ORIGINAL RESEARCH

Fishers' lives matter: social issues in small-scale fisheries migration of Ghana

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ABSTRACT. Migration is a common feature of most small-scale fisheries (SSF) across the globe. To enhance fisheries resources sustainability and management, we examined the social issues in the SSF from the perspective of fishers, Chief Fishermen, and Fisheries Technical Officers who are actively involved in SSF migration and fisheries management along the coast of Ghana. We conducted in-depth interviews in six important migrant fishers' communities and analysed documents on the socio-economic conditions of migrant fishers, conflicts among migrant fishers, rights of migrant fishers and the role of government in managing fishers' migration. Findings showed that the successful integration of migrant fishers in the host communities resulted in minimal conflictual incidents that are resolved through dialogue. Furthermore, both the Fisheries Technical Officers and Chief Fishermen are involved in conflict resolution depending on the nature of the dispute. Also, most migrant fishers (over 50%) have the same rights as the local fishers, though they are marginalized during the distribution of premix fuel. Migrant fishers with prominent status played key role during decision-making process in the host communities. Overall, the study showed that migrant fishers have aided in the progress of fishing technology, food security, and small-scale business in the host fishing communities. To avert any form of marginalization during the distribution of premix fuel, it is prudent for authorities to develop relevant policies that will ensure that migrant fishers receive enough fuel for their fishing activities in the host communities.

Key words: Migrant fishers, West Africa, conflicts, fisheries management, fisheries resources.

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La vida de los pescadores importa: cuestiones sociales en la migración de la pesca en pequeña escala de Ghana

RESUMEN. La migración es una característica común de la mayoría de las pesquerías de pequeña escala (PPE) en todo el mundo. Para mejorar la sostenibilidad y la gestión de los recursos pesqueros, se examinaron los problemas sociales en las PPE desde la perspectiva de los pescadores, los Jefes de Pescadores y los Oficiales Técnicos de Pesca que participan activamente en la migración y la gestión pesquera de las PPE a lo largo de la costa de Ghana. Se realizaron entrevistas en profundidad en seis importantes comunidades de pescadores migrantes y analizamos documentos sobre las condiciones socioeconómicas de los pescadores migrantes, los conflictos entre los pescadores migrantes, los derechos de los pescadores migrantes y el papel del gobierno en la gestión de la migración de los pescadores. Los hallazgos mostraron que la integración exitosa de los pescadores migrantes en las comunidades de acogida resultó en incidentes conflictivos mínimos que se resuelven a través del diálogo. Además, tanto los Oficiales Técnicos de Pesca como los Jefes de Pescadores están involucrados en la resolución de conflictos, dependiendo de la naturaleza de la disputa. Además, la mayoría de los pescadores migrantes (más de 50%) tienen los mismos derechos que los

pescadores locales, aunque son marginados durante la distribución de la premezcla de combustible. Los pescadores migrantes con un estatus destacado desempeñaron un papel clave durante el proceso de toma de decisiones en las comunidades de acogida. En general, el estudio mostró que los pescadores migrantes han ayudado en el progreso de la tecnología pesquera, la seguridad alimentaria y los negocios a pequeña escala en las comunidades pesqueras anfitrionas. Para evitar cualquier forma de marginación durante la distribución de combustible de premezcla, es prudente que las autoridades desarrollen políticas inteligentes que aseguren que los pescadores migrantes reciban suficiente combustible para sus actividades pesqueras en las comunidades de acogida.

Palabras clave: Pescadores migrantes, África Occidental, conflictos, manejo de pesquerías, recursos pesqueros.

INTRODUCTION

Food security, employment and sustainable utilisation of the world's natural resources are key to our survival. Globally, more than 490 million people depend at least partially on small-scale fisheries (SSF) for their livelihoods (FAO 2022). These fisheries supply 40% of global fish catch and provide protein and micronutrients like omega-3 fatty acids, calcium, selenium and zinc to billions of people. In Ghana, about 3 million people are currently involved in the fishery sector with over 90% being in the SSF sector. Fish provides about 60% of the dietary protein needs of the average Ghanaian with an average annual per capita consumption of 25 kg. Small-scale fishers use simple gears and technologies, travel for short distances and target multi-species.

The challenges encountered by SSF are recognized worldwide (Pauly et al. 1998; Muraski 2000; Hutchings and Reynolds 2004; Caddy and Seijo 2005). Common issues facing SSF include resource overexploitation, decline catches, complex and dynamic fleet interactions, competition, and conflicts between fleets (small-scale and industrial), poverty and post-harvest problems, such as lack of infrastructure (Salas et al. 2007; Asiedu et al. 2013). In order to cope with these issues most fishers migrate. In Ghana, migration is a livelihood strategy adopted by many small-scale fishers. Migration among small-scale fishers in Ghana is widespread and increasing exponentially (Overå et al. 2001; Marquette et al. 2002; GSS 2014a; Asiedu et al. 2022). This is mostly driven by biological, socio-economic, overexploitation of commercially important fish species, climate change safety and sargassum influxes (Kraan 2009; Daw et al. 2012; Peer and Miller 2014; FAO 2017). Fishers' migration provides an avenue for small-scale fishers to improve their standards of living (DFID 2004). For instance, income earned by migrant fishers is used to feed families, acquire assets, etc. Additionally, remittances by migrant fishers help in reducing poverty in their home communities. The economic aspect of migration helps fishers to earn income, take care of their families, meet other social commitments, and improve their standard of living (Asiedu et al. 2022). Migration also provides fishers with access to resources thereby contributing to the life sustenance of migrant fishers (Wanyonyi et al. 2021). In recent years, increased development, and globalization in the area of transportation and communication have facilitated fishers' migration (IOM 2005).

Migrant fishers face many social issues in their quest to migrate whether internally or internationally. As a first step, they face the challenge of moving with or without their families. During short-term migration, the majority of fishers leave their wives behind to care for their families, but during long-term travels, they move along with their families (Sall 2006). Further, migrant fishers are challenged by livelihood space. It is a concern where the migrant fisher would live, work, use available services and facilities, and earn acceptance from the local fishers (Kraan

2009). Before fishers migrate, inquiries regarding accommodation and working space are made through phone calls with friends and relatives in the host communities. However, being able to identify a niche and explore resources as well as gain acceptance from local fishers can be delicate (Odotei 2002). Although, most host communities welcome and maintain healthy relationships with migrant fishers (Sugimoto 2016), integration into the host communities is often challenging. Studies have indicated that most indigenes and migrant fishers coexist but do not collaborate (Sall 2006; Njock and Westlund 2008). They do not share the same interests since they do not belong to the same society, which results in disputes, stigmatization, marginalization, and exclusion of immigrants (Njock and Westlund 2008; Wanyonyi et al. 2017; Failler and Ferraro 2021).

A brief overview of the small-scale fisheries sector of Ghana

The small-scale or artisanal fisheries in Ghana operate several fishing gears such as purse seine nets, beach seine nets, set nets, drifting gillnets, and hook and line. Dugout canoes comprising both motorized and non-motorized are the main crafts used by Ghanaian small-scale fishermen. Currently, over 13,000 canoes and more than 124,000 fishers are engaged in small-scale fishing activity in Ghana operating from over 300 landing sites dotted along the 550 km length of the coastline (Dovlo et al. 2016). A high proportion of the fish catch is provided by the SSF sector (around 60%), with the marine sub-sector accounting for more than 70% of the total fish production (Nunoo et al. 2014; FC 2022). Fish caught by small-scale fishers in developing countries such as Ghana is likely to contribute about a quarter of the total protein, thus playing a vital role in food and nutrition security, trade, and other economic activities in small-scale fishing communities (Marquette et al. 2002; Asiedu et al. 2018). Roles are distinguished in SSF of Ghana (Torell et al. 2016; Adjei and Sika-Bright 2019). Men are primarily engaged in fish harvesting, undertaking the main fishing activities (Nunoo and Asiedu, 2013). Contrary, women act as wholesalers, supplying catch from boats they own or negotiating with boat captains to buy landed catches to dispose of by marketing. Women also serve as financiers to fishermen and support them in purchasing fishing inputs (Appiah et al. 2021). Major species harvested by small-scale fishermen include *Sardinella aurita*, *S. maderensis*, *Cynoglosus senegalensis*, *Selene dorsalis*, *Chlroroscombrus chrysurus*, *Decapterus punctatus*, *Ilisha africana*, and others (Nunoo and Asiedu 2013). Stock assessment studies on some of these fish species landed by small-scale fishing communities have shown overexploitation and possible collapse in the absence of appropriate management measures (e.g. Amponsah et al. 2019, 2021).

The management of SSF in Ghana is challenged by the expansion of rival fleets, economic collapse, open-access regime, weak enforcement, conflicts, and environmental issues (Asiedu et al. 2013). The culminating effect of these challenges confronting small-scale fisheries is the high rate of poverty in small-scale fishing communities (Asiedu et al. 2013). Furthermore, the Ghana Living Standard Survey Round Six (GLSS 6) revealed that whereas the poverty gap is reducing in other ecological zones, the opposite is occurring in the coastal zones (GSS 2014b).

Fishers in Ghana and other parts of West Africa have adopted several strategies to cope with the decline in their catch and this includes migration to other fishing communities. The Government of Ghana has enacted several legal instruments such as the Human Trafficking Act (Act 694) and the Human Trafficking Prohibition Regulations (Legislative Instrument 2219) to enhance migration governance (IOM 2020). The enactment of these laws contributes to the attainment of migration-related Sustainable Development Goals (SDGs) and, specifically, SDG Target

10.7 to 'facilitate orderly, safe, regular, and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies' (IOM 2020). As Ghana strives to achieve SDGs Goal 8 (decent work and economic growth) and Goal 11 (sustainable cities and communities) by 2030, there is a need to highlight and address all the issues concerned with fishers' migration. Furthermore, the integration of issues concerning migrant fishers into the formulation and implementation of effective fisheries management policies is weak in Ghana and other parts of the Gulf of Guinea. In most cases, migrant fishers are marginalized and do not have a voice in the management of fisheries. Efforts to address these challenges are important to the management of the SSF sector of Ghana. Reconciling fisheries management with social issues is among the greatest challenges in the era of declining stocks, especially in developing countries such as Ghana. Generally, knowledge about SSF is particularly limited despite its dominancy, and it is also less researched than commercial fishing (Cordell 2002; Salas 2007). Even though in recent times, attention on SSF is on the rise, it is still overshadowed by the industrial sector in fisheries science and policy discourse (Smith and Basurto 2019). These create gaps and challenges in managing the fishery that must be addressed.

The FAO (Food and Agriculture Organization) has indicated that the main problems and constraints of SSF are threefold and are related mostly to social, economic and human rights aspects that lead them to poverty and vulnerability. Fishers' migration is a social and economic issue. Thus, addressing social issues in migration is crucial in sustaining fishers' livelihood and the fishery. The United Nations General Assembly has declared 2022 the International Year of Artisanal Fisheries and Aquaculture (IYAFA 2022). Thus, this study contributes to highlighting issues in SSF. Accordingly, the study aimed to assess the social issues that migrant fishers face in the host communities. Specifically, we examined: a) the socio-economic conditions of migrant fishers; b) conflicts among migrant and host fishers; c) the rights of migrant fishers; and d) the role of government in dealing with fishers' migration. Understanding social issues faced by migrant fishers is necessary for the formulation of policies for the sustainable management of SSF of Ghana.

MATERIALS AND METHODS

Study communities

Ghana has a coastline of approximately 550 km. The SSF sector consists of 13,000 canoes, employs about 124,000 (mostly male) fishers and 1.9 million fish processors and traders (mainly female) and accounts for about 80% of total annual marine fish catch by volume (Dovlo et al. 2016; Andriesse et al. 2022). For this study, we selected six fishing communities that span the four coastal regions. The communities were Shama in Western Region, Elmina and Apam in Central Region, Tema and Ahwiam in Greater Accra, and Denu in Volta Region (Figure 1). Characteristics of communities in terms of population, fishing gears and number of fishers are shown in Table 1. These communities are involved in important fishing activities and are destinations for a significant number of migrant fishers (Nunoo and Asiedu 2013; Asiedu et al. 2022).

Data collection

Interview-based questionnaire

To meet the objective of the study, we conducted in-depth interviews with the use of a semi-structured questionnaire with key migrant fishers (n = 80), Chief Fishermen (n = 6) and Fisheries Technical Officers (n = 6) in the study communities. Respondents were chosen based on their

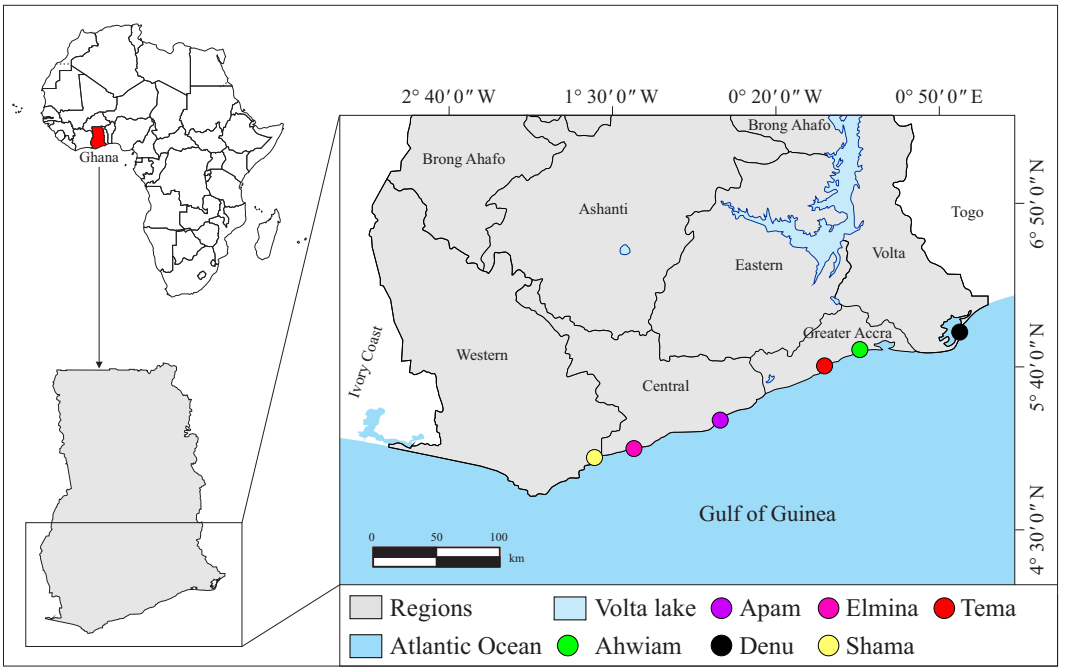

Figure 1. Map of the study communities.

Table 1. Characterization of study communities. Source: GSS (2014b) and Dovlo *et al.* (2016).

Study community	District assembly	Population	Gears used	Number of fishers
Apam	Gomoa West	23,588	Ali nets, drifting nets, purse nets, line, and set nets	1,600
Elmina	Komenda-Edina-Eguafo-Abrem (KEEA)	23,013	Ali nets, beach seine gears, purse nets, line, and set nets	2,000
Shama	Shama	11,000	Set net, purse net line, drifting net, Ali net, and beach seine	2,352
Ahwiam	Ningo Prampram	3,500	Pursing net, line, set net, and drifting net	894
Tema	Tema Metropolitan Assembly	71,711	Pursing[1] nets, line, *ali*[2] net, drifting[3] net, and set[4] net	5,167
Denu	Ketu South	6,051	Pursing nets, beach seine, and set net	418

[1]Pursing net are used by the inshore vessels with mesh sizes ranging from 10-25 mm.

[2]*Ali* net are the main net used in catching *Sardinella* normally at the beginning or towards the end of the fishing season.

[3]Drifting net are operated on the surface or at a certain distance below it, drifting freely with the current.

[4]Set net are nets that catch fish by gilling, entangling or enmeshing them in the net.

experience, availability, willingness to take part in the interview and membership of fisheries association (Table 2). In total 92 respondents were interviewed during the study period. The in-depth interviews were conducted between June and July 2022.

In the fishing industry of Ghana and many other West African countries, the Chief Fisherman is the most important traditional institution and plays a vital role in fisheries resources management. The Chief Fisherman has the authority to allow the entry of new fishers into their fishing landing communities (Nunoo et al. 2015). The position of the Chief Fisherman is hereditary and holds a lot of power and dignity. The Chief Fisherman he is in charge of all the fishing operations in the fishing community. He settles disputes, imposes penalties, organizes, and monitors the allocation of any communal input as well as deals with the activities that must be undertaken in the event of risk and disasters at sea (Bennett 2002). Given their importance in the traditional management of SSF in Ghana, they were selected for the key informant interview.

The Ghana National Canoe Fishermen Council (GNCFC) is the umbrella body of most small-scale fishers. It was formed in 1982 with the objective of promoting the welfare of canoe fishers. Since then, it has grown to become an umbrella body of fishers and fishery associations in Ghana (Adjei 2021). In this study, we interviewed migrant fishers who were also members of the GNCFC.

Interviews were carried out in English. In situations where the language was a barrier, a local facilitator (i.e. the local Fisheries Technical Officer) was employed. Furthermore, responses were transcribed onto an audio recorder with the consent of respondents. The qualitative data were collected using key informants, experts interviews, and informal field discussions. The main purpose of collecting the qualitative data through these methods was to examine the major issues on migrant fishers, mostly on the mode of migrations, conflict resolution, roles of government, rights of migrant fishers, and other themes in the host fishing communities. The research team was able to obtain a better knowledge of migrant fishers through the data collected. The interview duration lasted between 30 and 50 min.

The study employed quantitative and qualitative methodologies to collect data using mixed questionnaires (closed and open-ended questions). There were three parts to the questionnaire: the first part examined the modes of migration and the settlement structure of migrant fishers; the second part assessed the rules and regulations, and conflict issues; and the third part explored the roles of government in migrant fishers and the rights of migrant fishers.

Table 2. Category of respondents, number, percentage and criteria used during the interviewed.

Category of respondents	Number	Number interviewed (n)	% n	Criteria used
Chief Fishermen	6	6	100	Traditional leader
Fisheries Technical Officers	6	6	100	Government official
Migrant fishers	622	80	13	Membership of fisheries association, experience, availability, and willingness

Desktop studies

Documents on social issues of fishers' migration were analysed on the following themes: fishers migration, SSF, social issues, patterns and impacts. Documents consulted included the 2021 Annual Performance Report (FC 2022), the Ghana Canoe Frame Survey Report (Dovlo et al. 2016), the Co-Management Policy for the Fisheries Sector of Ghana (MoFAD, 2020), Asiedu et al. (2022), Deme et al. (2021), and Failler and Ferraro (2021).

Data analysis

Responses obtained from the study were coded and fed into the Statistical Package for Social Sciences (SPSS) version 23 for statistical analysis. Descriptive statistics were performed and represented in tables and charts. Inferential statistics were carried out at a confidence interval of 95%. Non-parametric tests such as Chi-square analysis were performed to elucidate the existence of any significant differences in categorical variables as provided by the various respondents.

RESULTS AND DISCUSSION

Socio-economic conditions of migrant fishers

Many Ghanaian fishers migrate either seasonally or permanently to internal and international fishing communities in search of better fish catches, prices and alternatives to population pressures (Asiedu et al. 2022). Out of the five migrating groups, fishermen were the dominant migrant group (47.4%) (Figure 2). Fishermen are mostly recruited as crew members for fishing purposes, while men in this study refer to the older generation who are mostly engaged for their experience in providing solutions to emergencies and advice during conflictual situations at sea (21.1%). However, in situations where the crew members see old men as a liability in the fishing activities due to generational gap, reduced physical strength and advanced age, only fishermen (mostly of the younger generation) form the migrating group. Though most wives or fish

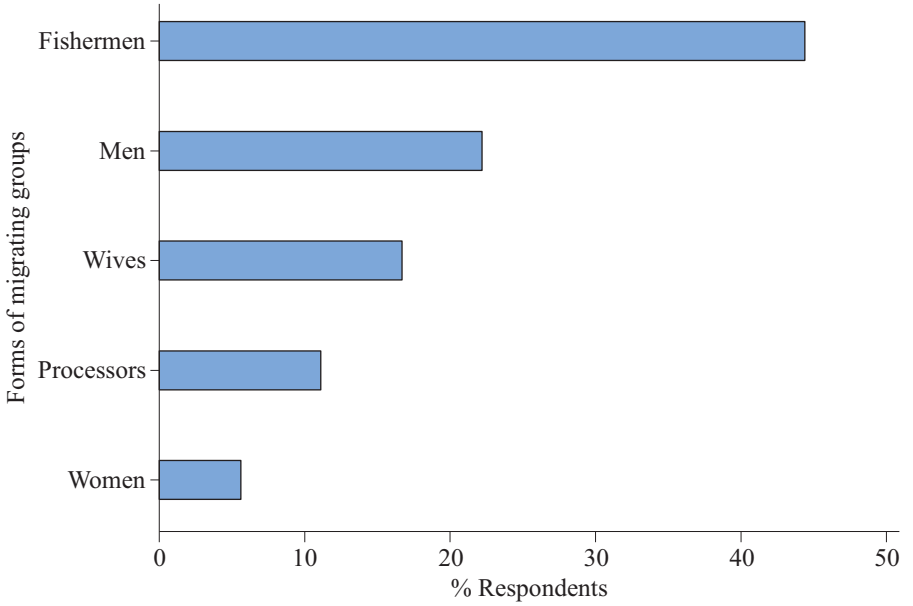

Figure 2. Migrating groups among migrant fishers.

processors join fishermen in the receiving communities by road, wives of the senior migrant fishermen are often allowed a return trip to their natal fishing community by the sea.

Most women migrate to the host communities with fishermen to provide housekeeping services for them. The women are remunerated with either a share of a catch or direct wages, thereby helping to meet food security and poverty reduction. The successful integration of women in the host communities largely depends on the generosity of the fishermen. In other cases, some migrant fishermen exclude women from migrating with them because they perceive that dwelling with women in the host communities is an expensive exercise. Nonetheless, the crew composition for the long-duration form of migration at sea tends to be influenced by kinship ties due to possible dangers the crew might face. It must be noted that women continue to play important roles within and outside the fisheries sector. Women play a big part in maintaining the social fabric of the fisheries and are central to the social context of fisheries (Szaboova et al. 2022).

Many migrant fishers (65%) upon arrival in the host communities live in the same neighbourhood as the indigenes (Figure 3). Having the nexus of friends, relatives or former co-workers makes settlement within the vicinity of the host communities possible. According to Asiedu et al. (2022), internal host communities visited by migrant fishers from Ghana include Tema, Sekondi, Apam, Axim and others, while for international host communities, fishing communities in coastal countries like Togo, Ivory Coast, Benin and others are mostly visited by Ghanaian migrant fishers. For internal migration, it is mandatory for migrant fishers to pay a token known as landing fee, which grants them access to the resources in the host fishing communities. However, for international host fishing communities, proper documentation on the period of stay, the number of crew, and other necessary information are requested before migrant fishers will gain access to the aquatic resources without hindrance (Asiedu et al. 2022).

Land scarcity in the host fishing communities appears to be a challenge, therefore these migrant

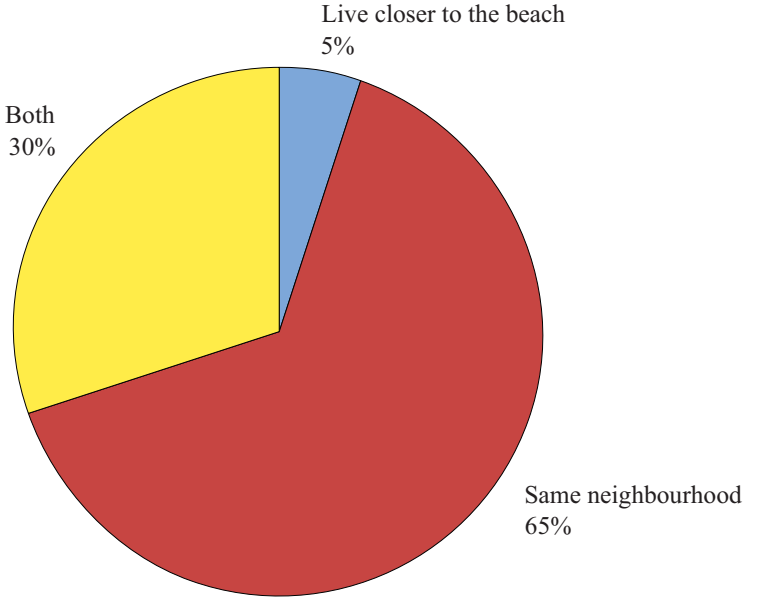

Figure 3. Settlement style of migrant fishers in the host communities.

fishers do not have the luxury of having a piece of land credited to them by the authorities of the host communities. To have access to housing units in the host communities, migrant fishers pay rent to the landlords. However, only in rare situations will migrant fishers opt to reside in separate locations within the host communities. About 5% of migrant fishers live close to beaches usually in tents and wooden structures. The UN Sustainable Development Goals (SDGs) advocate decent living as well as promote safe and secure working environments for all workers including migrant workers (Target 8.8). In most developing countries, fishers live in conditions with poor sanitation. This affects the health and well-being of migrant fishers.

Nature of fishing rules and regulations in the host communities

Migrant fishers are faced with challenges in their fishing activities even after successful integration into the host communities. They are mandated to comply with the local rules and regulations enacted by the Chief Fisherman and his council of elders (Figure 4). Prominent among these rules and regulations set aside for migrant fishers include i) obeying the non-fishing day holidays. During these days, fishers both indigenes and migrants are supposed to abstain from fishing activities. During these periods, migrant fishers indulge in mending their fishing nets, attending family gatherings such as weddings, naming ceremonies, and funerals, or spending quality time with family and friends. Fishmongers also use these fishing holidays to sell their processed fish products, particularly smoked fish, at either internal or external markets; ii) migrant fishers are mandated to partake in communal labour organized by the indigenes; iii) migrant fishers are also instructed to perform some rites which involve paying landing fees together with the presentation of local dry gin before being granted access to the aquatic resources, and iv) migrant fishers are required to halt any fishing activities during community curfews. Community curfews in this context relate to days during which funeral activities are ongoing within the

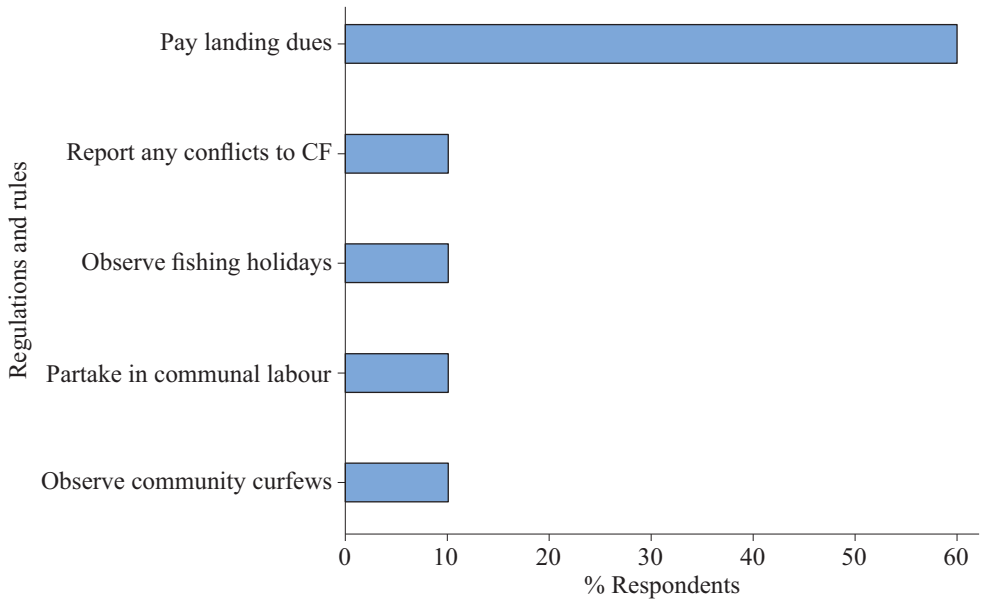

Figure 4. Prevalence of fishing rules and regulations at the host communities.

host communities. Failure to observe these rules and regulations implies that accessibility to aquatic resources is denied. In order to regain access to fisheries resources in the host community, violators are made to pay specified fines which vary from one fishing community to the other. Nonetheless, all fines include drinks that are used to pacify the sea god under the supervision of the Chief Fishermen and chief priest (Adjei and Sika-Bright 2019).

Conflictual issues among migrant fishers

Sources of conflicts between local and migrant fishers in the host communities are grouped into social and occupational (Figure 5). Occupational sources are generated because of fishing activities. For instance, rush for fishing grounds between indigenes and migrant fishers at sea, destruction of fishing equipment by locals, inadequate supply of premix fuel and stealing of landed catch by indigenes at the beach. Migrant fishers are technologically endowed with effective fishing techniques making it easier for them to explore greater fishing grounds than local fishers. These effective fishing techniques and access to wider fishing grounds lead to higher catches by migrant fishers. Such bountiful catches by migrant fishers triggers local fishers to explore similar fishing grounds after gaining access to such effective fishing techniques. The movement of local fishers to the fishing grounds exploited by migrant fishers breeds competition for fish resources, ultimately leading to conflicts between local and migrant fishers. In areas where local fishers do not have access to better fishing techniques and finances in comparison with migrant fishers (e.g. in Denu migrant fishers are offshore fishers while indigenes are mostly beach seine fishers) local fishers sometimes destroy the fishing vessels or part of the vessels belonging to migrant fishers. These actions by local fishers brew conflicts between them and migrant fishers.

The social source of conflicts occurs due to derailing from the accepted way of life practiced by the indigenes. This includes going after the wives or fiancée of the indigenes, not partaking in communal labour and defecating at the beach, etc. Most of the conflictual incidents are resolved through dialogue between the indigenes and migrant fishers amicably at the beach. For instance, when indigenes at the beach, tagged as

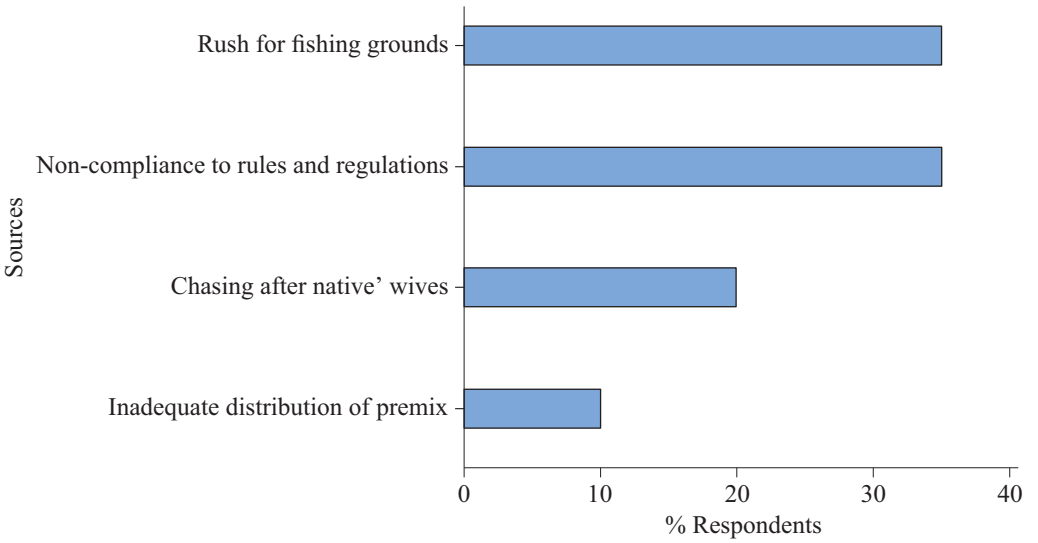

Figure 5. Source of conflicts between local and migrant fishers in the host communities.

'hustlers', steal a portion of the landed catch and are caught, such incidents are resolved in a friendly manner. Conflicts of higher magnitude such as going after another man's wife or destroying the fishing equipment of migrant fishers are mostly resolved through dialogue in the presence of the Chief Fisherman in the host community and at times the Fisheries Technical Officer is involved. However, in the absence of the Fisheries Technical Officer, justice for the migrant fishers in wake of any conflict with indigenes is stalled. Nonetheless, the long stay of migrant fishers in the host communities largely results in little or no conflictual incidents between them and the indigenes because they have accepted and are practicing the norms set aside by the host communities (Bennet 2002).

Rights of migrant fishers in the host communities

Rights enjoyed by migrant fishers in the host communities are outlined in Table 3. Migrant fishers in the various host communities raised concerns about not having constant access to premix fuel. In some host communities, members of the local committee act as middle agents who sell the fuel at exorbitant prices to these migrant fishers. These migrant fishers have no other option than to buy the premix fuel, which eventually affects the prices of landed catch as well as the expenses made for their fishing activities. The premix fuel is distributed to various fishing committees based on the number of local fishers. However, the influx of migrant fishers increases the total number of fishers, thus resulting in the unequal distribution of premix fuel. Such occurrences have the propensity of fuelling conflicts between migrant and local fishers. Therefore, it will be appropriate to quantify the number of migrant fishers moving into various fishing communities, and this could serve as an input for the recalculation of premix fuel for distribution in these communities.

Partaking in decision-making by migrant fishers in the host communities is a right that most migrant fishers enjoy. The zeal to contribute to

Table 3. Rights of migrant fishers in the host fishing community.

Role of Government	Response	Frequency (%)
Rights to social amenities	Yes	92 (100%)
	No	0
Right to vote	Yes	92 (100%)
	No	0
Right to own properties	Yes	92 (100%)
	No	0
Access to premix fuel	Yes	0
	No	92 (100%)
Decision management	Yes	92 (100%)
	No	0
Any discrimination	Yes	18 (20%)
	No	74 (80%)
Rights to marriage	Yes	92 (100%)
	No	0

such a decision-making process is mostly reliant on the fact it is geared towards sustainable management of the fisheries that form their main livelihood. However, in certain communities, migrant fishers with good standings sometimes have a degree of involvement when it comes to decision-making. For instance, a migrant fisher who possesses many fishing vessels, the Chief Fisherman of the migrant fishing community in the host communities, and highly experienced migrant fishers can be tagged as migrant fishers in good standings in the host communities. Nonetheless, the successful involvement of migrant fishers in decision-making depends on the benevolence of the council of elders in the host communities. Given this, there is a need to gazette policies with legal backing which would allow migrant fishers to partake in decision-making for the welfare of both locals and migrant fishers. Such policies are crucial mainly in areas where migrant fishers are not involved in decision-making and may tend to engage in illegal fishing methods without recourse to its implication to the ecosystem and the dependent livelihoods. For example, Muttenzer and Andriamahefazafy (2021) noted that the way migrant fishers fish greatly affects the populations of aquatic resources. The long stays and successful integration of migrant fishers in the host communities lower the likelihood of any form of discrimination. Also, the fact of establishing and maintaining social capital with locals through marriage, goodwill gestures, and other relationships enables migrant fishers to cohabitate successfully with locals in the host communities. However, discrimination between local and migrant fishers in the host community surfaces at certain happenings. For instance, during conflict resolution between local and migrant fishers, there is a high probability of migrant fishers being marginalized, resulting in stalemate or postponement of judgment. To avoid such results, especially during conflict resolutions, migrant fishers prefer the involvement of government officials who play a neutral role, thus ensuring fair treatment. The right to marry women or men in the host communities has been enjoyed for decades by migrant fishers. Migrant fishers become the preferred spouse of women in the host communities because they are seen as hardworking and financially stable. Furthermore, some migrant fishers employ women to assist them in their fishing business, which eventually ends in marriage.

Roles of government in managing fishers' migration

Table 3 indicates the role of government regarding the activities of migrant fishers during their stay at the host communities. The majority of the respondents (80%) agreed that the government, through the Fisheries Technical Officers plays a major role in resolving conflictual issues (Table 4). Officially, issues of conflict are in two forms, either it involves only small-scale fishers, or it occurs between small-scale fishers and semi-industrial fishers. When involving two or more small-scale fishers, they are mostly resolved by the Chief Fisherman and his elders within the host communities. However, conflicts existing between small-scale fishers and semi-industrial or industrial fishers are mostly brought to the notice of the Fisheries Technical Officers in-charge of the fishing community. Nonetheless, the lengthy or stressful procedure of tabling the case or allegations for mediation by the government deters some migrant fishers from reporting such incidents to the Fisheries Technical Officers. In some instances, the expenses involved before receiving attention from Fisheries Technical Officers is also a demotivating factor on the part of migrant fishers to report such incidents. Thus, some migrant fishers resort to resolving conflict with other small-scale fishers without involving government officials.

The majority of the respondents (60%) supported the claim that government do monitor the

Table 4. Role of government in the lives of migrant fishers in the host community. IUU: illegal, unreported, and unregulated.

Role of Government	Response	Frequency (%)
Conflict resolution	Yes	74 (80%)
	No	18 (20%)
Social amenities	No	83 (90%)
	Yes	9 (10%)
Data records	Yes	55 (60%)
	No	37 (40%)
Efforts on IUU	Yes	28 (30%)
	No	64 (70%)

fish catch landed on daily basis (Table 4). However, the monitoring of landed catch by Fisheries Technical Officers is not disaggregated into catch landed by migrant and local fishers. Some respondents (40%) were concerned that government does not record catches landed by migrant fishers in the host communities. However, this appears to be not the case, instead, the procedure used by the Fisheries Technical Officers in monitoring the catch statistically excludes some fishers. Nevertheless, to statistically have an idea of the percentage of the catch landed by migrant fishers as well as the contribution of migrant fishers to food nutritional security in the host communities, there is a need to segregate such fish catch data. This, when instituted can aid in drafting proper management policies for migrant fishers.

The majority of respondents (70%) indicated that government officials play no key role in curbing the involvement of migrant fishers in illegal, unreported, and unregulated (IUU) fishing methods (Table 4). Allegations stem from the fact that most migrant fishers believe that the government cannot control the engagement of fishers in IUU fishing due to the large number of fishers along the coast and the isolation of these areas. Furthermore, the inability or reluctance in punishing violators of sustainable fishing on the part of the Fisheries Technical Officers was cited as another factor for the government's inability to ensure that migrant fishers desist from practicing IUU fishing methods. In view of this, there is a need to strengthen the coordination between the Fisheries Enforcement Unit and the judiciary system for prompt issuing of varying levels of punishment to violators. When such coordination is firmly rooted within the framework of fisheries management, migrant fishers will have no option but to comply with the existing fisheries management measures at the various host communities.

CONCLUSIONS

Activities of migrant small-scale fishers continue to play critical roles in food security, livelihood support and the development of the local economies. Migration among fishers is mostly male-dominated due to the tedious nature of the job. Socio-economic conditions of migrant fishers must be critically examined and incorporated into fisheries management programmes and policies. Following adherence to fishing regulations in the host communities, migrant fishers tend to enjoy many benefits in the host communities

including the right to partake in decision-making for sustainable management of the fisheries resources. Nonetheless, there is a need to empower the Chief Fishermen and government authorities in the management of migrant fishers in the host communities as these institutions play a significant role in resolving conflicts between migrant and local fishers as well as ensuring that migrant fishers adhere to existing fishing rules and regulations. Additionally, Fisheries Technical Officers must record catches of migrant fishers. To ensure that migrant fishers do not engage in IUU fishing methods without considering the integrity of the marine ecosystem, equity in the distribution of premix fuel should be addressed in the host communities using relevant strategies. There is an urgent need for better integration of the social issues of migrant fishers into national fisheries policy to address challenges emanating therefrom.

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Declaration of interest

The authors have nothing to declare.

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