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Navigating 'mobility regimes' through land-sea patron-client networks: The case of Fante's shark fishery in West Africa☆

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ABSTRACT

With growing concerns over declining shark populations, states, NGOs and regional bodies are increasingly intensifying fisheries and conservation measures to protect endangered migratory shark species along the West African coast. Together, these measures impact the transboundary fishing and trade mobilities of nomadic fishery communities, which are fundamental for their livelihoods and fishery traditions. Through the lens of social navigation and mobility regimes, we examine how the Fante fisherfolk navigate these fisheries, conservation and border regulations via strategies enabled by their patron-client relations. First, we show how these regulations together constitute an interconnected mobility regime that extends across land and sea. Second, we show how these socially-embedded patronage relations can by themselves constitute a counter-mobility regime that mitigates the effects, evades and reshapes dominant mobility regimes. These findings contribute to ongoing debates on the mobility regimes by showing how mobile fishery practices challenge attempts to fix and securitise them through increasingly securitised national and regional borders across land-sea.

1. Introduction

Cross-border mobilities are crucial to the livelihoods and historic traditions of many indigenous mobile fishery communities worldwide. In West Africa, the nomadic Fante fisherfolk, originally from Ghana, are known for their regional, cross-border coastal mobility (Marquette et al., 2002; Odotei, 1990). These movements have largely been seasonal and circular, following the migratory patterns of pelagic fish species and exploring opportunities for fish trade from and to Ghana (Marquette et al., 2002). As early as the 1950s, Fante fisherfolk moved from Ghana to the coasts of Senegal and Gambia – together referred to as Senegambia – and Mauritania (Marquette et al., 2002). The limited fishing and fish trade by other communities at the time created opportunities for the Fante to expand their mobility through customary arrangements that governed rights and access to places and resources. While settling in various countries, they maintained their Ghanaian kinship, lineage and ethnic relations, as well as traditional institutions such as chieftaincy and family (Overå, 2005). These relations and institutions organised the labour of fishing and trade while sustaining their regional mobility.

In Senegambia, the nomadic Fante fisherfolk primarily specialised in catching sharks, rays, and other elasmobranchs (Diop and Dossa, 2011; Sall et al., 2021), largely due to demand for dried shark meat (called kako) in Ghana. Shark fisheries have long been practised by the Fante and other coastal communities in West Africa. In Ghana, kako has been an important source of nutrition for many since the 1930s (Sall et al., 2021). To maintain catches and meet growing market demand for kako, the nomadic Fante fisherfolk, from the 1950s, extended their shark fishing from the Senegambia to Mauritania and Guinea-Bissau, targeting unexploited migratory shark stocks (Deme et al., 2022; Sall, 2007). During the 1960s, Kako mainly reached Ghana by sea, but from the 2000s onward, land-based routes emerged (see Fig. 1) – by 2010 fully replacing sea transport – and becoming the preferred channel under growing regional trade integration through the Economic Community of West African States (ECOWAS). Today, many across the Fante community in Senegal, Gambia and Mauritania are dependent on shark fishing and trade for their livelihoods (Sall et al., 2021).

These mobile shark-based fisheries have, however, become increasingly difficult to sustain (Moore et al., 2019). Migratory shark populations are declining along the Senegambian coast due to increasing fishing pressure and climate impacts such as rising sea temperatures

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(Dulvy et al., 2021; Leurs et al., 2021; Sekey et al., 2022; Barange et al., 2014; Perry and Sumaila, 2007). This has led to stricter regulations and conservation measures – including Marine Protected Areas (MPAs) and prohibitions on catching specific shark species – with fishers, including the Fante, the risks of arrest, confiscation of fishing gear, and heavy fines for violations (Bräutigam et al., 2016; RAMPAO, 2024; Selkani, 2022). Simultaneously, Fante trade mobilities of dried shark meat (called Kako) over land between Senegambia and Ghana face bureaucratic controls despite ECOWAS promoting free mobility, regional integration and trade (Fieldnotes 1; Ayilu et al., 2016; Rouillé et al., 2024). Fante fish traders face unapproved fees, harassment, and the detention of goods, particularly heightened in periods of rising political tensions and insecurity in parts of the West African region (see Ayilu et al., 2016; Ayilu and Nyiawung, 2022). Together, these regulatory pressures have put the viability of mobile Fante shark fishing and trade livelihoods under pressure.

In this paper, we examine the ways the Fante navigate these emerging challenges and regulations surrounding shark fisheries. In doing so, we make two contributions. First, we show that the challenges experienced by the Fante fisherfolk must be understood as interconnected across sea and land. Most studies in the literature often treat these separately – focusing either on regulations governing fishing at sea (Liu et al., 2024) or on land-based policies restricting cross-border fish trade (Ayilu et al., 2016; Rouillé et al., 2024). Our findings demonstrate that these regulations constitute an interconnected mobility regime spanning land and sea, shaping where, when and how transboundary shark fishing and trade occur. Second, we explore how patronage-client relations among Fante fisherfolk – through which powerful actors (patrons) provide resources, protection, and other forms of support to clients in exchange for goods, services, and loyalty (Ferrol-Schulte et al., 2014; Miñarro et al., 2016) – constitute what we label a 'counter-regime' to these regulations, enabling the Fante to navigate regulations across sea and land. While such relations often generate debt particularly for clients, for many Fante fisherfolk, they remain a vital means of sustaining livelihoods amidst fines and confiscation of both fish and fishing gear.

The paper is structured as follows. The following section introduces the concepts of navigation and mobility regimes and explains their use for this study. We describe the mobile ethnography methodology used to trace Fante transboundary fishing and trade networks and movements. We then present the empirical material detailing the land-sea mobility regimes and navigation strategies organised by the Fante community through patronage networks. In the final part of the paper, we discuss and conclude on the implications of the case of these mobile land-sea fishery networks, mobility regimes, and their navigation strategies for the fisheries mobilities literature.

2. Understanding navigation of mobility regimes in marine fisheries

The terrestrial logic of states establishing fixed boundaries to control the movement of people, spaces and resources, has permeated the management of fisheries, conservation (Agnew, 2013; Barrena et al., 2022; Peters, 2020). This logic has been manifested through tools such as spatial planning and Marine Protected Areas (MPAs), often used by states to regulate land-sea spaces, people and exploitation of fish populations. As a result, the management of fishing practices at sea and trade practices across land by states and non-state actors has become increasingly securitised, when mobile practices are framed in national and global priorities as indicative of threats such as illegal, unregulated and unreported fishing (IUU) fishing and, as such, contributing to insecurity or the decline of fish stocks (Beseng and Malcolm, 2021;

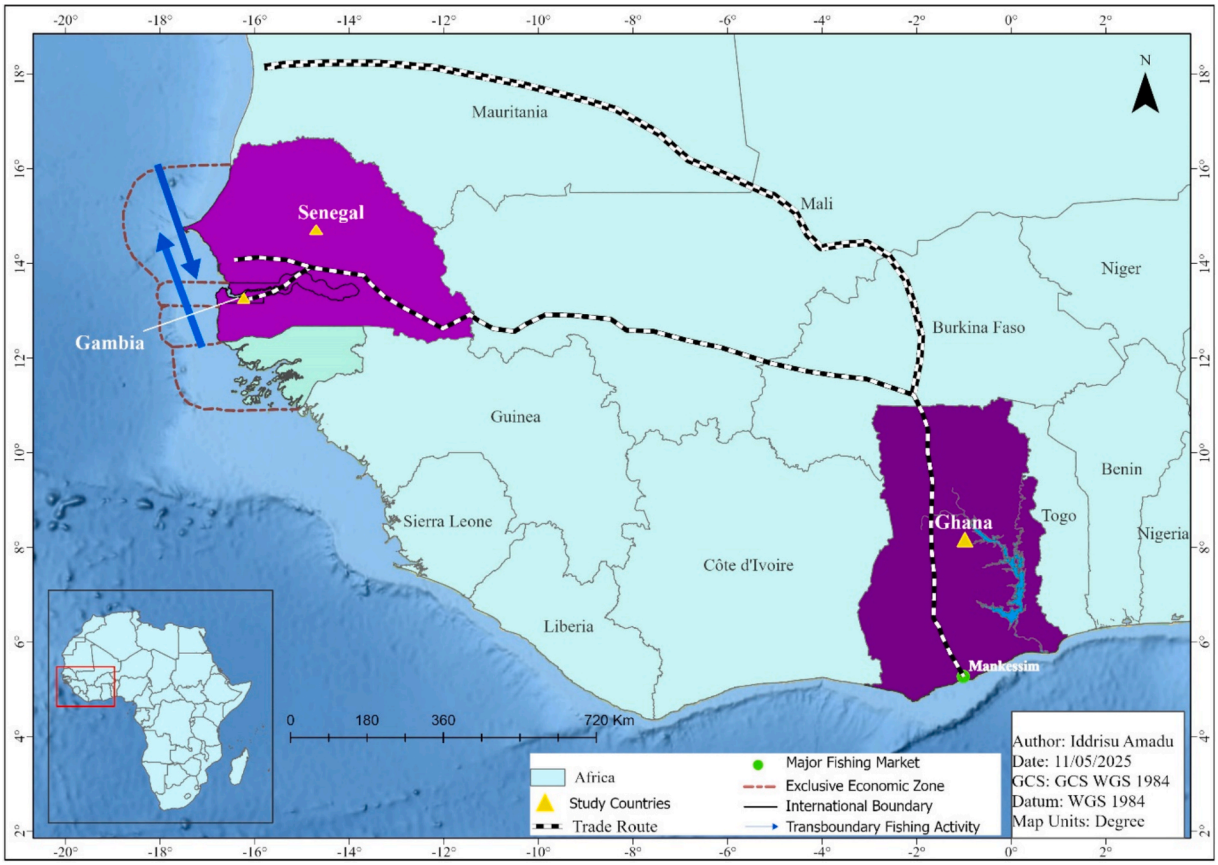

Fig. 1. Map showing study sites and the transboundary fishing and trade routes in West Africa (Note: Routes are for illustrative purposes and do not entirely represent precise mobility channels of the Fante fisherfolk).

Schapendonk, 2020; Song et al., 2020; Walther, 2022). The rise in these regulatory controls that often tend to delegitimise and control transboundary fishing and trade constitutes what we label a 'land-sea mobility regime'.

Mobility regimes consist of actors, relations, institutions, and rules that collectively define, (il)legitimise, facilitate, and/or control mobilities (Merriman, 2012; Schwarz, 2020; Sheller, 2018), such as fishing or trade mobilities (Zickgraf, 2022). As mobilities scholars emphasise, these regimes are not comprised of individual actors and institutions but of relations, rules and informational flows that together structure how, where and when people and materials become mobile or immobile (Boas et al., 2022; Schapendonk, 2020). Beyond state-based institutions (laws, policies and information) and technologies (e.g. surveillance systems), mobility regimes also include powerful regime-making actors such as NGOs, media and scientists (see e.g. Paprocki, 2018). In West Africa, for instance, international NGOs like the Regional Partnership for Coastal and Marine Conservation have been influential in designing, implementing and monitoring Marine Protected Areas (Mulongoy, 2016).

Yet, as scholars in the field of mobilities have argued, these dominant mobility regimes are constantly being contested (Tazzioli, 2018; Barrena et al., 2022; Iwuoha, 2025). For example, migrants have continuously adapted and manoeuvred through imposed border regulations that seek to control and restrict their movement (Schapendonk, 2020). Following Vigh's (Vigh, 2009a, 2009b), such an ongoing process of orienting and manoeuvring can be understood through social navigation. Developed in the context of chronic crises and instability, Vigh's notion of social navigation analytically captures how individuals move through social environments that are characteristically in motion themselves (Vigh, 2009a, 2009b). The concept focuses attention not only on the spatial aspect of movement through tightening conditions, but also the temporal and relational aspects of adaptive practices, including how individuals continuously (re)orient their trajectories as the conditions and power relations around them keep shifting (Nielsen and Vigh, 2012). It emphasises agency within constraints, including the capacity of individuals to develop strategies through innovation, creativity, improvisation, and the negotiation of complex relations involving both facilitating and controlling actors (Schapendonk, 2020), in ways that enable them to move through uncertainty, crises, and restrictions.

In small-scale fisheries, patron-client relations constitute one of the most important socially embedded relations through which navigation strategies of fisherfolk in response to various kinds of constraints, crises, and uncertainties are enacted. Patronage relations in fishery communities are typically socio-economic relations that involve patrons (e.g., traders/middlepersons or financiers) and clients (mostly, fishers), and characterised by mutual interdependencies and power hierarchies that shape fishing and trade practices (Platteau and Abraham, 1987; Roberts et al., 2022; Ruddle, 2011). These asymmetric relations often extend from historical social and cultural ties of fishery communities, such as ethnicity, and are characterised by the provision of economic support, promotion of market or fisheries access, mutual exchanges, and reciprocity of loyalty (Drury O'Neill et al., 2019; Johnson, 2010). While they are traditionally embedded in the proximate social networks of a community, they have also been shown to expand to include other communities, groups, and influential actors who act as brokers, controlling and facilitating the process (Platteau, 1994; Rouillé et al., 2024).

There are a range of examples that show how patron-client relations both restrict and enable small-scale fishers and traders to adapt to changing conditions, including restrictions imposed by broader institutional and governance systems. For instance, patrons have been shown to shape the decision of fishers and traders by exerting significant influence over the production activities of clients (Fabinyi, 2009; Ferrol-Schulte et al., 2014; Kusumawati and Visser, 2014). They shape the decisions of their clients on the type of fishing gear, as well as the fish species they target, and the prices of fish, which can, in turn, influence where fishing occurs and fish are traded. For instance, patron-client relations can enhance the capacity of fishers to expand fishing effort, potentially leading to excessive fishing pressure on fish stocks (Miñarro et al., 2016). The conditions set by patrons may also coerce client fishers and traders to act in contravention of conservation measures (Miñarro et al., 2016; Nurdin and Grydehøj, 2014; Djelantik and Bush, 2020; Roberts et al., 2022). Yet in other cases, patrons have been shown to enable and facilitate the capacity of fishers and traders to adjust to economic and environmental pressures, including declining fisheries (Johnson, 2010; Drury O'Neill and Crona, 2017). They have even been shown to enable social and environmental outcomes by changing the terms of incorporating fishers in value chains and engaging in collaborative forms of fisheries management (Wentink et al., 2017; Djelantik and Bush, 2020).

Patron-client relations can thus offer a range of strategies through which fisherfolk navigate dominant mobility regimes, including borders, fisheries and conservation regulations. Beyond dominant mobility regimes such as state structures of control, scholars have also highlighted the role of intangible, socially embedded relations such as patron-client relations that steer mobilities by influencing relations, networks, norms, values, and attitudes around who can(not) access capital, resources and markets (Dahinden et al., 2023; Salazar and Schiller, 2014).

Building on this scholarship, this paper examines how such socially-embedded relations, particularly transboundary patron-client relations of the Fante fisherfolk, intersect with, and at times counter the dominant land-sea mobility regime shaping fishery mobilities. Specifically, we study how and to what extent the patron-client relations of the Fante fisherfolk constitute a counter-regime to the dominant land-sea mobility regime governing their transboundary shark fishing and trade. We show how this counter-mobility regime enables fishers and traders to socially navigate restrictions imposed on them at both land and sea, enabling them to continue fishing, production, and trade activities.

3. Methodological approach

A mobile ethnographic approach was used, supported by secondary data sources, to study the transboundary fishing and fish trade mobilities of the Fante fisherfolk, the land-sea regimes with which they intersect, and the networked navigation strategies they employ.

A mobile ethnography approach focuses on how people, information, and material elements such as goods and commodities move across space and time, capturing the dynamic and often complex processes of movement (Boas et al., 2020; Schapendonk, 2020). Such a mobile perspective enables us to study seemingly fixed spatial boundaries by understanding how they interplay with mobilities on an everyday basis, as well as examine the agency of mobile people to actively navigate and reshape such land-sea regimes (Blok, 2010; Schwarz, 2020). In practice, this involves following the mobile subject, joining their journeys and in doing so, carrying the ethnographic enquiry or meeting at specific sites after journeys, regularly communicating and following up with them to understand their experiences (Boas et al., 2020).

We started fieldwork for this study in March 2023 with an initial visit to Senegal and Gambia. This was followed by two field visits by the first and second authors, including one in Ghana, where markets for shark meat are concentrated, and in February 2024 in Senegal. To better understand the interdependencies in the patronage networks of the Fante shark fishery, between December 2023 and February 2024, we (the first and second authors) positioned ourselves at the two nodes of the transboundary network – Senegambia and Ghana traders, where clients and patrons are, respectively, based. Starting from different sites simultaneously, we enriched our fieldwork by observing in real-time how the transboundary shark fishing mobilities and trade flows of these specific routes are intertwined and continuously shape each other, actively enabling and facilitating the navigation of state-based land-sea mobility regimes.

During fieldwork, we had informal conversations,open-ended interviews and participant observations in many different places, such as

state fishery departments, the homes of fisherfolk, fish landing, processing and distribution sites. Our participants included seven (7) leaders of the Fante community; eleven (11) fishers; eight (8) Kako processors, middlepersons (middlemen and women) and traders; and three (3) actors of state and non-state institutions, including media, fisheries, and conservation departments. Interviews were conducted in Fante and English by the first author and with the assistance of local interpreters for the second author. We initially inductively identified five (5) themes related to the navigation strategies, and with further follow-up interviews and analysis, these were narrowed into three (3). Considering the sensitivity of the topic – particularly its connection to fishery practices deemed illegal and the use of strategies to navigate state regulations, we ensure confidentiality by using pseudonyms instead of the real names of our participants and places.

Contact with Fate fishers followed Fante traditions, including paying homage to traditional leaders for approval and consent. The position of the first author, who is a Ghanaian with previous working relations with the Fante community, helped build rapport and trust. At the same time, we remained reflexive about our affiliation with a European institution and the non-Ghanaian nationality of the second author. We were critically attentive to how these dynamics shaped participants willingness to share or withhold information. The first author led initial community engagements to foster familiarity and trust. We shared and compared notes daily, discussing how best to approach the sensitive topics. We also reflected on how our affiliations informed participants' expectations and responses during interviews. These positional dynamics shaped our interpretations, combining an insider empathy for fisherfolk's experiences with an outsider's analytical perspective linking observations to broader scientific debates.

Finally, to complement the fieldwork, we reviewed relevant traditional academic literature, policy documents and other publications by local, regional and international organisations such as the Economic Commission of West African States (ECOWAS), Sub-Regional Fisheries Commission, WorldFish, Food and Agriculture Organisation, International Union for Conservation of Nature, the Regional Partnership for the Conservation of Coastal and Marine Zone and Institute for Biodiversity and Protected Areas.

4. Land-sea mobility regimes

The prevailing state-led land-sea mobility regime that nomadic Fante fisherfolk are subject to consists of an interconnected mix of regulations governing borders, fisheries, and shark conservation, which intersect their activities at both land and sea.

The nomadic Fante community have long been classified by West African states as 'foreigners', a status that subjects them and their Kako trade flows to bureaucratic regimes, limiting their access to trade routes and transboundary markets (Duffy-Tumasz, 2012; MacLean, 2010). The daily mobile fishery practices – whether in the places of dwelling, fish landing and processing sites, which were negotiated and accessed largely through customary arrangements – encounter multiple checkpoints and borders (Ayilu and Nyiawung, 2022; Bouet et al., 2018). Crossing land frontiers often involves informal 'fees', harassment, and detainment of goods (Ayilu et al., 2016; Rouillé et al., 2024). Trade and mobile livelihoods of nomadic groups are recognised under the ECOWAS Protocol on Free Movement of Persons, Residence and Establishment (Protocol A/P.1/5/79), the Common External Tariff System (ECOWAS, 2017), and various bilateral agreements (Adepoju, 2015; Schöfberger, 2020; Weinrich, 2023). Nevertheless, the Fante's trade mobilities remain constrained by state controls, further intensified by political crisis and militarised borders in parts of the region (Iwuoha and Mbaegbu, 2021; Ummer and Bolaji, 2023).

As part of a broader trend to assert sovereignty, state controls have been extended from a predominantly land-based regime in the 1960s to marine territories. This has included new access regulations to fisheries that were considered 'open access' and managed under customary arrangements and local community stewardship (Okafor-Yarwood, 2015; Troadec, 1983). State-imposed fishing license regimes also increasingly differentiate access to fisheries based on the nationality of boat owners, fishing crew, and fishing vessel type (Deme et al., 2022). For example, in Guinea-Bissau, the classification of small-scale fishing licenses by the nationality of vessel owners means nationals with boats powered by a 15HP engine pay 84,000 CFA, while foreigners pay 175,000 CFA for the same license (Cross, 2014). For the nomadic Fante fisherfolk, who hitherto state control largely accessed the region's coastal waters under customary arrangements, now have to contend with the requirements for multiple licenses and higher costs in order to maintain fishing journeys to the coast of Guinea Bissau.

Furthermore, the use of nationality to categorise fishers in fishing access regulations is integrated into conservation measures by states as part of broader regional and multilateral agreements (see Humane Society International, 2016) aimed at protecting endangered species, such as sharks. Following the adoption of the regional strategy to create the "Ecoregion of West Africa", the Regional Network of Marine Protected Areas in West Africa (RAMPAO) in the region (see Wabnitz et al., 2008), state institutional frameworks have been strengthened to manage newly created MPAs as well as those formerly established by local communities and customary rules that are now 'recognised by states' (RAMPAO, 2024; Selkani, 2022). Local and regional non-governmental actors, such as the Partnership for Coastal and Marine Conservation and Tiniguena, among others, with the support of international partners including the Blue Action Fund and WWF, have been actively involved in supporting MPA creation and management initiatives.

The exclusion of nomadic fishers is now embedded within national and international state regulation. For instance, the formalisation of existing and new locally managed areas, especially in Sub-Regional Fisheries Commission member countries, increasingly recognises "local communities" (Merceron et al., 2022) while excluding nomadic fisherfolk such as the Fante. Alongside varying restrictions on shark fishing, access to marine protected areas is also now limited to local fishing communities – for example, in the National Park of Park D'arguin Reserve in Mauritania (Dia et al., 2023; Trégarot et al., 2020). The Bijagos Blue Project in Guinea-Bissau, which integrates sharks and rays into fisheries regulations and marine protected area management (Urok, Orango, and João Vieira e Poilão), explicitly frames migrant fisherfolk, including the Fante, as "external influences … exploiting resources illegally without following traditional rules" (Blue Action Fund, 2023; p1). Conservation regulation has strengthened institutional and technical capacities for monitoring, control, and surveillance, including surveillance of protected areas by national and regional marine patrols (Merceron et al., 2022). These measures overlap with broader regional securitisation measures – such as the ECOWAS-EU Improving Fisheries Governance project and ECOWAS Coordinated Maritime Presences – that expand joint surveillance against IUU fishing.

5. Navigating the land-sea mobility regime through patron-client relations

In response to the increasingly securitised dominant land-sea mobility regime governing shark fishing and trade, the nomadic Fante community navigate restrictions and maintains their shark fishery livelihoods and tradition via patronage relations. In the first two navigation strategies, patronage relations enable fishers to counter the mobility regime by enabling Fante fisherfolk and patrons to spread their financial and regulatory risk and switch roles between fishing and trading to maintain their livelihoods. The third navigation strategy of diversifying networks enables Fante fisherfolk to move beyond countering to influencing and reshaping the dominant mobility regime in their favour.

5.1. Risk spreading

The spreading of risk entails a mutual shifting of costs/burdens, uncertainty, and resources, such as credit and information, between patrons and clients in order to buffer or mitigate risk that threatens the collective functioning of their transboundary shark fishery practices (Drury O'Neill et al., 2019). The spreading of risk has been a common practice in small-scale fisheries (Nunan et al., 2020; O'Neill and Crona, 2017) and other mobile livelihoods (see Boas et al., 2022). The following shows two ways transboundary patronage networks enable the spreading of risk in response to stricter land and sea-based mobility and fishing regulations – as well as overfishing and climate change.

First, patrons have expanded and diversified their role, moving beyond providing financial support for basic fishing supplies such as fuel, to enabling fishers to cover fines in order to fish in highly securitised waters (Fieldnotes 2). Additionally, patrons pass on information on the location of recent catches, patrol boats and checks at landing sites, which enables them to determine where and how they go fishing. For example, Nyarku, a Fante fisher in Senegal who has owned and operated a fishing boat since 2002, explained how information on shark catches, market information helps him to plan how to allocate his fishing efforts at sea:

> "When there is a lot of fish [Kako] in the market, they [the patrons] let us know. When there is no fish too, we know, and that is when everybody wants to get their Kako to the market because there are quick returns."

He also explained how patrons facilitate their fishing journeys by paying fines when fishers are caught:

> "Sometimes fishers will tell traders [patrons] that they have an amount of fish in the canoe when they are arrested in Bissau and need money to pay fines and secure release. The trader [patron] will send the money to get them released, and when they arrive [in community X], sometimes the fish is not enough…"

As these quotes illustrate, fishers and their patrons regularly stay in touch via regular phone calls and WhatsApp communications, sharing information, including how to navigate the risk of arrests at sea. When arrests and fishing materials are confiscated, patrons are informed about the cost of fines imposed and the quantity of fish catch in order to make a decision on whether or not to sponsor their release. As explained by Nyarku, having a trustworthy and loyal patron in Ghana has become crucial for navigating increasingly securitised waters, including arrests, fines, and confiscation of fishing materials:

> "Now everyone [patrons] is careful with their money. No one wants to bail you if they don't trust you because some fishers will tell you that they have enough fish catch to compensate for the fine…but you send them the money, and they pay off the fine and get released, they come back to the shore with a little quantity of fish that can barely compensate for the money from patrons."

Some patrons provide support to fishers whom they trust in situations when the market value of fish caught cannot compensate for the cost of imposed fines that must be paid to secure the release of fishing materials. Fishers also sometimes negotiated with multiple patrons in these situations, especially when the fish catch is not enough to settle fines or when patrons are not willing to allow them to carry forward their work until their debt has been paid in subsequent fishing trips (Fieldnotes 3). This has also led to a shift to a more 'anticipatory' credit provision, in which funds for the payment of potential fines form part of the budget for the organisation of fishing trips.

Second, fishers and patrons have expanded the informational practices that enable them and their clients to strategically spread financial risk and burden from a focus on individual countries to the broader region through their control over the Kako trade. At the Kako distribution market in Mankessim in Ghana, we observed the facilitative role of these emerging regional networks in tactically providing resources to fishers at high risk of bankruptcy to enable them to continue their transboundary shark fishing journeys and for them to supply Kako. For patrons, it is just as crucial for the shark fisheries to persist, given that they are equally dependent on them for trade. Patrons are, as such, constantly weighing information on the sources with the most frequent supply of Kako and the changing regulatory challenges faced in these countries, in which they support shark fishing expeditions of their client-fishers with credit. The information collected in these fishing networks is essential for patron traders to plan and organise their network of clients (Fieldnotes 4).

For example, Ajoa – a patron – started trading Kako with her mother 30 years ago, through whom she has inherited not only the trade but a network of clients from Senegal, Gambia, and Mauritania. Ajoa used to focus on her clients in Senegambia until the recent declines in shark catches and the securitisation of the transboundary fishing grounds in the waters of Bissau. For Ajoa, this meant expanding her provision of information and credit exchanges from Senegambia to Mauritania in order to maintain her trade flows. Ajoa is now regularly in touch with her wider network of clients, continually assessing the "climate" across the region in terms of crackdowns by marine patrols, shark catches, and fines. Based on this information, as well as the market demands from her retailers, Ajoa decides on where to channel their credit to maintain a regular supply of Kako. Ajoa explains:

> "I only deal with clients I trust. Before I send money, I need to hear from my clients, whether here, I am getting three or four bags, and there, I am getting that. About four years ago, my brother connected me to a client in Senegal who promised to send me five bags of Kako and demanded advance credit worth three bags. He could not get even three bags to send me and defaulted until he left Senegal to work in Guinea."

The expansion of these networks by Ajoa means that her financial risk has been spread to clients across the region. Multiple markets mean that the financial risk of fines is mitigated throughout the trading network. As summarised by Ajoa: "By prioritising in this manner, patrons maintain their relations with multiple clients—enabling them to strategically channel resources and exert more control over mobilities at sea".

Taken together, these examples show how patronage networks enable the Fante community to navigate the securitised land-sea mobility regime by brokering information and finances necessary to plan and circumvent bans on shark fishing, MPAs, or IUU surveillance measures Patrons operating through their wider regional Fante fishery community networks, in exchange for shark meat, enable fishing by absorbing financial costs (through credit loans) from fines and by providing resources to facilitate the ongoing navigation of regional MCS measures, MPAs, and other conservation measures related to trade.

5.2. Switching roles

In small-scale fisheries, traders are typically influential intermediaries in fish provisioning, with expansive networks of client fishers through whom they aggregate and channel fish to distant markets (Crona et al., 2010; Pauwelussen, 2015). In this manner, they also act as patrons. They facilitate fishers' access to various forms of services and markets in exchange for a regular supply of fish catches. Through these exchanges, patron-traders shape markets and significantly control fishers' engagement with the sea, including fishing activities at sea. In Fante fisheries, traders are traditionally women involved in fish processing and trade who play this intermediary role. However, this case also shows how patronage relations enable fishers, who are predominantly male, to switch to intermediary trading roles, as part of navigation strategies in response to an increasingly securitised land-sea mobility regime.

The switching of roles helped fishers navigate the shutdown of the

Fante shark fishery in Mauritania in 2003. These measures included seasonal closures and restrictions on shark fishing in Mauritania, particularly within the Banc d'Arguin National Park, which restricts access to only local Mauritanian fishers – criminalising Fante shark fishing activities that cross these maritime and protected areas (see Trégarot et al., 2020). Additional measures aimed at fishing gears (drift gillnets), primarily utilised in the Fante shark fishery, subsequently halted the shark fishery (Dia et al., 2023; Diop and Dossa, 2011). As a result, many Fante fishers transitioned to the intermediary traders through their local and broader regional patronage network, linking the shark landings of local Mauritanian fisherfolk to a network of patrons who trade Kako in Ghana.

To demonstrate how this role-switching from fisher to intermediary traders works in practice, we take as an example the case of Egya-Attah, a key distributor of Kako in Mankessim, who initially worked as a fisher in Mauritania, supplying Kako to his patrons in Ghana. Egya-Attah has long been involved in the distribution of Kako from Mauritania and has many clients (retailers) who meet him at his distribution site to take delivery of their share of his consignment. On market day, which happens every Wednesday, his storeroom is filled with his client retailers, who hand over cash from the sales of previous consignments and take more bags of Kako. Egya-Attah has been doing this for almost ten years now. In a conversation, he reveals his over ten years of work as a fisherman in Mauritania:

> "It has been a long time since I left Mauritania. I worked for over ten years before moving back to Ghana when we had to stop fishing there. Many people have left their… You don't need to be there before you run the business. For me, I sent my son there. He buys the fish for us. If I were there, the business would be better than it is now because I know a lot more people than my son."

Egya-Attah relocated to Ghana and became a trader after the Fante shark fishery was halted by new conservation regulations in Mauritania. Patronage relations in the fishery facilitated this switch by providing access to trade network, credit, and market information typically controlled by patrons. By becoming a patron himself, by building a network of client retailers, Agya-Attah distributes Kako received from his son in Mauritania. His son travels daily across fish landing sites, providing credit to clients (local Mauritanian fishers, see Fieldnotes 5), aggregating shark catches for processing, and helping organise the shipment of Kako to Ghana. Switching from fishing to trading enabled Agya-Attah and many other Fante fishers to sustain their mobile shark-based livelihoods despite growing state surveillance. Patron-client structures thus do not merely reflect asymmetric power in access and control over resources, but also shape how Fante fishers navigate new risks of state regulation at sea (Pedroza, 2013; Thủy et al., 2019).

Switching from fishing to intermediary traders – and even patrons themselves – has enabled many Fante to navigate restrictions and bureaucratic border controls that constrained the trade flows of Kako. Since Mauritania discontinued its membership of the ECOWAS, vehicles, including trucks used in the transport of Kako that are registered in countries with no formal trade agreement with it, face extra border control procedures that have slowed down trade mobility. Fante fishers who have made this switch have played a crucial role in navigating these constraints. According to Salley, a kako distribution agent at Mankessim, these intermediaries not only mobilise and foresee the drying of shark meat into kako but also facilitate its transportation across the Mauritanian border. According to Salley, a Kako distribution agent in Mankessim:

> "They [middlepersons in Mauritania] hire a locally registered truck, making it easy to go through the border controls in Mauritania. When they get to Mali, we [traders in Mankessim] organise another truck to bring here."

This transhipment, as described by Salley, materialises through the coordinated efforts of both middlepersons and their patrons who pay the cost of hiring both Mauritanian registered trucks and those of ECOWAS member countries that transport Kako to Mankessim. It shows that the navigation of restrictions across land routes is enabled by the patronage network of the Fante community through the switching of roles.

These examples reflect a broader trend in which the patronage networks of the Fante enable fishers to switch from fishing to acting as middlepersons as a navigation strategy in response to regulations that tend to securitise the seas and tighten border controls in the region. By relying on a network of fishers who have transitioned into middlemen, the Fante fisherfolk have sustained the flow of shark meat from local fishers in countries where Fante shark fishing practices have been halted, thereby maintaining their broader Fante regional fish trade network.

5.3. *Diversification of networks*

Diversifying from historically embedded patronage networks to relying on influential regime actors, including the media and state-based institutions, has become another means used by Fante fishers and traders to counter the prevailing land-sea mobility regime. Transboundary fishing and trade among the Fante have traditionally depended on patronage networks that entwined fishing and trade, sustaining their mobile fishing livelihoods. However, the ability of these traditional relations to navigate growing restrictions has been challenged by both declines in the shark populations and growing surveillance and control by West African states. Consequently, the community has actively enrolled government officials and reporters into their networks, who facilitate their mobility under tightening restrictions.

First, Fante patrons have developed networks with media actors who can negotiate fishers' access to places of dwelling and fishing grounds and advocate for the reclamation of their rights in relation to violent targeting by security controls and marine patrols. This is well illustrated by the experience of Tawiah, our interlocutor, during fieldwork in Senegal. Tawiah is a journalist from Ghana who has lived in the Gambia since 2011 and works as a reporter for TV and radio stations in both the Gambia and Ghana. Tawiah's influence in the media has grown over the years through his sensational entertainment and talk shows. As the following examples will show, this made him a focal point for leaders of the fisher (clients) association seeking to elevate the community's advocacy to achieve a response from authorities while continuously, on an ad-hoc basis, negotiating and mediating with security controls and marine patrols across land-sea spaces.

Tawiah recalled the first time he was called in 2019 to support the Fante fisherfolk by M, a leader of community X , Senegal. Isaac had heard about Tawiah and his media influence from community elders in the Gambia during a funeral ceremony. According to Isaac, contacting Tawiah for support in their advocacy emerged as a way the community could get the attention of authorities after their complaints about violent attacks on their fishers by marine patrols on the coast of Bissau yielded no results. In this way, community leaders across different places in the region share pressing challenges in social and cultural events as well as connections to influential actors. Upon M's invitation, Tawiah recalled the exchange as follows:

> "When they called. They said they wanted the president [of Ghana] to hear about the issue. So I said okay. I went and made the report. I shot videos, pictures…everything and did interviews, and I sent all to Ghana, a radio/TV station called X."
> "I also sent the information to one minister. You know, in our work, we sometimes call ministers on the talk shows. So, we have their contacts."

The connection with Tawiah, therefore, gave more weight to the issue, reaching authorities in Ghana and sparking a diplomatic response that eventually led to compensation payment for the attack by the Bissauan government. Tawiah's bond with and influence on the community's responses to unfolding challenges have since grown significantly.

Second, as Fante shark fishing and trade has become increasingly obstructed, Tawiah's role has expanded to negotiating bureaucratic security controls, especially when deemed to curtail Fante fisherfolk's rights to movement. He illustrated this with an recent incident that shows how, by connecting to Tawiah, the Fante community seeks negotiated outcome that sustain their mobility:

> "They [leaders of the community] told me the police had arrested 43 young men in X and sent them to community Y. The police alleged that they had just arrived in the community by sea and did not have documents. When I got there. I showed them my reporter card and told them the young men had ECOWAS ID cards, and I asked the community leaders to get the cards. The police released them…"

The roles of this diversifying network of the community also extend to cross-border Kako traders across the region. The Fante fisherfolk, through their fishing and trade associations, for example, have built ties with the Ghana Shippers Authority (GSA) and the customs and security control authorities. In doing so, the Kako Traders Association in places like Mankessim are able to establish and leverage the services of the GSA to facilitate the flow of Kako.

To illustrate, the leaders of the Kako Traders Association in Mankessim have since 2021 established contact with the GSA to support them to negotiate border controls over Kako across the region. As Adu, the leader of the association, narrated:

> "In 2021, we encountered so many issues with the customs controls. The fees and other charges at many state borders in the region have increasingly shot up. This is why we decided to reach out to the authorities in the GSA for an intervention…We met with them and they explained the new changes and some lawful procedures we needed to take to facilitate the trade…"

With the support of the GSA the Fante have been able to enroll other key actors to facilitate their transboundary flows of Kako. The GSA helps them engage relevant agencies, including government revenue and customs agencies, to regularly inform the association's leaders about new border regulations and procedures, and also intervene in unlawful practices that hinder trade. For instance the GSA organised a training workshop in 2023 for leaders of the Kako Traders Association in Mankessim to inform them of new import protocols and also enable them to establish new ways of connecting with authorities. This led to the establishment of a dedicated mobile phone line and an e-platform to file complaints smoothly regarding constraints related to border regulations (Ghana Shippers Authority, 2023).

Even though leaders of the association have no experience with the electronic platform yet, contact via mobile phone and regular engagements have enabled them to navigate the bureaucracies along the trade corridor and provided an opportunity for maintaining and expanding the network. For instance, as narrated by Adu:

> "Two of our trucks were detained by border security in Burkina and Guinea on the allegation that they carried contraband products. We first reached out to a parliamentarian here in Ghana, who directed us to contact the police headquarters. When we filed a report, there was a quick response via Interpol that got one of the trucks released…"

In the face of changing socio-economic and political challenges, particularly the security context of the region and associated regulatory responses, including restrictions on cross-border mobility by states, connections to these networks play an important role in the ability of the Fante community to navigate and maintain its Kako trade flows.

These examples of networks with powerful actors and institutions together illustrate another crucial aspect of the land-sea navigation strategies through regime-making. It involves diversifying the Fante fisherfolk's governing networks beyond patronage relations to include influential actors, with an aim to reshape the securitised land-sea mobility regime that currently steers shark fishing and trade across the region.

6. Discussion

The results illustrate the various ways in which Fante fisherfolk, via their patron-client relations, navigate the increasingly securitised land-sea mobility regime in West Africa. We argue that these patron-client relations can be considered a counter-mobility regime in its own right – though one still entangled with the prevailing dominant mobility regime. Seen as such, patron-client relations are fundamental for Fante fishers and traders to manoeuvre around restrictions to their mobilities across land and sea in order to sustain their transnational livelihoods. The following elaborates how patron-client relations – as a counter-mobility regime – enable navigation strategies, and how this regime challenges the key spatial logics of control and surveillance by states over shark fisheries in West Africa.

The results show how Fante patron-client-based strategies use risk spreading, role switching and diversification of networks to navigate the securitised land-sea mobility regime. Each of these navigation strategies involves what we call 'mechanisms' of re-orientation, re-distribution and repositioning within the dominant land-sea regime (Table 1). First, patrons and clients redistribute financial and regulatory risks – such as multiple fines, license fees, and the confiscation of fishing equipment – in order to maintain shark fishing and trade. Second, fishers reorient and reposition themselves from clients to middlepersons within the patronage network as a way to evade restrictions of a securitised land-sea regime seeking to protect shark species. Finally, the diversification of networks shows the extension of the patronage network by connecting to institutional and media actors and reshaping the mobility regime to their advantage.

Building on Vigh (Vigh, 2009a, Vigh, 2009b), we argue that these social navigation strategies demonstrate how patronage relations *collectively* constitute a counter-mobility regime that enables individuals to "move in a moving environment" (p. 420) in order to persist with fishing and trading practices along the West African coast. As summarised in Table 1, this counter-regime enables fishers and traders to operate in spite of the limits imposed by the dominant regime by mitigating ongoing impacts, evading constraints altogether, or shaping the regime to enable existing or adapted mobility. For instance, Fante traders have diversified their networks through their association to include with institutional actors such as the Ghana Shippers Authority. Doing so has enabled them to benefit from initiatives such as a dedicated hotline for quick response, which facilitates the flow of kako across borders. Similarly, fishers utilise their relationships with influential media and local actors to advocate and negotiate the release of fishing crews intercepted by marine patrols for MPA incursions and shark fishing. Seen as such, all three patronage-led counter strategies can be conceptualised as an ongoing relational process constantly shaped by intersection regulations and relations that enable 'subversive' mobilities to unfold across space. As these relations of patronage extend, their influence on the dominant mobility regime expands, that is, mitigating its risk and facilitating subversive mobilities (see Fig. 2).

Table 1
Navigation strategies of the Fante fisherfolk through the counter mobility regime of patronage network.

Navigation strategy	Key mechanism of the counter-mobility regime (patronage network)	Effect on the dominant mobility regime
Risk spreading	Spreading and redistributing financial and regulatory risks and burdens	Mitigating its ongoing impacts to enable the capacity to maintain mobility
Role switching	Re-orientating and switching roles to evade and avoid regulatory risks	Evading constraints on mobility altogether
Diversification of networks	Extending relations into powerful regime actors through advocacy and collaboration	Shaping the regime to enable existing or adapted mobility

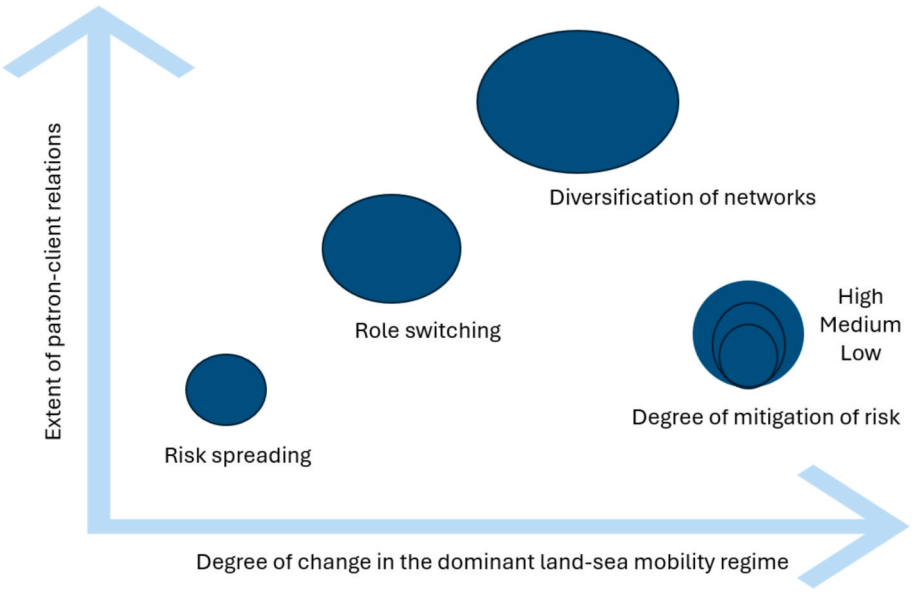

Fig. 2. Influence of patronage-led counter-strategies on the dominant land-sea mobility regime.

In this regard, we argue, this patronage network operates as a counter-mobility regime that seeks to reshape and thereby becomes potentially co-constitutive of the dominant land-sea mobility regime it seeks to influence. This role of patron-client relations extends the current understanding of mobility regimes, which emphasise diverse actors that cumulatively steer mobilities (Boas et al., 2022; Glick Schiller and Salazar, 2013), but tend to focus on state, international organisations, NGOs or scientific actors (e.g. Boas et al., 2022; Barrena et al., 2022; Paprocki, 2019). It also, following Sheller (2018: 14), extends debate on how increasingly marginalised groups sustain "subversive mobilities" by resisting, overturning, or escaping "mobile governance, territorialization, and securitisation". Our results show how patronage relations empower fishers and traders to oppose pressures towards immobilisation and control and maintain mobilities that sustain increasingly subversive exploitation of sharks. They furthermore show that fishing and trading across borders is not fully determined by the regulatory measures governing access to maritime spaces and fisheries or cross-border trade policies, but also by relations of dependence and reciprocity through the patronage-led counter mobility regime.

The relational ontology of this counter-mobility regime also challenges the spatial fixation of state-led marine governance. Most fisheries and conservation regulations have long focused on territorial logics of states in governing resources and mobilities (Voyer et al., 2017; Peters, 2020). However, territorial measures, such as marine protected areas, are often challenged by the fluid mobility of people, materials, information, and finance, which cannot be fixed or contained within Cartesian boundaries (Steinberg and Peters, 2015; Pauwelussen, 2015; Bush and Mol, 2015; Acton et al., 2019; Barrena et al., 2022). Our results show how patronage relations counter the spatial logic of territory by enabling fishers and traders to navigate through and between state jurisdictions across land and sea. For instance, transboundary shark fishing of Fante fishers is increasingly met with a securitised regime at seas, while the flow of shark meat across land routes faces restrictions, harassment and informal fees at multiple checkpoints. Building on Steinberg and Peters (2015), any attempt to govern ocean-based activities, such as shark fishing, confronts the relational nature of patronage networks that entwine 'fishing' and 'trading' practices across sea and land and across national jurisdictions (see Steinberg, 2013; Barrena et al., 2022). Border controls and conservation measures are thus actively countered by patronage relations that enable fishers and traders to spread risk, switching roles, and diversifying their network to evade and/or actively oppose securitised jurisdictions.

Finally, the navigation strategies of the nomadic Fante community can also be understood as practices of resistance to the ongoing illegitimisation of their fishery practices, which are historically grounded in customary arrangements governing coastal waters and fisheries in West Africa. As outlined at the start of the paper, the nomadic Fante fisherfolk have navigated the region's coast for centuries through patronage, kinship and cultural ties that recognised, supported and benefited from regional mobilities (see Overå, 2005). It was only after the emergence of post-colonial states and the shift toward state-led governance organised around nationality and place-based rights, exclusive economic zones and access licenses that a land-sea mobility regime that the legitimacy of historical mobilities became increasingly questioned than ever. Through these strategies enabled by their patronage relations, including risk spreading, role-switching and diversification of networks, the Fante community is not only countering and reshaping the regime, but these navigation strategies are also means of asserting their claims that non-territorial fisheries and trade are legitimate. The community further situates these claims of customary legitimacy within the right to mobility and the establishment of livelihoods enshrined in ECOWAS. Yet the region's shark populations, upon which these livelihoods depend, are declining, raising legitimate concerns about ways to effectively balance the pressing conservation needs with safeguards for mobile fishery livelihoods. This tension underscores the need to rethink current governance approaches in ways that engage with the relations through which fishery mobilities take shape, rather than seeking to fix them via territorial and institutional boundaries.

7. Conclusion

In this paper, we examine how the Fante fisherfolk navigate these fisheries, conservation and border regulations via strategies enabled by their patron-client relations. First, we demonstrate how these fisheries, conservation and border regulation together constitute a dominant mobility regime that extends across land and sea. By illustrating how this dominant land-sea mobility regime is navigated through counter-strategies facilitated by patron-client relations across fishing and trade networks, our analysis shows how these relations in themselves operate as a counter-mobility regime seeking to uphold shark fishery and trade mobilities—that remain controversial given the declines in shark populations—by countering, evading, but also influencing the dominant mobility regime. This broadening of the conceptualisation of a mobility regime that has largely been focused on dominant institutional,

regulations and infrastructures (see Sheller, 2018; Paprocki, 2019; Boas et al., 2022), in turn, also extends the analytical perspective of social navigation, which has been about the adaptive nature of the agency of people moving within an environment that is itself in flux (Vigh, 2009a, Vigh, 2009b; Schapendonk, 2020). Our analysis demonstrates how the Fante manoeuvres the shifting regulatory environment (dominant land-sea regime) by not only evading it but also actively reshaping it through patronage relations to enable transboundary shark fishing and trade. Navigation in this context can therefore be understood as an ongoing process consisting of regulations, relations, strategies, counter-strategies and places, revealing the tensions between mobile fishery livelihoods tied to endangered shark species and governance measures.

By situating our findings within marine governance, the paper contributes to ongoing debates that critique spatial fixation approaches, which are based on terrestrial logics that seek to impose boundaries in marine spaces, overlooking the inherently fluid relations and materiality that constitute these spaces (Steinberg and Peters, 2015; Voyer et al., 2017; Peters, 2020). We show how these relations tend to be overlooked, here, patronage relations that enable counter-strategies that not only evade the imposed boundaries but also actively reshape the institutionalised structures in ways that facilitate mobilities across land and sea.

We further discuss the broader implications of our findings for understanding resource rights, ownership and indigenous identity, especially in the context of nomadic fisheries, as it illustrates how rights, particularly the customary, are not always place-based or tied to fixed territories. Instead, as the literature has shown, they are produced through mobility and historical social relations that cut across the boundaries or territories of nation-states (Overå, 2005; Reid, 2015). Recognising this complicates place-based notions of ownership, which also challenge most fisheries management and conservation frameworks that tend to focus on and prioritise 'sedentarised' communities. Broadly, this invites scholars and actors to rethink governance, towards an approach that engages with, rather than fixing and containing, the mobilities that sustain fisheries. Future research could expand on these by looking into how different nomadic fishery communities navigate issues of recognition and rights within state marine governance frameworks and how their livelihood practices.

8. Fieldnotes

1. Throughout our fieldwork from March 2023 to July 2024, fishers, traders and transporters of kako bemoaned the challenges with hikes in tariffs and unapproved fees they have to pay, as well as the harassment they face in their livelihood practices to keep the flow of kako across borders despite ECOWAS protocols' supporting free movement and trade. This was before Burkina Faso, Niger and Mali from the ECOWAS officially withdrew from ECOWAS in January 2025
2. Interviews in March 2023 and July 2024 in which a trader and fisher, respectively, describe the situation of increasing indebtedness of fishers to patrons as a result of fines, often referred to as 'bail' by them, and how this dynamic is fueling scepticism among patrons, especially the highly risk-averse.
3. This is based on a follow-up interview in July 2024 with a fisher who explained the multiple arrangements that exist in the current situation, the amount of credit a patron is willing to commit can be insufficient to defray the cost of the fine, so fishers have to call multiple patrons.
4. This is based on observations at the Kako distribution point and market in Mankessim between January and February 2024. Through information from their WhatsApp platforms, traders pre-arrange the quantities they will distribute the upcoming consignment of Kako to their clients (small retailers). They call them ahead of time for pricing and payment arrangements, usually the next market day (every Wednesday in Mankessim).
5. Sharks landed by Mauritanian fishers have largely been bycatch. But over the years, some local fishermen in Mauritania increasingly target sharks as patronage relations enable access to market in Ghana.

CRediT authorship contribution statement

Iddrisu Amadu: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Conceptualization. **Ingrid Boas:** Writing – review & editing, Writing – original draft, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Simon Bush:** Writing – review & editing, Writing – original draft, Supervision, Resources, Methodology, Formal analysis, Conceptualization. **Aliou Sall:** Writing – review & editing, Writing – original draft, Resources, Project administration, Formal analysis, Conceptualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability

The data that has been used is confidential.

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