Goal (SDG) 14.b, which advocates for the recognition and support of small-scale fishers (SSF) and their access rights to marine resources and markets. However, despite growing attention to blue economy frameworks in national planning, there remains a critical need to mainstream the SDG 14.b into community-level implementation and policy instruments. This paper presents a structured policy review of 11; national (3), county (2), and co-management planning (6) documents from Kenya, including the Blue Economy Strategic Plan (2023–2027), County Integrated Development Plans (CIDPs) for Kwale and Kilifi, and Joint Co-Management Area (JCMA) plans. The review focuses on two dimensions: Goal Interaction, adapted from the UN SDG Interactions Framework, and Vertical Coherence, guided by indicators derived from the Food and Agriculture Organization FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (VGSSF). The findings show that the Blue Economy Strategic Plan and JCMA plans demonstrated the strongest alignment with SSF priorities. While all documents referenced small-scale fishers, none made explicit mention of SDG 14.b, and county planning instruments fell short in integrating SDG indicators related to marine access and SSF governance. Coherence was notable in areas such as co-management, market access, and environmental sustainability, while they lacked tailored provisions for SSF in tenure rights, monitoring systems, and cross-sectoral impact assessment. This study offers recommendations to better integrate SDG 14 b across different policy instruments and governance opportunities for policy reform and research on SDG 14.b mainstreaming in fisheries and governance.

Keywords: Policy coherence, Small-scale fisheries, fisheries Access, SDG14.b, Beach Management Units.

1 Introduction

The ocean economy in 2023 accounted for approximately 7% of global trade, with a combined value of USD 2.2 trillion from ocean-related sectors such as Shipping, fisheries, and

marine energy¹ United Nations trade and development UNCTAD reports that the world's ocean economies have grown 250 per cent since outpacing the global economy, which grew by 190 per cent over the same period². With over 600 million people depending on ocean-based

activities for their livelihoods and 100 million jobs supported mainly in fisheries and coastal tourism, the Ocean Economy presents both development opportunities and a sustainability challenge³.

The sustainability of the ocean economy is under pressure from climate change, resulting in loss of biodiversity, rising sea levels, and the overexploitation of marine resources. Coastal and marine tourism alone contributes 4% of global greenhouse gas (GHG) emissions, with the broader ocean economy responsible for at least 11% of global GHG². These threats do not impact all actors equally. Small-scale fisheries (SSF) contribute approximately 40% of the world's fish catch and 44% of its fisheries' economic value⁴ and face increasing exclusion and marginalization as industrial exploitation of ocean resources intensifies.

This tension is captured by the economic concept of the “tragedy of the commons” where individual rational priorities lead to collective depletion of shared. In marine environments, unregulated access and unequal power dynamics have led to overfishing, displacement of local fishers, and ecological degradation. In Africa, almost half of all fish catches are illegal, often attributed to industrial fleets that undermine SSF access and inflate costs⁵ This has necessitated governance systems that not only regulate access but also distribute benefits equitably.

In response, governments have adopted Sustainable Development Goals as part of national priorities and conduct Voluntary National Reporting to Track progress towards achieving a Global vision. A central dimension of effective governance is the alignment of objectives,

institutions, and implementation mechanisms across sectors and levels of governance. A study on National policy coherence to sustainable development goals was conducted in Brazil's National School Feeding Programme (PNAE) to demonstrate how aligned policies can simultaneously advance multiple sustainable development goals (SDGs). The Study demonstrated when National Policies like PNAE reference global goals and put in place regulations to operationalize like the guaranteed school meals, nutrition standards and compulsory procurement from farmers Led to local level alignment and joint achievement of Goals.⁶

Government institutions also serve as a key element for achieving Sustainable goals through localization of the Goals in National Plans. The Organization for Economic Cooperation and Development (OECD Government at a Glance 2025 report finds that 63% of OECD countries have formal coordination mechanisms such as inter-ministerial committees and working groups to promote coherence across government departments.⁷ Kenya presents a good study model as it advances fisheries access through the establishment of Beach Management Units (BMUs) through the Fisheries Management and Development Act, which provides Co-management structures for government and local communities. This has improved participation and local stewardship, but it still faces challenges in coordination, enforcement, and support from higher levels of government^{8,9} This is due to low enforcement capacity national policies set ambitious goals for inclusive and sustainable fisheries, but the financial and Institutional commitments required to implement these goals at the county and BMU levels are insufficient. The

changing blue economy landscape and interconnectedness of the ocean as a resource call for a joint management approach and multi-stakeholder coordination.

This study seeks to examine policy coherence by examining policy objectives from the National level to the county and community level and how it shapes access to marine resources for small-scale fisheries in Kilifi and Kwale counties in Kenya. This paper assesses: (1) SDG 14.b Integration in policy documents. (2) Downward vertical coherence across national and county governments, and local level in key areas of marine resource access and marketing for Small-scale fisheries. The research aims to generate insights into the current SSF coordination from the National to county Government and local Initiatives, highlighting 2 coastal counties, Kilifi and Kwale.

The study examines two coastal counties for coherence, Kilifi and Kwale. The counties are well-positioned for the study as they have active co management plans and are beneficiaries of the Kenya Marine Fisheries and Socio-Economic Development (KEMSFED) project that aims to improve management of priority fisheries and mariculture and increase access to complementary livelihood activities in coastal communities. The project has SSF at its core, and the research can generate insights for enhancing the National project.

2 Material and Methods

2.1 Study Design

This study employed a structured policy review approach to examine the alignment of fisheries

governance instruments across national, county, and local levels with the principles of Sustainable Development Goal (SDG) 14.b, which promotes access for small-scale fishers (SSF) to marine resources and markets. Drawing on the implementation pathways proposed by Pressman and Wildavsky on how policy failure emerges not from poor design but the complex chains of implementation and decision making.

Each stage of approval coordination and resource transfer is independent with a different probability of success, and it is the product of the probabilities that increase the success of its implementation. The study examined coherence from National policy objectives, through County Planning instruments, to community-level instruments of practice. Two main dimensions of policy coherence were examined:

Goal interaction: evaluates how policies recognize and integrate SDG 14.b principles.

Vertical coherence: Which assesses the alignment of the policy goals across national, county, and community levels.

This design enables the identification of patterns in how SDG 14.b commitments are integrated in fisheries policies and implemented across the policy hierarchy, revealing areas of alignment or disconnects

2.2 Data Sources and Selection Criteria

A total of 11 documents were purposively selected based on relevance to small-scale fisheries, their governance level, and whether they were current or recently implemented as presented in Table 1.

Table 1 - Policy documents included in the study

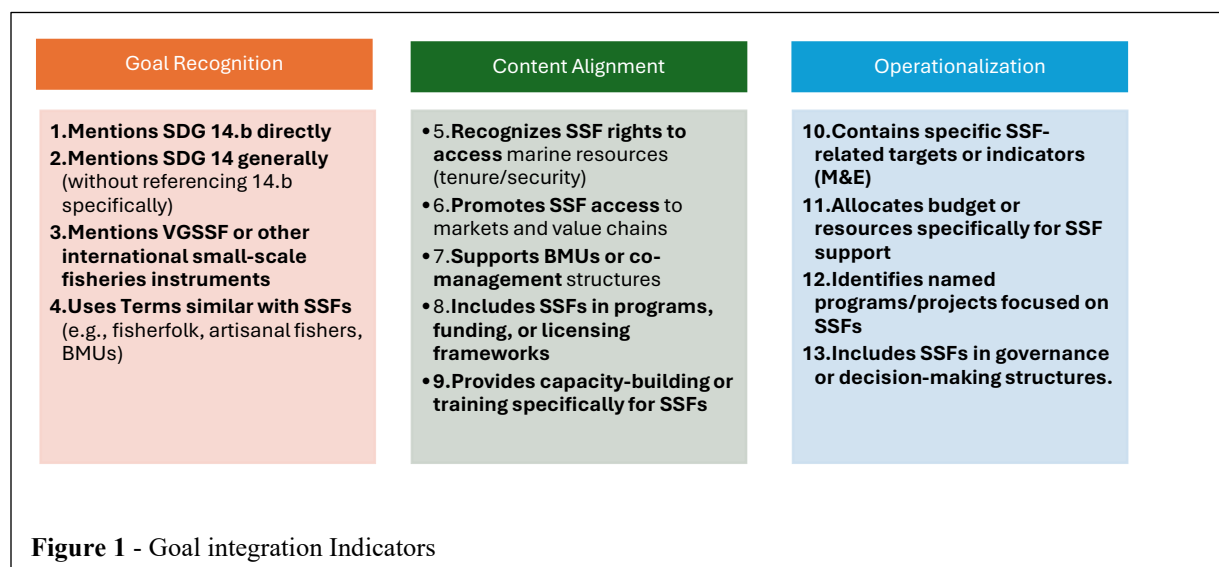
Category of policy	Policy documents
Kenya National policies	Fisheries Management and Development Act, 2016 National Fisheries Policy, 2020 State Department of Blue Economy Strategic Plan
Sub-national policies	Kwale County Integrated Development Plans 2023–2027 Kilifi County Integrated Development Plans 2023–2027
Localized governance frameworks	<i>Kilifi County</i> Tamkibo BMU Joint Co-Management Area Plan Malindi Magharini BMU Joint Co-Management Area Plan Kamamkuki BMU Joint Co-Management Area Plan <i>Kwale county</i> Chale Gazi BMU Joint Co-Management Area Plan Shimoni Vanga BMU Joint Co-Management Area Plan Mwandamu Funzi BMU Joint Co-Management Area Plan

2.3 Goal integration determination

The goal integration dimension assessed how each policy document recognizes SDG14b. The Policy contents of the policy have small-scale fisheries' specific needs and any operationalization measures for SDG 14.b. This dimension is critical because alignment at the

policy level determines the degree to which global development goals are reflected in national and sub-national strategies.

To undertake a comprehensive and structured assessment, 13 indicators were developed as in Figure 1.



These indicators serve as diagnostic tools to evaluate the three core aspects: The indicators were designed to move beyond surface-level mentions and capture depth, specificity, and intent within the documents. They enable comparison across different types of policies (strategic plans, legal frameworks, co-management plans, etc.) and levels.

2.4 Scoring Rationale

A binary scoring system (1 = present, 0 = absent) was used to evaluate each document against 13

indicators grouped into three levels of integration. The scoring framework for goal interaction was structured around three sequential dimensions that reflect how policy commitment to SDG 14.b progresses from objective to action:

Goal Recognition (Max Score: 4):

Content Alignment (Max Score: 5):

Goal Operationalization (Max Score: 4):

Each document was scored out of 13, and integration levels were classified as shown in Table 2.

Table 2 - Goal integration Scoring Rationale.

Score Range	Integration Level	Explanation
0–4	Low	Minimal or no mention of SDG 14.b principles; limited recognition, alignment and operationalization.
5–8	Moderate	Partial alignment: includes some strategic or operational content but lacks Integration.
9–13	High	Strong recognition, alignment, and clear implementation mechanisms related to SDG 14. b.

Scores were first analyzed per document, which allowed for comparison across all documents to identify documents that were high in integration vs low in integration for target 14.b

2.5 Vertical coherence determination

Vertical coherence assessed how well policies are aligned across national, county, and community levels, using indicators derived from the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (VGSSF). The review focused on five core thematic areas central to SSF access and governance. The VGSSF includes a broader range of themes, such as social

development, post-harvest practices, and disaster preparedness. This study focused on the five listed above due to their direct relevance to SDG 14 b, which centers on governance, access, and participation: The five indicators were: Fisheries tenure, Co-management, Market access, Monitoring and evaluation frameworks, and Environmental impact assessment (EIA) integration.

2.6 Scoring Rationale

A binary scoring system (1 = present, 0 = absent) was used to assess each document against five governance-related themes derived from the FAO Voluntary Guidelines for Securing Sustainable

Small-Scale Fisheries (VGSSF). Each document was scored out of 5, and coherence levels were classified as shown in Table 3.

Table 3 - Vertical coherence scoring Rationale

Score Range	Vertical Coherence Level	Explanation
0-1	Low	Key themes are poorly addressed or absent at most governance levels.
2-3	Moderate	Some themes are addressed, but coherence is partial or inconsistent.
4-5	High	Strong consistency and reinforcement of key themes across national to local levels.

To assess vertical coherence, data from the reviewed policy documents were synthesized by comparing the presence or absence of each of the five selected VGSSF-based thematic indicators

across the three governance levels: national, county, and community. The synthesis followed a comparative matrix approach structured around the vertical coherent Analysis Rationale as shown in Table 4.

Table 4 - Vertical Coherence Analysis Rationale

Component	Description
1. Thematic Alignment Across Levels	For each theme (e.g., co-management, market access), the study mapped whether and how it was addressed in each document—national, county (CIDPs), and community (JCMAs). This enabled comparison of thematic treatment across governance levels.
2. Scoring Consolidation	Each document was scored using a binary scale: 1 = theme present, 0 = theme absent. The total score per document was used to classify vertical coherence as low, moderate, or high, based on predefined thresholds.
3. Identification of Alignment Patterns and Gaps	Patterns were observed to determine coherence or gaps, with typical outcomes including: - Theme present across all three levels - Theme present in national policy only - Theme absent across all levels
4. Qualitative Support from Policy Texts	Quotes from the documents were selected to support scoring. These illustrated the framing of themes, commitment levels, and implementation provisions, adding depth to the binary scoring.

3 Results

The findings are presented with the two aspects of the study, goal interaction and vertical coherence.

3.1 Goal Interaction

Goal interaction was considered across recognition, content alignment and operationalization. The 11 policies were scored with their capacity to capture the three areas as presented in Figure 2.

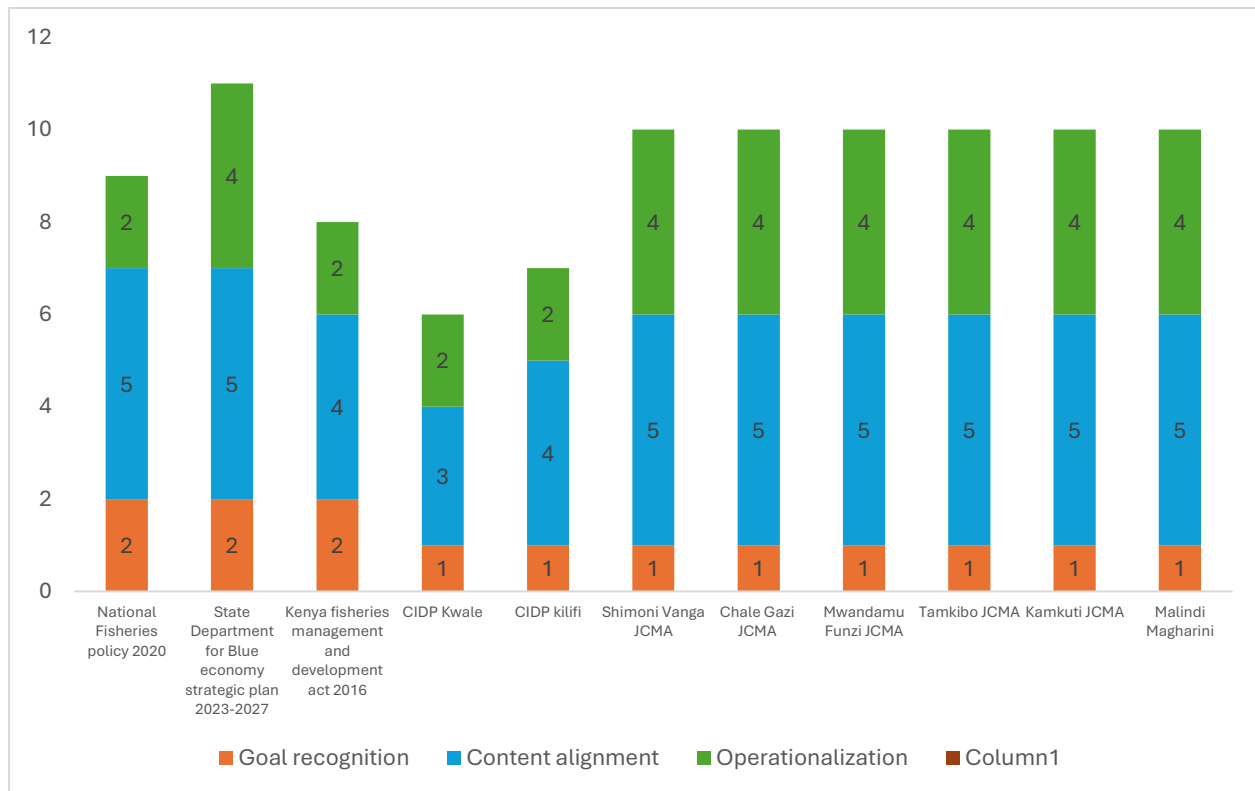


Figure 2 - Goal interaction scores across National County and Co-Management Documents.

3.2 Goal Recognition

Goal recognition was assessed based on a maximum score of 4 points, as defined in the scoring framework. The finding shows that none of the reviewed documents achieved a full score of 4/4. The highest scorers were the State Department for Blue Economy Strategic Plan (2023–2027) and the National Fisheries Policy (2020), each scoring 2 out of 4. These documents stood out for explicitly referencing SDG 14 and outlining strategic priorities related to SSF.

The Strategic Plan 2023 – 2027 directly states: “Towards the realization of the Sustainable Development Goals (SDGs), the State Department will undertake the following activities

during the plan period: Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.”

It further includes a strategic objective directly targeting SSF: “Strategic Objective SO2.3: To enhance fisherfolk and fish farmers’ capacities.”

Similarly, the National Fisheries Policy (2020) made mention of SDG 14 and emphasized improved governance and participation of artisanal and small-scale fishers. The remaining nine documents, including all County Integrated Development Plans (CIDPs) and JCMA Plans, each scored 1 point under this dimension, based solely on the presence of general references to fisherfolk or artisanal fishers. These references,

while valuable, lacked explicit alignment to the SDG framework.

Notably, both the Kwale and Kilifi CIDPs (2023–2027) did not mention SDG 14 at all, even though other sectors within the plans (e.g., health, education, climate) were mapped to SDG indicators.

3.3 Content Alignment

Content alignment was assessed on a maximum score of 5 points, reflecting the extent to which a policy document addresses the core principles of SDG 14.b. Most policy documents scored highly under this dimension, even when they did not explicitly reference SDG 14.b. This is because of their strategic objectives, planned activities, and thematic focus areas aligned with the goal's intent.

All Joint Co-Management Area (JCMA) Plans received a score of 5/5, reflecting their deliberate focus on small-scale fisheries (SSF). For example, the Tamkibo JCMA Plan outlined a concrete target: “*Overall objective: Increase in total small-scale tuna landings from 120 to 125MT with enhanced sustainability by 2028.*” This objective directly speaks to improving resource access and sustainability for SSFs, consistent with SDG 14.b’s focus on enhancing access to marine resources.

Similarly, the Kilifi CIDP (2023–2027), although it did not mention SDG 14 explicitly, demonstrated strong thematic alignment through its strategies to enhance fisheries productivity and market integration. It outlines the following priorities:

- a) Ensure sustainable exploitation of fisheries resources;
- b) Gazette new fish landing beaches;

- c) Carry out surveys to identify suitable areas for aquaculture;
- d) Provision of storage facilities;
- e) Increase funding for extension services;
- f) Venturing into commercial fishing to satisfy local demand.”

These activities reflect a clear policy commitment to SSF access (e.g., gazettement of landing beaches), value chain enhancement (e.g., storage facilities, marketing), and institutional support (e.g., extension services), all central to content alignment under SDG 14.b.

At the national level, both the Blue Economy Strategic Plan (2023–2027) and the National Fisheries Policy (2020) also scored strongly. The Strategic Plan included dedicated programs targeting SSF, including training, gear provision, and sustainable fishing initiatives, while the policy emphasized co-management and access rights. The Fisheries Act also provided for counties to develop their own county fisheries management plans.

Overall, the results show that even in the absence of explicit SDG 14 references, many policy documents are substantively aligned with their goals. This suggests a degree of goal integration, where local and national strategies reflect shared priorities in SSF development and governance.

3.4 Goal Operationalization

All Joint Co-Management Area (JCMA) Plans and the Strategic Plan (2023–2027) included clear governance structures that enabled SSF participation. These ranged from Beach Management Units (BMUs) to local co-management committees. The Strategic Plan

noted: “Active participation in the development of policies, laws and regulations on the blue economy sector.” This was also supported legally in the Fisheries Act (2016) through Section 37, which provided for BMUs to be managed in collaboration with counties. However, CIDPs did not explicitly outline how SSF participation is ensured, indicating a gap in community engagement mechanisms at the county level.

On budget for SSF, the Fisheries Management and development Act establishes a Fisheries levy trust fund “The object of the fund shall be to provide supplementary funding of activities geared towards management, development and capacity building, awards and urgent mitigation to ensure sustainability of the fisheries resource”

The Strategic Plan (2023–2027) directly referenced financing mechanisms and resource allocation. Through the work plan budget, estimates the joint co-managed plans also had financing primarily to be done through BMU membership fees “The co-management structure is financed primarily by the BMU with support from partners,” but from the government. It stated: “Funds appropriated to the national institutions for coastal zone conservation and management... revenue generated from licenses, levies, and royalties... and County Government funds appropriated by the County government for fisheries management and development.”- Kamamkuki JCMA

On Programs for SSF, the strategic plan referenced the implementation of a named program: “Fast-track implementation of the KEMFSED Project.” All JCMA Plans included detailed action plans, with clear Activities to be done. All JCMA Plans and CIDPs (Kwale and

Kilifi) included monitoring frameworks with SSF-specific indicators. For example, the Kamamkuki JCMA outlines: “Number of fishermen accessing new markets.” The Kwale and Kilifi CIDPs, while less detailed, still provided quantified targets such as: “Number of fisherfolk trained.” In contrast, the National Fisheries Policy (2020) and the Fisheries Act (2016) referenced SSF support but lacked clear project names, monitoring indicators.

3.5 Level of integration across policy documents

3.5.1 High Integration (9–13 points)

The Strategic Plan (2023–2027) achieved a score of 11, the highest overall score, demonstrating strong performance across all three dimensions. It explicitly referenced SDG 14, included a strategic objective targeting fisherfolk, named programs such as KEMFSED, provided budget information, and identified responsible institutions. Similarly, all six Joint Co-Management Area (JCMA) Plans also scored in the high range, particularly excelling in content alignment and operationalization due to their targeted design, action plans, and monitoring frameworks.

3.5.2 Moderate Integration (5–8 points)

The National Fisheries Policy (2020) and the Fisheries Act (2016) both scored 9 points as seen in figure 3 they showed clear intent to support SSF but lacked detailed implementation mechanisms or budget allocations. The Kilifi and Kwale CIDPs (2023–2027) also fell within this category.

Between the two, Kilifi CIDP scored 7 slightly higher than Kwale at 6 points. Both CIDPs included SSF-related targets under

fisheries development, such as fisherfolk training and value chain improvements. However, Kilifi CIDP provided more detailed programmatic activities, such as gazettement of landing beaches, aquaculture surveys, and investment in storage infrastructure. In contrast, Kwale CIDP offered less detail on implementation and did not mention SDG 14 or governance arrangements for SSF participation, contributing to a lower score.

3.5.3 Low Integration (0–4 points)

None of the reviewed policy documents were classified as low scoring. This suggests that all documents incorporated SSF issues to some

degree, reflecting a baseline policy awareness of SDG 14.b priorities, even if full integration was not achieved.

3.6 Vertical Coherence

3.6.1 Fisheries Tenure

The findings indicate high vertical coherence for the fisheries. As summarized In Table 5, all documents scored a point, and it was aligned across different levels of governance. The documents included provisions, either legal, strategic, or operational, that support access to marine resources by small-scale fishers.

Table 5 - Fisheries Tenure Scores

Document	Fisheries Tenure Score (1/0)	Comment
Fisheries Management and Development Act (2016)	1	Provides a legal framework supporting BMUs and co-management structures.
National Fisheries Policy (2020)	1	Affirms the need for participatory governance in resource access.
Strategic Plan (2023–2027)	1	Commitment to improving fisherfolk capacity and marine resource use governance.
Kwale CIDP (2023–2027)	1	Mentions capacity building for BMUs but lacks clear tenure language.
Kilifi CIDP (2023–2027)	1	Referring to sustainable fish exploitation and gazettement of landing beaches.
All JCMA Plans	1	Define marine zones and access protocols for SSFs via local co-management. ¹

At the national level, tenure is anchored in legislation. The Fisheries Act (2016) provides a legal basis for participatory management, stating: *“The Cabinet Secretary may... make regulations setting out standards for the management of*

beach management units established by the county governments.”

The National Fisheries Policy (2020) reinforces this by promoting community participation and local ownership in fisheries

governance. At the county level, tenure is mentioned more loosely but is still present. For example, the Kwale CIDP notes: “Continuous capacity building of BMUs for sustainable fish harvesting and management.”

Similarly, the Kilifi CIDP refers to: “Ensuring sustainable exploitation of fisheries resources” and “gazettement of new fish landing beaches.” These reflect general support for access, though they fall short of formal tenure articulation. At the community level, all JCMA Plans operationalize tenure through access rules and zoning protocols. For example, the Kamamkuki JCMA sets objectives related to spatial access and resource

control, including: “Designated fishing zones and landing sites to support local fishers.”

While the form and specificity of tenure provisions vary, the consistent scoring as seen in Table 3 demonstrates an institutional commitment to fisheries tenure for SSFs. This indicates strong thematic alignment and high vertical coherence for this theme across governance levels.

3.7 Co-management

The findings reveal that the co-management theme is a consistent policy priority across governance levels, as seen in Table 6, showing high vertical coherence under this theme.

Table 6 -Vertical Coherence Scores for the presence or absence of Co-Management theme

Document	Co-Management Score (1/0)	Comment
Fisheries Management and Development Act (2016)	1	Establishes a legal basis for community participation in fisheries management.
National Fisheries Policy (2020)	1	Supports strengthening BMUs and CMAs as participatory structures.
Strategic Plan (2023–2027)	1	Recognizes BMUs as key to collaborative governance.
Kwale CIDP (2023–2027)	1	Mentions BMU capacity building for sustainable management.
Kilifi CIDP (2023–2027)	1	Implies co-management through extension support but lacks formal clarity.
All JCMA Plans	1	Built around co-management principles; roles of BMUs and stakeholders defined.

At the national level, the Fisheries Management and Development Act (2016) provide a strong legal foundation. Section 5(g) emphasizes: “Encouraging the participation of users of the fisheries resources, and the general

community, in the management of fisheries.” This is reinforced by both the National Fisheries Policy (2020) and the Strategic Plan (2023–2027), which promote the establishment and strengthening of Beach Management Units (BMUs) and Co-

Management Areas (CMAs) as institutional anchors for participatory decision-making.

At the county level, co-management is recognized primarily through references to BMU capacity-building. For instance, the Kwale CIDP (2023–2027) commits to: “*Continuous capacity building of BMUs on sustainable fish harvesting and management.*” However, county-level policies often lack formal co-management frameworks, project structures, or clearly defined stakeholder roles, resulting in less structured commitments compared to those at national or community levels.

At the community level, all JCMA Plans demonstrate strong operationalization of co-management. BMUs are identified as primary governance actors, and the plans detail roles, responsibilities, and mechanisms for shared decision-making among local communities, county officials, and national institutions. Participation is not only encouraged but institutionalized, with co-management serving as

both a guiding principle and implementation design.

All reviewed documents scored positively for co-management, indicating high vertical coherence. However, the depth and structure of co-management provisions vary with JCMA Plans and national frameworks offering strong legal and operational foundations, while county-level references remain general and capacity-focused, without institutional clarity or role definition.

3.8 Market access

Market access is a present theme Across the Documents. This is Reflected in Table 7, which illustrates that at the national level, the Fisheries Management and Development Act (2016) provide strong policy and institutional support for value chain enhancement. Section 30 outlines training, extension, and value addition as national mandates: “*Promoting value addition and utilization of fish by-products and by-catch.*” (Section 30m).

Table 7-Vertical coherence Scores for the presence or absence of Market Access Theme

Document	Market Access & Value Addition Score (1/0)	Comment
Fisheries Management and Development Act (2016)	1	Mandates training, extension services, and value addition promotion.
National Fisheries Policy (2020)	1	Supports cold storage, fish trade, and processing interventions.
Strategic Plan (2023–2027)	1	Prioritizes market development and fisheries-based enterprise support.
Kwale CIDP (2023–2027)	1	Includes training and support for fish product development.
Kilifi CIDP (2023–2027)	1	Mentions “capacity building... on utilization of various fish products.”
All JCMA Plans	1	Have training and Post harvest

The Act also establishes the Kenya Fisheries Marketing Authority (KFMA), tasked with promoting trade, value addition, and market access for fish and fishery products nationally and internationally. This institutional mechanism offers an important platform for developing structured market pathways, although its operations are not specifically tailored to small-scale fishers.

The National Fisheries Policy (2020) and Strategic Plan (2023–2027) similarly highlight value addition, cold chain development, and enterprise support across the fisheries sector, though without targeted strategies for SSF inclusion. Both Kilifi and Kwale CIDPs (2023–2027) include commitments to training and fish product utilization. The Kilifi CIDP states: “Capacity building staff and farmers on utilization of various fish products. “While supportive, these strategies are broad and sector-

wide, lacking specific reference to SSFs or mechanisms to ensure equitable market participation. All JCMA Plans integrate market-oriented interventions into their co-management frameworks. These include Training on value addition, Postharvest support, and Initiatives to “develop and implement value addition options.”

Overly, Provisions for market access and value addition are present across all governance levels, resulting in high vertical coherence for this theme. However, most interventions are general, with limited explicit focus on securing markets for small-scale fishers.

3.9 Monitoring And Evaluation

Monitoring and evaluation (M&E) are moderately integrated across national and local fisheries governance frameworks, though with notable variation in depth and specificity. The distribution of M&E provisions across governance levels is

presented in Table 8, highlighting partial vertical coherence for this theme. At the national level, the Fisheries Act requires consideration of data in decision-making (Section 34(1)), while the National Fisheries Policy promotes general environmental data systems.

Table 8 - Vertical coherence for presence or absence of Monitoring and Evaluation Theme.

Document	Score (1/0)	Comment
Fisheries Management and Development Act (2016)	1	Broad M&E provisions (e.g., Section 34(1)) but no SSF-specific indicators or data protocols.
National Fisheries Policy (2020)	1	Mentions data collection and environmental indicators but not focused on SSF.
Strategic Plan (2023–2027)	1	Emphasizes data-driven implementation but lacks SSF-specific indicators.
Kwale CIDP (2023–2027)	0	It contains departmental M&E frameworks but does not reference SSF-specific data or tracking.
Kilifi CIDP (2023–2027)	0	M&E is mentioned generally; it lacks explicit indicators or data systems for SSFs.
All JCMA Plans	1	Include clear monitoring activities and SSF-specific indicators (e.g., fisherfolk trained).

The Blue Economy Strategic Plan (2023–2027) notably strengthens M&E through a dedicated Monitoring, Control, and Surveillance (MCS) framework and sector-specific indicators, enhancing accountability though it still lacks disaggregated SSF-specific metrics.

County-level frameworks (Kwale and Kilifi CIDPs) refer to monitoring generally within departments but do not detail any SSF-related data collection systems or indicators, suggesting weak coherence with national and local efforts. JCMA

plans are the most advanced, featuring explicit SSF indicators, monitoring roles for BMUs, and regular data collection practices, positioning them as strong operational models.

3.10 Environmental Impact Assessment

The findings show that environmental safeguards appear across all governance levels, but the degree of formal Environmental Impact Assessment (EIA) integration varies, as indicated in Table 9, JCMA plans demonstrate the strongest fisheries-relevant environmental assessments.

Table 9 - Vertical coherence score for Presence or absence of environmental Impact assessment *theme*

Document	Score (1/0)	Comment
Fisheries Management and Development Act (2016)	1	Provides for environmental regulation (e.g., closed seasons), but EIA is not outlined as a procedural or cross-sectoral tool.
National Fisheries Policy (2020)	1	Promotes sustainability but lacks specific EIA procedures or links to SSF-relevant assessments.
Strategic Plan (2023–2027)	1	Supports environmental stewardship but no formal EIA framework included.
Kwale CIDP (2023–2027)	0	Contains general discussion of marine ecosystem services but no mention of fisheries-specific EIA processes.
Kilifi CIDP (2023–2027)	0	Environmental conservation is addressed spatially via natural capital planning, but fisheries and EIA are not explicitly included.
All JCMA Plans	1	Integrate Ecological Risk Assessments (ERA) for fisheries through participatory processes and implement ecosystem-based measures like tengefu.

At the national level, laws and policies (e.g., Fisheries Act 2016, National Policy 2020) support environmental protection via seasonal closures and resource limits. However, they lack clear procedural EIA frameworks, particularly regarding cumulative impacts of non-fishing sectors (e.g., tourism, sand harvesting).

County-level plans, such as Kwale CIDP and Kilifi CIDP, address environmental conservation in broad terms. For instance, Kilifi proposes conservation zoning for natural capital and Kwale highlights marine ecosystem services. However, neither plan links these concepts to fisheries-specific EIAs, resulting in low coherence with SSF governance priorities.

In contrast, JCMA plans incorporate Ecological Risk Assessments (ERA) for key fisheries, identifying local threats and guiding adaptive co-management strategies. These

participatory assessments are operationalized through actions like tengefu zones and seasonal closures, showing practical application of ecosystem-based governance.

In conclusion, while national frameworks provide enabling policy for environmental sustainability, and countries acknowledge conservation, only JCMA plans integrate structured, fisheries-specific risk assessments. This highlights the need to mainstream localized tools like environmental risk assessment (ERA) into national and county systems to bridge gaps in vertical coherence for SDG 14 b implementation.

3.11 Level of Coherence Across Policy Documents

High Coherence (5/5): National Frameworks (Act, Policy, Strategic Plan) and JCMA Plans exhibit strong alignment with all five governance

indicators derived from the VGSSF. These documents demonstrate comprehensive integration from tenure frameworks to environmental sustainability, participatory governance, and targeted SSF support. JCMA plans stand out for their bottom-up implementation and practical M&E systems focused on SSF.

Moderate Coherence (3/5): Kwale and Kilifi CIDPs align partially, with strong emphasis on tenure, co-management, and market access. However, they lack concrete frameworks for M&E and EIA, particularly for SSFs. These gaps signal a disconnect from national-level to county planning and community-level priorities, especially in tracking progress and addressing environmental risks.

4 Discussions

4.1 Goal Integration

4.1.1 Goal Recognition

This study finds that goal recognition of SDG 14.b is most intentional and structured at the national level, while county and community-level frameworks demonstrate a more implicit or functional acknowledgement of small-scale fisheries (SSF) priorities. National instruments such as the Blue Economy Strategic Plan (2023–2027) and the National Fisheries Policy (2020) explicitly reference SDG 14 and outline strategic objectives aligned with its targets, particularly enhancing fisherfolk capacities and promoting sustainable resource use.

However, this clarity and explicitness decline at the county level, where the SDG is not explicitly attached to plans. Instead, county development plans such as those for Kilifi and

Kwale incorporate priorities around fish production, marketing, and conservation, but fail to directly link these strategies to the global framework of SDG 14.b. This detachment creates gaps in vertical policy coherence and limits accountability for global development commitments at the subnational level.

It is important to note that County Integrated Development Plans (CIDPs) are not fisheries-specific policies but rather broader multi-sectoral planning instruments. However, the council of governors have placed them as the key instrument for SDG localization, hence the absence of direct SDG 14 b references is interpreted as a failure of vertical coherence. CIDPs are designed to provide overarching frameworks for county priorities for 5-year periods. Their prioritization of specific SDGs may indicate greater focus on those areas.

The study reinforces the view that national commitment alone is insufficient for effective SDG localization. As emphasized by Biggeri and Ferrannini¹⁰ and¹¹ OECD, adapting global and aspirational strategies to local conditions requires a territorial approach that recognizes the heterogeneity of priorities across governance levels. Localization is critical for integrating global goals in county plans that reflect context-specific challenges and opportunities.

4.1.2 Content alignment

The study finds that content alignment with the Sustainable Development Goals (SDGs) is strongest where policy instruments are either highly specialized, such as national fisheries laws, or deeply grounded in community practice, as seen in JCMA plans. This observation reflects broader research that demonstrates policy effectiveness and coherence improve when

strategies are focused, tailored, and closely connected to local realities, supporting smoother implementation and accountability^{7 12}. Specialized laws not only address specific SDG targets effectively but also draw upon sectoral expertise, while community-driven plans benefit from local ownership and practical engagement.

However, county-level development documents often lack sufficient integration and cross-sector coherence, limiting their potential impact. Jan Anton van Zanten and Maria Putintseva's 2025 global study found that only about 20% of countries have policies that actively support SDGs, with many national frameworks containing inconsistencies that can undermine overall progress.¹³ These findings underscore the urgency of bridging policy gaps through enhanced integration mechanisms and alignment efforts. Recognizing these challenges, the United Nations has developed dedicated frameworks and toolkits to support countries in localizing the SDGs, encouraging the use of results-based planning and intergovernmental coordination to translate broad national commitments into actionable, coherent strategies at local levels¹⁴

4.1.3 Goal operationalization

The findings suggest that effective operationalization of SDG 14.b at the community and national levels depends heavily on clear governance structures, participatory frameworks, and dedicated resource allocation. The JCMA Plans and the Blue Economy Strategic Plan illustrate how embedding localized governance tools like BMUs, and co-management committees supported by legal mandates and financing mechanisms translates policy goals into actionable programs with measurable outcomes.

This confirms academic insights, such as Munaretto emphasis on the necessity of locally adapted governance and measurable indicators to make global goals meaningful in practice,¹⁵

4.2 Vertical coherence

4.2.1 Fisheries Tenure

Fisheries tenure is the basis of SSF access to marine resources. The study revealed that the policies provide an institutional foundation across national and community levels, with policy and legal instruments clearly articulating access frameworks and co-management arrangements. This multi-level recognition, particularly through national laws such as the Fisheries Management and Development Act (2016)¹⁶ and the operational structures embedded in Joint Co-Management Area (JCMA) plans, is key to strengthening local stewardship, enhancing legitimacy, and reducing user conflicts.

This interpretation aligns with broader literature emphasizing the role of tenure security in promoting sustainable small-scale fisheries. As noted in a global systematic review by D'armengol, legal recognition of user rights, when supported by participatory governance structures, is associated with both improved ecological outcomes and social equity.¹⁷ Similarly, the establishment of Territorial Use Rights in Fisheries (TURFs) in Chile not only enhanced biodiversity but also increased community resilience and economic returns.¹⁸

However, despite this alignment, county-level policies (e.g., CIDPs) show limited articulation of tenure arrangements, often lacking direct reference to access rights, conflict resolution mechanisms, or social protections. This absence

may weaken vertical coherence by creating implementation gaps or uncertainty at the meso-level, where coordination and service delivery are expected to occur.

Literature shows that formal tenure arrangements alone are insufficient without effective enforcement, institutional support, and continued community engagement¹⁹. In the Kenyan context, this is particularly relevant given that resource constraints, political dynamics, and uneven capacity across counties may hinder the realization of tenure benefits.

4.3 Co-management

Co-management stood out as a cornerstone of small-scale fisheries (SSF) access, consistently recognized as a principle of governance across multiple levels. Its broad uptake reflects a growing commitment to participatory governance, where fishers and local communities are seen not merely as beneficiaries but as legitimate co-decision-makers in resource management.

This alignment is significant in reinforcing the shift from top-down control to shared authority, a move long championed in small-scale fisheries literature as essential for building trust, legitimacy, and stewardship by embedding co-management into national legal frameworks and local planning tools. Kenya demonstrates a normative convergence with global best practices for inclusive governance.

However, co-management as a principle must be matched by operational clarity, resource allocation, and institutional support to move from symbolic participation to meaningful influence. Studies in similar contexts caution that recognition alone is not sufficient effective co-

management demands defined roles, legal enforceability, and regular engagement platforms²⁰.

In Kenya's case, the widespread recognition of co-management provides a strong conceptual foundation for advancing SDG 14.b. Yet, its full transformative potential will depend on ensuring institutional depth, particularly at the county level, and resourcing mechanisms that empower fishers to participate actively and equitably in governance processes.

4.3.1 Market access

SDG 14.b explicitly calls for the provision of access to markets for small-scale fishers (SSF), positioning market integration not just as an economic objective but as a rights-based development goal. The Kenyan policy landscape demonstrates recognition of this imperative, with national, county, and community-level documents all highlighting marketing and value addition as priorities. Notably, the Fisheries Management and Development Act (2016) go further by establishing the Kenya Fisheries Marketing Authority, institutionalizing market development as a policy function.

This reflects commendable alignment with the global sustainable development agenda. Reports on the state of aquaculture³ affirm that when SSFs are supported with structured market access and value chain services, including cold storage, training, and branding, they experience improved livelihoods, reduced vulnerability, and increased participation in the blue economy.

Further, case studies in Tanzania have demonstrated how cooperatives and collective action mechanisms serve as crucial enablers for

market access among SSFs, particularly women, by enhancing their bargaining power and reducing transaction costs.²¹

However, despite this policy recognition, the analysis reveals a lack of SSF-specific tailoring in implementation. Many of the market interventions identified are broad in scope and not disaggregated by scale or gender. While the presence of a fisheries marketing authority is a strategic asset, its effectiveness in delivering equitable market opportunities depends on deliberate efforts to reach SSFs, particularly through decentralized programs, inclusive value chain strategies, and local organizational strengthening.

4.4 Monitoring and evaluation

Monitoring and Evaluation (M&E) is a key element of good governance and essential for realizing SSF access. To effectively assess the state of fisheries and track governance processes, clear, context-specific indicators are necessary. This study found that among all reviewed documents, only the JCMA plans, and the Sustainable Blue Economy (SDBE) framework explicitly incorporate SSF-specific indicators. These localized mechanisms offer a promising foundation for targeted monitoring and tracking of progress under SDG 14.b.

The interpretation of M&E systems must also consider whose knowledge and priorities they reflect. The Made in Africa Evaluation approach challenges the decontextualized and externally framed focus often found in conventional M&E systems by emphasizing relationality and understanding of knowledge grounded in social, ecological, and cultural context.²² SSF-specific

indicators should reflect community priorities and promote equity in access.

Empirical studies²³ demonstrate that robust and participatory M&E frameworks not only enhance ecological tracking but also serve as tools to promote resilience and equitable governance in natural resource management. Thus, while JCMA-level efforts are encouraging, there remains a significant gap in integrating localized, equity-sensitive indicators across county and national M&E systems²⁴

4.5 Environmental Impact Assessment

Environmental Impact Assessment (EIA) has been widely accepted as a fundamental sustainability practice within governance frameworks, particularly for small-scale fisheries (SSF). EIA plays a crucial role in ensuring the preservation of marine resources by evaluating and mitigating potential environmental harms before they occur. Given that SSFs often employ ecologically sensitive harvesting methods, involving fishers in management interventions such as seasonal closures as highlighted in this study represents a positive and inclusive approach to conserving marine ecosystems for sustained access.¹⁹

This participatory and ecosystem-based management aligns with the toolbox of climate adaptations for small-scale fisheries, a framework to guide fishing communities, decision makers and other stakeholders to anticipate implementation needs and find the right tools to adapt to future climatic conditions and prevent negative socioeconomic and ecological impacts.

5 Conclusion

This study examined policy coherence for advancing SDG14.b IN Kilifi and Kwale counties through reviewing policy and planning documents across three governance levels. The review assessed the integration of SDG 14 and vertical coherence in prioritizing SDG 14.b, focusing on fisheries tenure, access, and market provisions in Kwale and Kilifi counties. The findings reveal that from the national to county levels, there is significant coordination in recognizing small-scale fisheries (SSF) as core stakeholders and their rights and contributions are affirmed. This alignment reflects a positive institutional foundation for advancing SSF priorities within Kenya's Coastal governance.

However, challenges remain in securing SSF effective access to marine resources and markets for SSF. In County Integrated Development Plans (CIDPs), Fisheries initiatives are often embedded within broader agriculture and livestock agendas, limiting dedicated focus to SSF. The study therefore recommends the establishment of flagship projects specifically for SSF within CIDPs to better address their unique needs. Although Joint Coastal Management Areas (JCMAs) are relatively new, their incorporation of SSF-specific indicators linked to broader strategic goals offers an important monitoring tool to evaluate SSF status and inform future actions.

In conclusion, this study highlights that sustained policy coherence is vital for realizing the objectives of SDG 14.b. Strengthening alignment between national frameworks and county-level implementation mechanisms is essential to ensure that SSF are not only recognized in policy but effectively supported through responsive, inclusive, and adaptive governance. Embedding coherence as a

continuous and iterative process rather than a one-time alignment can enhance the translation of strategic intent into tangible social, economic, and environmental outcomes for SSF communities. Future research should explore the lived experiences and implementation of the policies to SSF livelihoods.

6 Limitations

The study is based on a review of policy and planning documents, which may not fully capture practical implementation challenges or the lived experiences of small-scale fishers.

7 Recommendations

To strengthen policy coherence across governance levels and Ensure Access to resources and markets for SSF this study proposes Integrated actions for Government. Counties should establish SSF Flagship Initiatives linked to National Projects within the strategic plan within the CIDPs. These should address market access, resource sustainability, and social protection, ensuring SSF priorities are not overshadowed by broader agricultural objectives. In Addition, the National and County governments should Scale up successful local initiatives such as Value addition of fish and SSF cooperatives by formally integrating them into county and national policies. This will enhance bottom-up alignment, build on proven models, and better reflect SSF realities at higher governance levels. Finally, invest in developing and harmonizing SSF-specific monitoring indicators across policy documents and frameworks. Regularly link JCMA and county-level indicator data to strategic objectives in county plans, enabling adaptive management and evidence-based decision-making for SSF access, sustainability, and equitable development.

Data Availability

The policy documents reviewed for this study are publicly accessible through county government portals, the Kenya Fisheries Service, and the Ministry of Blue Economy and Maritime Affairs. Supplementary materials and analytical notes can be made available by the authors upon reasonable request.

Author Contributions

NO conceptualized the study, coordinated data collection, and led the writing process. **MK** provided methodological guidance, critical review, and editorial input. **JO** contributed expert feedback and review during manuscript development. All authors have read and approved the final version of the paper.

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Conflict of Interest

The Authors declare there are no conflicts of Interest associated with this work.

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