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# The Fisheries Sector in Ghana

## A Political Economy Analysis

Wisdom Akpalu, Stein Sundstøl Eriksen, Godwin Kofi Vondolia



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## Summary

The fishery sector of Ghana is beset with several problems, including widespread illegal, unreported and unregulated (IUU) fishing. In addition, the unregulated management regimes that characterize much of the fisheries sector have resulted in significant loss of economic rents and deteriorating socio-economic conditions of fisheries-dependent coastal communities.

Ghana's fisheries sector consists of marine capture fisheries, inland fisheries and aquaculture. In addition to providing much-needed animal protein, the fisheries sector creates jobs for 20% of the active labour force (2.7 million people), including women who engage solely in processing and distribution. The marine fisheries sector has four subsectors: artisanal or small-scale, semi-industrial or inshore, industrial, and tuna fisheries. The industrial sector is made up of trawl vessels and shrimpers. Small pelagic fish species dominate the catches of all the sectors, except that of the tuna fleets. Available statistics indicate that total fish landing generally increased from the 1970, peaked in 1996 and started to decline through 2016.

In addition to overfishing the targeted demersal stocks, trawlers in Ghana actively engage in IUU fishing activities. Until recently, many trawlers fished within the inshore exclusive zones, competing with artisanal fishers over dwindling stocks of small pelagic species. Such species are disguised as by-catches (locally termed *saiko*), frozen in blocks and transshipped at sea to artisanal boats.

The artisanal marine-capture fishery sector is the dominant fishery sector in Ghana in terms of landings and fleet capacity. Available data indicate that catch levels have been declining since 1992, when the highest catch of 308,000 metric tons was recorded. Similarly, catches per canoe and fisherman have been generally declining.

Aquaculture started in Ghana in the 1950s. Between 2005 and 2016, aquaculture production soared. According to the most recent population census (2010) some 48,000 individuals are involved in aquaculture.

The legal and regulatory framework of fisheries management in Ghana is informed by the Fisheries Act (Act 625), Fisheries Regulations (L. I. 1968), National Premix Fuel Committee Regulations (L. I. 2233) and various international fisheries agreements. The Fisheries Act of 2002 provides for the regulation and management of fisheries, the development of the fishing industry and sustainable exploitation of fishery resources, and fishery-related matters. The Act established and stipulated the functions the Fisheries Commission, which is the implementation agency of MOFAD. The Ministry of Fisheries and Aquaculture Development (MOFAD) is responsible for the management of fisheries resources in Ghana and for the development of fishing industry. The Fisheries Commission, one of two agencies under MOFAD, implements the policies and regulations of MOFAD.

Ghana has many fisheries associations, each catering for a particular type of fisheries. A key stakeholder in trawler fisheries is the Ghana Industrial Trawlers Association (GITA), composed of individual and corporate trawler fishing operators. In January 2009, aquaculture industry actors formed the Ghana Aquaculture Association (GAA), aimed at promoting sustainable aquaculture practices.

Recognizing the existence of general overcapacity in the fishery sector, it is the stated aim of the government to reduce the number of industrial trawlers. Industrial and artisanal fishing vessels compete for space in Ghana's waters. Currently, there are 76 registered industrial trawlers in Ghana, down from the peak number of 103 in 2014. However, average fishing efforts of trawlers have increased, so it is not clear that the reduction in the number of trawlers has led to a reduction in total trawling activities. Trawlers are obliged to purchase licenses in order to operate. These fees, which have been assessed as being too low, are the main source of government revenue from the trawling sector. Industrial trawlers are required to have majority Ghanaian ownership.

It is alleged that many officials within the government have some stake in these businesses. Although we have not seen detailed information about ownership of individual vessels, we were told that each trawl vessel is linked to a politician, which makes it difficult for IUU offenses to be prosecuted.

According to official data, catches from the trawlers constitute about 6% of total marine catches. However, these figures are likely to be an underestimation. First, the Fisheries Commission lacks the capacity to control actual catches: catch figures are based on self-reporting by the trawlers; according to the FC, these reports are not reliable. Second, fish caught by trawlers and subsequently sold to canoe fishermen at sea (*saiko*) is not reported.

By its own admission, the Fisheries Commission does not have sufficient resources to regulate fishing activities effectively, because it lacks both staff and information. Shortages can be identified at several levels. One factor is the lack of reliable data on catches. There is a shortage of staff and equipment in the regulatory institutions. As regards equipment, there is currently no surveillance system that can monitor the actual activities of trawlers.

There are also weaknesses in the system for prosecution of offenders. When trawlers are caught violating regulations, the case may either be taken to court or transferred to the arbitration arrangement known as Alternative Dispute Resolution (ADR), where settlements are made and violators fined. However, these settlements fail to deter offenders, probably because the fines are too low.

A key factor that impedes the enforcement of effective regulations is that there are different forms of political interference. Many informants held that the licensing system is politicized, and that licenses are issued as political rewards to those in political positions or with close ties to such persons. The issuing of licenses can represent an obstacle to effective management, as political leaders and their key supporters could see their interests threatened by reforms aimed at stricter enforcement of regulations. Also, the enforcement of regulations is weakened by the system of out-of-court arbitration. This arrangement enables trawler-owners to avoid strict punishment and is open to political interference. The lack of political will to implement effective controls in the industrial trawling sector is therefore related to the structure of political and economic interests. When key actors have an interest in preventing changes that are necessary to improve effectiveness, effective reforms will be difficult to implement, no matter how well- designed the policies are.

Political will and sufficient backing from the top is necessary for effective reform. One way to create such political will is to improve transparency. Information about ownership, licenses, profits and fines imposed must be made available to the Parliament, interest groups, and the general public, in order to create greater public awareness and put political pressure on decision-making bodies.

Canoe fishing is by far the largest part of the fishing industry in Ghana. According to the Fisheries Commission, data on catches in the artisanal sector are more reliable than those for the trawling sector. Given the under-reporting of industrial fishing described above, this means that the proportion of total catches by the artisanal sector is likely to be lower than the official figures. More than 200 coastal villages have limited alternative sources of livelihood or employment, and rely on fisheries as their primary source of income. Over the past 10 to 15 years, average annual income per artisanal canoe has dropped by as much as 40%. Illegal, unreported and unregulated (IUU) fishing activities characterize the artisanal marine-capture fishery sector.

The Monitoring, Control and Surveillance (MCS) unit, together with the marine police and the navy, who are charged with the task of seizing illegal gears and arresting the fishers who violate the regulations, are poorly resourced. Moreover, when illegal gears are confiscated, the enforcement officers are often ordered by politicians to return them.

The government subsidizes premix fuel used by artisanal fishers. The premix fuel administration has significant political influence, and members of the political party in power benefit from the proceeds from diverted fuel. Thus, the premix fuel subsidy has continued due to reasons of political expediency (to win the votes of artisanal fishers) as well as for financial gains to the political elites involved in fuel diversions to industries.

As in the industrial sector, canoe fishing has severe overcapacity, which exacerbates overfishing and depletion of stocks. The many reasons for this. Firstly, canoe fisheries management in Ghana is characterized by open access, where every citizen has the right to engage in fishing. Thus, there are license requirements and no fishing quotas. With limited opportunities for alternative employment for members of fishing communities, this creates a classic 'tragedy of the commons' situation, where each fisher has an incentive and is entitled to increase



fishing efforts. Secondly, the government has limited capacity to enforce existing rules and regulations. As a result, it has not managed to prevent the use of illegal fishing methods, despite the official ban and its declared policy of combatting the use of such methods. One reason is the shortage of staff in fisheries administration. The large number of vessels, in combination with their dispersed geographical distribution, makes it extremely difficult to create an effective management system.

However, the size of the administration is not the only constraint. Staff members do not perform effectively. We were told of problems of absenteeism (perhaps related to low salary levels) and various forms of collusion/corruption, such as not reporting the use of illegal fishing methods and not prosecuting offenders. Also, the division of responsibilities between MOFAD and the Fisheries Commission is not clear.

Given the dispersed nature of canoe fishing and the government's limited administrative capacity, a reduction in fishing efforts can be achieved only if fishers comply voluntarily, or if local institutions (chief fishermen and their elders, and the fish queen) are better-resourced.

What would be required to achieve voluntary compliance? One challenge is that fishing communities have little trust in the authorities – as was clearly expressed in our meeting with representatives of organizations in this sector. This lack of trust makes it difficult to create a climate of cooperation and compliance, and also reflects the fact that fishers' organizations do not feel included in the decision-making process, which they see as being entirely top-down.

It is a major challenge to persuade canoe fishermen to scale down their efforts in the absence of alternative livelihoods. Any effective reduction in canoe fishing would have to be accompanied by a good strategy for creating alternative sources of income and employment. Without alternatives, it is unlikely to be possible to create voluntary compliance with a policy which restricts fishing opportunities. Another problem is that the nature of electoral politics makes it extremely difficult to implement policies that restrict access to fishing for canoes. Political parties and leaders are reluctant to impose such restrictions, fearing electoral losses. In a competitive clientelist system with two

parties of more or less equal size, losing votes in fishing communities could prove decisive in elections. This is a risk few politicians would be willing to take. For the same reason, it is also politically difficult to cut or reduce fuel subsidies.

These challenges – limited administrative capacity, lack of trust in authorities, lack of alternative livelihoods and electoral risks – all make it very difficult to reduce fishing activity in the canoe sector. It is our assessment that the problems in the canoe sector can be addressed only if overfishing in the industrial sector has been dealt with, by reducing the number of trawlers and by limiting fishing activities of each trawler through monitoring and enforcement of fisheries regulations.

There are two main reasons for focusing the trawlers. First, the relatively limited number of trawlers makes the sector more manageable for the administration. Better trawler surveillance can be achieved by a combination of more staff in the administration, more observers and better equipment (cameras, drones, satellites). Second, visible reduction of industrial fishing will help to give greater legitimacy to subsequent cuts in canoe fishing. In turn, if reductions are seen as legitimate by canoe fishermen, the political leaders could become less afraid of losing votes by imposing restrictions on canoe fishing.

However, something could be done in relation to the canoe sector as well. First, subsidies of premix fuels could be eliminated or reduced. To lower the political risk associated with such cuts, a guarantee could be given that the savings from such cuts could be used for other types of support to fishing communities. Second, there could be greater enforcement and prosecution of illegal fishing methods, like the use of dynamite and poison. Third, government support could be given to training and education in fishing communities, to develop alternative livelihoods for those who leave the fishing sector.

The aquaculture sector is facing several serious, imminent challenges. The most critical are the high costs of feed, which constitute over 80% of production cost. The high cost of this locally produced feed is attributable to high import tariffs, taxes and other fees on inputs for production, coupled with the depreciation of the local currency.

The second challenge facing medium and small-scale aquaculture operators concerns the poor marketing opportunities for their produce, especially during the low season. Large-scale operators generally transport the output to sales points or outlets where they retail them directly to consumers.

Finally, other constraints often identified by those in the industry include extreme climate events like flood or drought, poor seed (fingerlings) quality, theft of fish from cages, and inadequate training in fish farming and potential environmental impacts. The cage culture is supposed to be governed by regulatory bodies, but enforcement is far from complete.

### *Risks*

The project document identifies five risks associated with the proposed programme:

- (1) inadequate political will to support enforcement of laws and regulations in fisheries
- (2) low staff strength and limited logistics as regards MOFAD and FC, collaborating agencies and stakeholders, for effective implementation of project activities
- (3) low compliance with fisheries laws and regulations on the part of private-sector operators
- (4) weak coordination among collaborating stakeholders
- (5) low/inappropriate adoption of improved technology.

Overall, MOFAD considers the programme risk to be low, although the consequences, if shortcomings are not effectively dealt with, are seen as very serious. It is striking, however, that no justification is provided for why the overall risk is seen to be low.

### *Lack of political will to reform*

Fisheries management is not uppermost on the political agenda in Ghana. Despite the officially declared commitment to sustainable fisheries management, there is a lack of day-to-day leadership and commitment to addressing the problem of overcapacity. This is related to the interests associated with preservation of the status quo, as described above.

*Insufficient administrative capacity*

This has three aspects: inadequate number of staff; lack of qualifications among the staff; ineffective organization of the sector. Of these, we consider the first and the third to be the most important. The shortage of staff in MOFAD and FC needs to be addressed. There are also problems of unclear division of responsibility between the Ministry and the Commission. It is a central objective of the programme itself to address these risks, through support for staff strengthening and improved organization of the sector. Sustainability must be ensured beyond the project period; here we recommend that the government commit itself to retaining the staff recruited and trained under the programme when the project period ends.

*Lack of compliance*

Of the five stated risks, this is the only one deemed serious by MOFAD. This is also a serious risk in line with our assessment. However, we think the mitigation measures described in the document need to be further specified. However, it is not specified how enhanced enforcement will be secured and how incentives will be changed. In the absence of such specifications, it is not clear how this risk will be managed. Moreover, it is unclear how the activities of the political elites that impede enforcement of regulation and prosecution of those who violate will be addressed.

*Weak coordination among stakeholders*

Given limited state capacity in Ghana, it is critical to assist the government in steering effective and transparent coordination of its activities in the sector. Within the government, this applies particularly to the division of labour between MOFAD and the Fisheries Commission. The same applies to coordination and cooperation with private actors (most importantly, the fisheries organizations, as well as NGOs and civil society organizations).

*Other risks*

While the risks discussed in the draft document are real and important, there are also other risks that the document does not mention. We would emphasize the following:

*Lack of accountability and government legitimacy*

There is a lack of trust towards the government from actors in the fishing industry. Representatives of trawlers and canoe fishers claim that they do not trust the government authorities, whom they consider to be inefficient, corrupt, and not responsive to their concerns. As cooperation and voluntary compliance is required, this represents a risk for any reform programme for the sector. Mechanisms for holding relevant actors accountable are needed.

The fisheries project document should make clear how civil society, citizens, and businesses will be able to use fisheries sector information to bring public pressure to bear on the government to address governance challenges. We propose the establishment of a Steering Committee for the programme, to improve accountability. This Committee should include representatives of all key stakeholders in fisheries management in Ghana, including MOFAD, the Fisheries Commission, parliament/political parties, fisher organisations and representatives of civil society. This Committee would then need access to information about catches, controls, decision-making about licenses, restrictions on fishing efforts, prosecution of violators and any other matter related to fisheries management.

*Access to project benefits.*

In Ghana, training, educational and travel opportunities with international partners are often the preserve of senior officials, who may also use such privileges to reward their cronies. Norwegian partners will need to ensure that the selection of project staff and counterparts is based on actual skills and departmental needs.

*Human rights and gender*

The project document does not directly address the issues of gender and human rights, so it does not discuss how the project will affect the human rights situation. Reference should be made to other relevant donor projects, including the efforts of the International Labour Organization in labour rights and the combat of trafficking. There have been instances where enforcement officers have physically assaulted by fishers who have illegal gear, with impunity.

*Potential negative impact on fishing community livelihoods*

If efforts are made to limit canoe fishing, there is a risk that fishing communities will be adversely affected. Canoe-fishing communities are among the poorest communities in Ghana, and they rely entirely on fishing. Any limitations of fishing activity should therefore be accompanied by support to the affected communities, in the form of alternative employment, training and education or direct economic transfers.

# Introduction

The Norwegian Institute of International Affairs (NUPI) has been commissioned by the Norwegian Agency for Development Cooperation (Norad) to carry out a limited political economy analysis (PEA) of the fisheries sector in Ghana. The intention is to inform Norwegian donors on how the fisheries and aquaculture sector in Ghana forms part of the broader political and economic context in the country. The study has been conducted in connection with the proposed initiation of a bilateral project between Norway and Ghana's Ministry of Fisheries and Agricultural Development (MOFAD).

Cooperation between Ghana and Norway in the fisheries sector dates back to the 1960s, when RV Johan Hjort of Norway surveyed the waters of Ghana. Formal cooperation was established in 1964 when Ghana's State Fishing Corporation (SFC) bought seven trawlers from the Norwegian company Akergruppen. Norad supported this initiative by providing technical and operational assistance. Further, Norway provided financial and technical support to the Government of Ghana to establish fisheries and marine engineering courses until 1987. It has provided scholarships for higher education in Norway, supplied equipment and supported the construction of workshop facilities, as well as supporting efforts at combating illegal fishing and developing Volta Lake. All the same, the fishery sector of Ghana is beset with several problems, including widespread illegal, unreported and unregulated (IUU) fishing. In addition, the unregulated management regimes that characterize much of the fisheries sector have resulted in significant loss of economic rents and deteriorating socio-economic conditions of fisheries-dependent coastal communities.

This report begins with a discussion of the broader political economy of Ghana, to offer a better understanding of the challenges confronting its fisheries sector. Next follows an overview of the fisheries sector and its stakeholders. In section 4, the relevant laws and regulatory framework are presented, followed in section 5 by an analysis of the challenges, constraints and conflicts facing the various parts of the

fishing sector (industrial trawlers, canoe fishing, aquaculture). The concluding section identifies risks and presents recommendations.



## The Political Economy Context

Kwame Nkrumah, who headed the Convention People's Party (CPP), led Ghana to independence in 1957. In 1960, the CPP government replaced multiparty democracy with a one-party state (Apter, 1963; Austin, 1970). From 1966 to 1992, Ghana saw 21 years of military authoritarian rule under six different military-police governments, and only five years of constitutional democratic rule by two different political parties. While Ghana's public institutions were deemed among the best and most efficient in Africa at independence, this worsened after the military takeovers (Apter, 1963; Wereko, 2009).

After a decade (1981–92) of quasi-military rule under the Provisional National Defence Council (PNDC), strong internal and external pressures led to the adoption of a liberal constitution in 1992 and the inauguration of multiparty democracy in 1993. Despite these frequent changes in government, clientelism remained 'the glue of political power' (Idun-Arkhurst, 2012). Between the 1960s and the 1980s, the authoritarian and military regimes maintained political control through distributing patronage in return for political support. Ruling coalitions were based on redistribution of resources towards supporters, whereas the weakening economic classes perceived to be real or potential members of the political opposition (Idun-Arkhurst, 2012; Opoku, 2010).

Since the return to multiparty democracy in 1992, elections have been held every four years. A de facto two-party system has emerged, in which the National Democratic Congress (NDC) and the New Patriotic Party (NPP) dominate national elections. With each electoral cycle, the system has become increasingly competitive. For example, while the NDC defeated the NPP by a margin of nearly 30% to win the 1992 elections, the margin of votes that separated these parties in the 2008 presidential election, in which the NPP lost to the NDC, was less than 0.5%. Party turnover has become an increasingly likely outcome in each election. After President John Atta Mills died in office in 2011, his vice president, John Dramani Mahama, led the NDC to win the 2012 elections with 50.7% of the vote. However, Mahama served only one term in office after losing the December 2016 elections to the NPP, led by Nana Addo Dankwa Akufo-Addo, the current President of Ghana.

Both the NPP and the NDC can be described as centrist parties, but there are political differences between them. In general terms, the NDC is a moderate social-democratic party while the NPP is more liberalist and market-oriented. These differences are reflected in the two parties' views on economic policies: the NDC favours more interventionist, state-centred policies, whereas the NPP has a more pro-market orientation. There are also differences in the support base of the two parties: the NPP's stronghold is in the Eastern and Ashanti regions, while the NDC has greatest support in the Volta, Northern, Upper East and Upper West Regions.

Observers of Ghanaian politics concur that the prevailing political settlement can best be defined as 'competitive clientelism' (Abdulai and Hickey, 2016; Hirvi and Whitfield, 2015; Mohan et al, 2018; Oduro et al., 2014; Whitfield, 2011a; 2011b; Whitfield et al., 2015). In such a system, the coalition in power faces strong excluded coalitions that contest its hold on power (Khan, 2010: 65). In competitive clientelist systems, the threat of being removed from power within an electoral cycle may mean that 'there is little incentive for political leaders to invest in the long-term task of building bureaucratic capability' (Levy, 2014: 40). Instead, ruling elites will tend to use the public bureaucracy as a means of maintaining their coalition in power through, *inter alia*, 'the discretionary allocation of rents: market privileges; patronage public employment; single-sourced procurement contracts; preferential access to natural resources' (ibid). Given the credible threat of losing power to excluded and powerful opposition political parties in competitive elections, the logic of competitive-clientelism suggests that the executive is likely to use its discretionary power to allocate goods and benefits to strong lower-level persons, groups and constituencies who are more likely to help the executive to win the next elections. Further, development policies will be shaped by short-term logics of action within the expected tenure of the elected executive, rather than unpredictable long-term logics of action beyond the expected tenure of the elected executive.

Multiparty democracy has generated competitive clientelist tendencies between the NDC and the NPP. Building political legitimacy and regime stability simultaneously requires distribution of resources towards members of the government, party members, and influential leaders in society, while weakening the political and economic bases of

real or perceived members of the political opposition (Idun-Arkhurst, 2012; Opoku, 2010). One implication of competitive clientelism is that, because the power of ruling elites is vulnerable, they will tend to focus on distributional initiatives designed to deliver resources and economic opportunities to their patrons and clients, and on delivering visible goods and services to as many voters as possible. As a result, only initiatives with potential short-term political gains are prioritized (Whitfeld, 2011a; Oduro et al., 2014).

Second, state institutions have been politicized through patronage appointments, with significant implications for the state's administrative capacity. Every transition of power is accompanied by the removal of public servants perceived to be associated with the previous regime. Gyimah-Boadi and Yakah have argued that the effectiveness of Ghana's public bureaucracy is undermined by politicization and the persistent 'clientelization of the democratic politics': most senior public sector bureaucrats 'are typically appointed by presidential fiat, largely on the basis of partisan political criteria rather than merit' (2012: 3).

Partisanship in public appointments has been a persistent feature of competitive clientelism in Ghana. Members of the two dominant parties see control of the state as the most lucrative avenue for group and individual wealth and influence. The president and ruling elites select and appoint persons who are aligned with the ruling political party. While the details of such exchanges remain obscure, it is widely held that this is usually done in order for the ruling elites to maintain political support (Hirvi and Whitfield, 2015). Recent evidence indicates that, partly as a consequence, some elements of institutional quality have worsened since the first competitive elections in December 2000.<sup>1</sup>

Faced with the real threat of losing power to excluded factions in competitive elections, reform initiatives are driven by the strategic incentive to maintain power by ruling coalitions. This has had adverse consequences for the efficacy of reform initiatives, evidenced in superfluous institutional duplications, the politicization of the

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<sup>1</sup> The International Country Risk Guide Assessments show that, as elections have become increasingly competitive in Ghana, bureaucratic quality has stagnated ever since 2006, indicating that improvement in democratic governance has not translated into improved bureaucratic quality and government effectiveness.

bureaucracy through patronage-based appointments, and removal of public servants perceived to be associated with previous regimes.

# Overview of the fisheries sector and key stakeholders

## **3.1. The state of fisheries (stocks, catches)**

Ghana's fisheries sector consists of marine capture fisheries, inland fisheries and aquaculture. At present, the entire sector produces only 41% of the annual fish consumption of 21kg per person with the remainder being imported. To meet the annual per capita consumption requirement of 40kg per person, current fish imports will have to be more than doubled. In addition to providing much-needed animal protein, the fisheries sector creates jobs for 20% of the active labour force (2.7 million people), including women who engage solely in processing and distribution. Furthermore, the fisheries sector contributes about 15% and 3.5% to agricultural and total Gross Domestic Product, respectively, if the income generated along the entire value chain is included. However, the capture fisheries (marine and inland) are over-capitalized and over-exploited, leading to huge losses in potential rents.

The marine fisheries sector has four subsectors: artisanal or small-scale, semi-industrial or inshore, industrial, and tuna fisheries. The industrial sector is made up of trawl vessels and shrimpers. Small pelagic fish species dominate the catches of all the sectors, except that of the tuna fleets. Besides human predation, environmental factors such as seasonal upwelling, salinity and sea temperature affect the environmental carrying capacity and the biological reproduction of the fish stocks. Available statistics on catches and fishing efforts indicate that total fish landing generally increased from the 1970, peaked at 1996 and started to decline through 2016. Figure 1 shows the evolution in catches from 1970 to 2016.

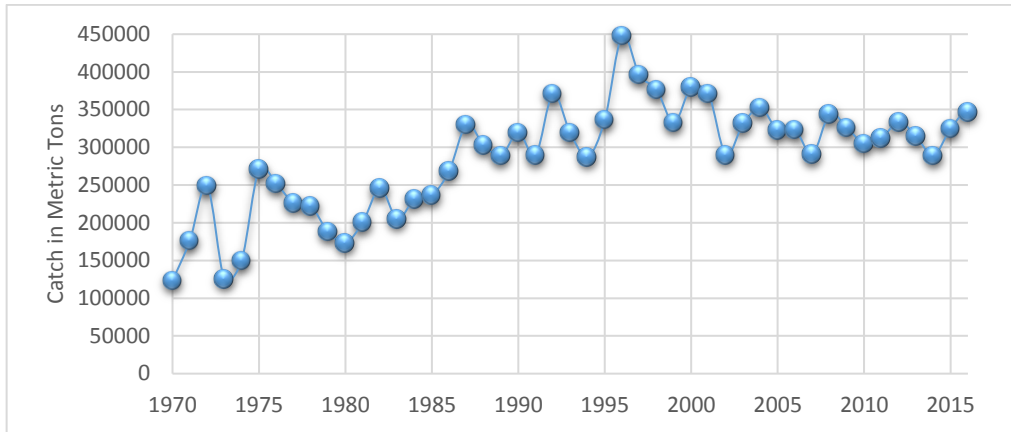


Fig. 1. Total marine landings in Ghana, 1970–2016

The catch level in 1970 was 123,000mt. This rose to 448,000mt in 1996, but then declined by nearly 30% by 2016, despite an increase in fishing effort (i.e., number of fishers and fishing vessels).

Inland fishery in Ghana is entirely artisanal, mainly undertaken in Lake Volta. Fishers use planked canoes, only a few of which (4%) are motorized. Available data (see Fig. 2) indicate that inland waters are biologically overexploited, as catch levels have declined from 81,500mt in 2006 to as low as 41,753mt in 2015 (about 50% within a decade). On the other hand, production from aquaculture has been rising. In 2006, total aquaculture production was 1,667mt, rising sharply to 44,515mt by 2015.

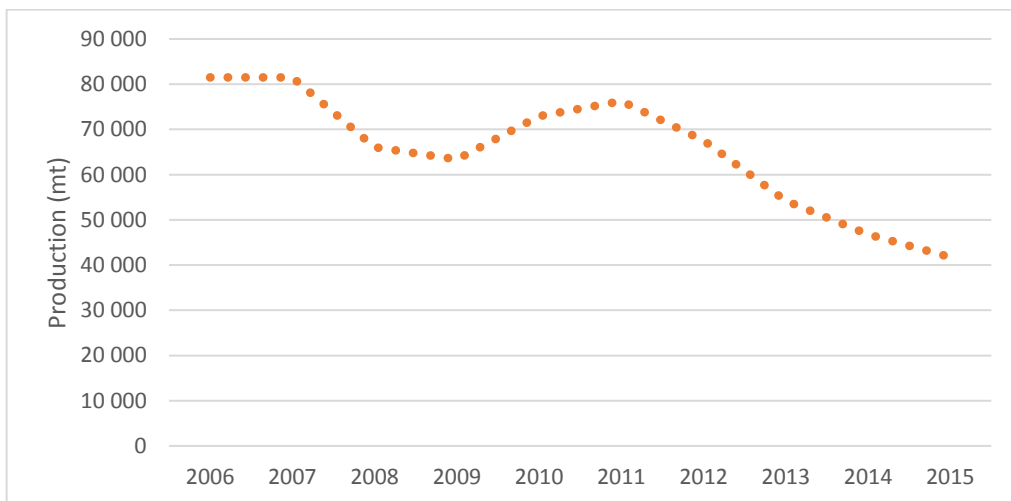


Fig. 2. Inland fish production in Ghana (2006–2015), in metric tons

## 3.2. Key Sectors and Stakeholders

### 3.2.1. Trawlers

The trawl fishery in Ghana involves large, foreign-built vessels operating from two landing sites, Tema and Takoradi, where there are berthing facilities. Prior to the UN Convention on the Law of the Sea, which allocated 200 nautical miles of Exclusive Economic Zone (EEZ) to coastal countries, trawlers from Ghana fished in more productive waters outside the country, mostly in Angola and Mauritania. With the EEZ, vessels are restricted to operating only in Ghanaian waters (Failler et al., 2014; Mensah et al., 2006). The trawlers are licensed to target demersal stocks outside the Inshore Exclusive Zone (IEZ) where the waters are deeper than 30 meters, or the six nautical mile offshore limit, depending on which is greater (Fisheries Act 625 of 2002).

As of 2016, the industrial fishery subsector had 98 operational trawl vessels; at present, there are 76 registered industrial trawlers.<sup>2</sup> The lowest and highest numbers of such vessels (52 and 103) were recorded in 2009 and 2014, respectively. Comparison of the recent fleet to the 48–54 vessels that correspond to the Maximum Sustainable Yield (MSY) (MoFAD, 2015) shows that the country's industrial fisheries are overcapitalized and stocks are heavily overfished. Using data on landings and number of trawlers 1971–2016, and the average operational cost of the vessels, Akpalu and colleagues (2018) have found that the industry may be losing an accumulated rent of over USD 200M within the last five years of their study (2012–2016).

In addition to overfishing the targeted demersal stocks, trawlers in Ghana actively engage in IUU fishing activities. Industry actors agree that all the vessels target small pelagic stocks using fishing techniques that include dragging trawl equipment along the seabed, thereby destroying the benthic (lowest) floor of the ocean. Until recently, many trawlers fished within the inshore exclusive zones, competing with artisanal fishers over dwindling stocks of small pelagic species. Such species caught by the trawlers are disguised as by-catches (locally termed *saike*), frozen in blocks and often transshipped at sea to artisanal boats. Although transshipment, which is illegal unless conducted under

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<sup>2</sup> Interview with MOFAD official, 22 August 2018

the supervision of an authorized officer, has now been minimized, no attempt is made to punish trawlers for illegally landing pelagic species that are not true bycatches (Hen Mpoano, 2015). Trawlers openly sell *saiko* catches at the ports.

### 3.2.2 Canoe fishery

The artisanal marine-capture fishery sector is the dominant fishery sector in Ghana in terms of landings and fleet capacity (Seini, 1995; Tobey et al., 2016). Artisanal fisheries contributed about 64–74% to total marine catches between 2006 and 2016, with approximately 11,600 canoes operating along the coast. This figure does not include *saiko* landings, as the Fisheries Commission does not collect data on illegal landings. It is estimated that there are over 200,000 fishers operating in the fishery and that the livelihoods of 2.7 million people depend on the marine capture fishery sector. Of this figure, about 18% (predominantly women) are engaged in fish processing and distribution. Artisanal fishers employ simple fishing equipment and gear such as dugout canoes, and use outboard motors, purse seine nets, beach-seine nets, drift gill nets, surface set nets, and hook and line. The canoes are privately owned by Ghanaians who generally live in the fishing communities. There are no restrictions on Ghanaians entering the artisanal fishing industry.

Available data indicate that catch levels have been declining since 1992, when the highest catch of 308,000 metric tons was recorded. The lowest catch was recorded in 1999, but has apparently stabilized around 180,000 metric tons since 2013 (see Fig. 3). Similarly, catches per canoe and fisherman have been generally declining: catch figures per canoe are 35.44 and 15.5 metric tons for 1992 and 2016, respectively. Stocks are clearly overcapitalized; recent stock assessment reports indicate severe depletion of small pelagic stocks.



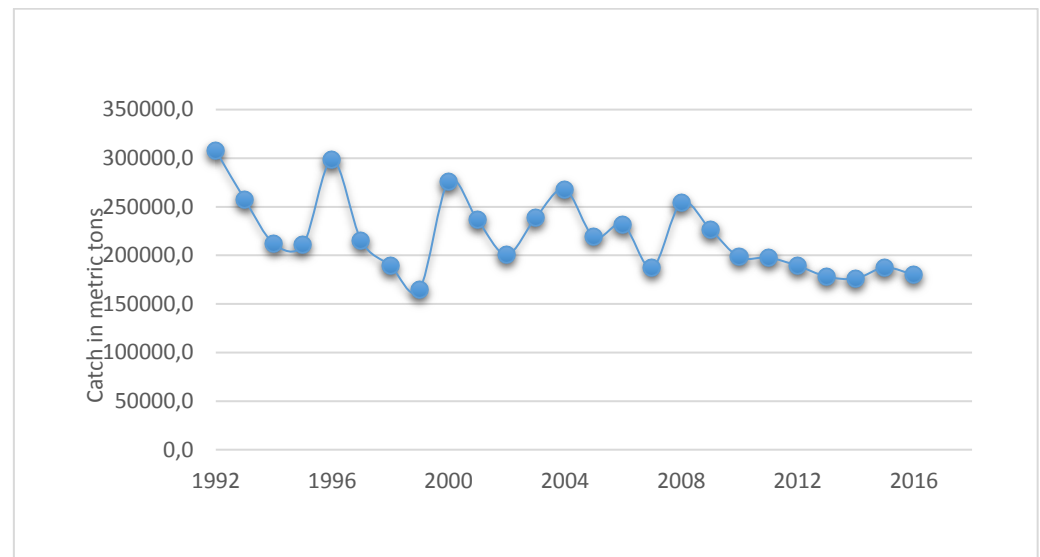


Fig.3. Total artisanal marine capture in Ghana (1992–2016)

### 3.2.3 Aquaculture

Aquaculture started in Ghana in the 1950s. In the past two decades it has gained recognition, as marine and inland fisheries production has declined (Faller and Tall, 2012). Between 2005 and 2016, aquaculture production soared – from 1,153 metric tons to 52,470 metric tons, constituting 0.3 and 11.28% of total domestic fish production, respectively. Tilapia, the dominant species farmed in Ghana, is in great demand, leading to high prices and increasing foreign investment in its production and distribution. The main tilapia breed is the Akosombo strain, initially developed in the 1970s. The faster-growing strain, Genetically Improved Farmed Tilapia (GIFT) developed in 1988, is barred because, according to MOFA, it could have negative impacts on the freshwater ecosystem. Personal communication with industry actors revealed that some large farms are currently (and illegally) growing the GIFT strain, with impunity. Further, industry actors alleged that the large farms do not consult the Fisheries Commission when importing inputs such as feed and drugs for use on their farms, and fisheries officers are prevented from examining the operations on the farms.

Ghana has become a leading (13<sup>th</sup> largest in 2015) producer of tilapia. Given the carrying capacity of Lake Volta, it is estimated that current levels of tilapia production can increase about 400%. The average farm-gate price of tilapia, which is over GH12 (USD 2.50) per kg, is at least

twice the international market price, due mainly to high feed cost, as well as occasional bans and restrictions on imports. Fig. 4 shows the evolution of aquaculture production in Ghana between 2005 and 2016. Fish farming is conducted predominantly in cages and ponds, with cages contributing over 90% of total production.

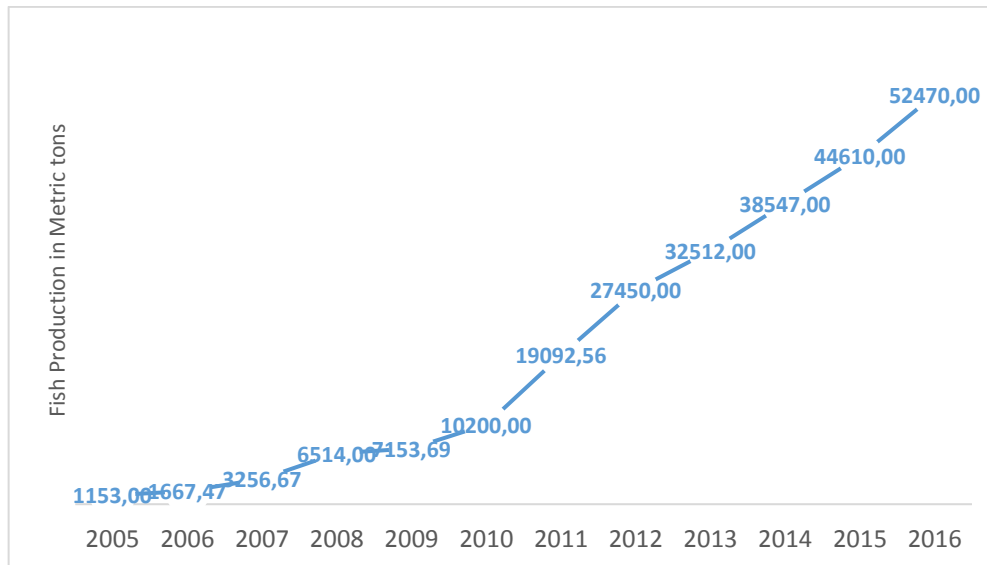


Fig. 4. Aquaculture production in Ghana (2005–2016) in metric tons

Fish farmers in Ghana are classified as large-scale, medium-scale and small-scale or minor operators. Large-scale operators produce more than 100 metric tons a year or have more than 40 cages; medium-scale operators produce 50–100 metric tons or have 16–40 cages; and those with 4–16 cages or produce less than 50 metric tons are termed ‘small-scale’ operators. ‘Minor’ operators farm up to three cages. Nearly all the medium- and large-scale fish farms are owned and managed by foreign operators. Currently, there are ten large-scale farmers, all operating cage culture; eight medium-sized, six of these with cage culture; and many small-scale and minor operators. According to the most recent population census (2010) some 48,000 individuals are involved in aquaculture. Tilapia cage culture is conducted particularly in connection with Volta Lake: this the largest artificial lake in the world in surface area (8,502 km<sup>2</sup>). Cages or ponds are normally stocked with 10g to 30g fingerlings which are grown for 6 to 8 months, achieving an average weight of 250g to 350g (Failler and Tall, 2012).

# Legal framework and administration of fisheries

## 4.1. Review of Legal and Regulatory Framework

The legal and regulatory framework of fisheries management in Ghana is informed by the Fisheries Act (Act 625), Fisheries Regulations (L. I. 1968), National Premix Fuel Committee Regulations (L. I. 2233) and various international fisheries agreements.

### *Fisheries Act (Act 625)*

The Fisheries Act of 2002 provides for the regulation and management of fisheries, the development of the fishing industry and sustainable exploitation of fishery resources, and fishery-related matters. The Act established the Fisheries Commission, which is the implementation agency of MOFAD. It also stipulates the functions of the Fisheries Commission, which include ensuring cooperation (sub-regional, regional and international) in the management of fisheries resources. The Act also requires the Commission to advance the development of artisanal fishing, which is deeply linked with the national economy in terms of jobs and food security. The Commission is to submit recommendations to the Minister of Fisheries on granting of fishing licenses. Further, in collaboration with District Assemblies and fishing communities, the Commission is required to enforce the relevant by-laws of District Assemblies. The Minister of MOFAD is to give general directions on matters of policy, with which the Commission must comply.

The Act stipulates the composition of the Commission, and that its membership reflects the multifaceted management nature of fisheries. Membership in the Commission is to come from other ministries (like Transport, Environment, Defence), other state agencies (like the Water Resources Institute), the National Fishers Association of Ghana, and various organizations and groups of fishers. The Act established the Fisheries Development Fund, specifying the sources of as well the uses of the Fund. The latter include the promotion and development of

fisheries, assistance to small-scale fishery cooperative enterprises, and promotion of research on the fishing industry.

As regards fisheries management and development, the Act calls for the preparation of fishery plans based on best available scientific information. These plans shall identify fishery resources, assess the state of exploitation, specify measures for developing local fishing enterprises, determine the size of fishery resources to be granted to licensed foreign vessels, specify conservation measures, indicate the research required for management, and address principles relevant to artisanal fishing methods.

The Act calls for the licensing of local industrial and semi-industrial fishing vessels, and requires that actions be taken to protect and promote artisanal and semi-industrial fishing in Ghana. It also stipulates the rules that are to govern the artisanal, local semi-industrial and industrial vessels and foreign fishing vessels: for instance, that a fee be paid for the issuance and renewal of artisanal fishing licenses. It mandates the Commission to declare closed seasons; and closed seasons declared by international bodies of which Ghana is a member shall be recognized in Ghana. The Act calls for the protection of gravid and juvenile lobsters and fish in addition to the establishment of marine reserves. Transshipment is allowed only under the supervision of an authorized officer.

The amended Act (the Fisheries Amendment Act 2014, Act 880) strengthens the 2002 Fisheries Act regarding international conservation and management and the empowerment of the minister to combat Illegal, Unreported and Unregulated (IUU) fishing in consonance with international obligations.

Section 41 (1) of the Fisheries Act calls upon the Fisheries Commission to develop Fisheries Management Plans for the management and development of fisheries. The current Plan is aimed at rebuilding fish stocks in order to improve the socioeconomic conditions in fishing communities. Specific main objectives of the 2015–2019 Fisheries Management Plan are to reduce pressures on fish stocks, exploit fish stocks within biologically tolerable levels, implement fisheries legislation, protect marine habitats and biodiversity, enhance export opportunities and value addition, strengthen fisheries co-management, and fulfil the country's international obligations in fisheries management.

*Fisheries Regulations (L. I. 1968) of 2010*

The Fisheries Act 139(1) and its Amendments recommend to the minister responsible for fisheries to make regulations on the recommendations of the Fisheries Commission. As noted above, Fishery Management Plans are to be prepared. The Fisheries Regulations specify the regulations on the registration, licensing of local semi-industrial and industrial fishing vessels. Similarly, the Fisheries Regulations set the specifications for multifilament and monofilament, as well as banning destructive fishing methods such as light aggregation devices (LADs), pair trawling, explosives and dangerous chemicals. Fishing is also prohibited in areas designated for oil and gas exploration and installations. It sets the minimum mesh sizes of fishing gears. Furthermore, the Regulations set the requirements of Ghanaian fishing vessels in foreign waters, and specify rules and regulations concerning the operation of canoe fishing. The Regulations ban transshipment (33(2)) but allow for transshipment at designated ports (33(8)). The Regulations also allow for the changes in fishery management plan to conform to International Agreements and Conventions.

The Fisheries (Amendment) Regulations 2015 (L. I. 2217) modified some existing sections and included additional sections. IUU fishing is now covered, as is international cooperation for combatting such fishing.

The Fisheries Regulations Section 53(3) calls on the Fisheries Commission to develop a management measure in the form of National Aquaculture Guidelines for orderly development and sustainability of the aquaculture industry. The current guidelines (the National Aquaculture Code of Practice and Guidelines) specifies guidelines for site selection, water quality, conservation of indigenous species and aquaculture feeds, as well as guidelines on veterinary medicine, hygiene and fish-processing infrastructure and waste management.

*National Premix Fuel Committee Regulations (L. I. 2233) of 2016.*

These Regulations establish National Premix Fuel Committee (NPFC), to assist in the procurement and distribution of premix fuel to fishing communities. The Regulations specify the composition of the Committee and place the Committee under MOFAD. However, the Committee is also to collaborate with other public and private institutions in order to perform its functions. Further, the Regulations establish and specific the

functions and management the National Premix Fuel Secretariat (NPS), the second agency of MOFAD. Landing Beach Committees are to be established to facilitate the work of the National Premix Fuel Committee. The composition of the Committee, to be constituted in consultation with the District Assemblies, is to cover various related activities of coastal and inland communities. In addition to the distribution and sale of premix fuel, the Committee is also required to undertake developmental projects. The NPS was established to ensure that subsidized premix fuel is not diverted for industrial use; proceeds from the sale of the fuel to artisanal fishers are to be used to develop coastal fishing communities.

#### *International agreements that influence fisheries management*

Both the Fisheries Act and Fisheries Regulations underscore the importance of international agreements for fisheries management in Ghana, in particular the United Nations Convention on the Law of the Sea (this permits fisheries agreements between developing coastal nations and distant-water fishing nations), the International Commission for the Conservation of Atlantic Tuna, Agenda 21 – The United Nations Conference on Environment and Development, the FAO Code of Conduct for Responsible Fisheries, the FAO Compliance Agreement on Flag States, the UN Fish Stock Assessment on Flag State Responsibilities and Port State Measures (in 2016, Ghana ratified the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing) and the FAO Guidelines on Flag State Performance for Responsible Fisheries.

## **4.2. Fisheries administration**

The roles and responsibilities of the main institutions that engage in fisheries administration in Ghana are briefly presented below.

#### *Ministry of Fisheries and Aquaculture Development (MOFAD)*

The Ministry of Fisheries and Aquaculture Development (MOFAD) is responsible for the management of fisheries resources in Ghana and for the development of fishing industry. As stated in the current Fisheries Management Plan, MOFAD is responsible for obtaining cabinet approval for the implementation of management plans; the provision of financial resources for implementing management plans; the supervision of implementing institutions and agencies; and the promotion of

collaboration between the Fisheries Commission and international fisheries management organizations for management plan implementation (MOFAD, 2015).

#### *Fisheries Commission*

The Fisheries Commission, one of two agencies under MOFAD, implements the policies and regulations of MOFAD. It has five divisions: Marine Fisheries Management Division, Inland Fisheries Management Division, Fisheries Scientific Survey Division, Monitoring, Control and Surveillance Division, Operations and Administration Division; and four units: Fish Health Unit, Monitoring and Evaluation Unit, Post-Harvest Unit and Projects Unit. The Fisheries Commission is to review and implement the Fisheries Management Plan, develop staff capacity, and collaborate with the authorities and stakeholders, coordinating the activities of all stakeholders (MOFAD, 2015).

#### *Other Relevant Ministries and Departments*

Section 13 of the Fisheries Act calls for inter-agency collaboration on fisheries management. Both MOFAD and the Fisheries Commission work together with other ministries, departments and agencies (MDAs) in designing and implementing fisheries management. Main MDAs involved in fisheries management include the following:

*Ministry of Environment, Science, and Technology (MESTI):* Its overriding function is to provide leadership and guidance for Environment, Science, Technology and Innovation through policy formulation and implementation.<sup>3</sup> MESTI's implementation agency is the Environmental Protection Agency, which issues Environmental Impact Assessments for economic activities including aquaculture.

*Ministry of Transport:* The core functions of this ministry, especially those related to the Ghana Maritime Authority and Ghana Ports and Harbour Authority, are to formulate and coordinate transport policy; regulate, monitor and coordinate activities relating to the safety and security of marine and inland waterways; and to plan, build, operate and manage all ports and harbours.<sup>4</sup>

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<sup>3</sup> <http://mesti.gov.gh/functions/>

<sup>4</sup> <http://www.mot.gov.gh/2/about-ministry-of-transport>

*Ministry of Trade (Ghana Standards Authority and Ghana Export Promotion Authority):* This ministry formulates and implements policies for the promotion and development of domestic and international trade. Mandates with implications for fisheries management include product certification and destination inspection of high-risk goods.<sup>5</sup>

*Ministry of Health (Food and Drugs Authority):* The functions of Food and Drugs Authority regarding fisheries resources are to ensure effective standards for food, drugs and medical devices; and to advise the Ministry of Health on measures required for the protection of consumer health.<sup>6</sup>

#### *Academic institutions/Universities*

The involvement of academic institutions/universities in fisheries research is discussed in the Fisheries Regulations of 2010. Research collaboration with the Fisheries Commission requires the involvement of the Fisheries Scientific Survey Division (FSSD). Similarly, research conducted in collaboration with Fisheries Commission is required to provide data to the Commission in addition to dissemination of research findings, recommendations and technology transfer. Further, researchers must submit their research findings to the Commission before disseminating them.

#### *Fisheries Associations*

Ghana has many fisheries associations, each catering for a particular type of fisheries. Associations include the Ghana Tuna Association Traders, Ghana Industrial Trawlers Association, Ghana Inshore Fishermen Association, Ghana National Association of Farmers and Fishermen, Ghana National Canoe Fishermen Council, National Fisheries Association of Ghana, Ghana Aquaculture Association, National Association of Fish Processors and Traders, Association of Fish Input Importers.

A key stakeholder in trawler fisheries is the Ghana Industrial Trawlers Association (GITA), composed of individual and corporate trawler fishing operators. Its objectives include bringing together all trawler operators in Ghana under one umbrella, serving as a link between government, policy-making institutions and members of the

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<sup>5</sup> <http://moti.gov.gh/agencies.php>

<sup>6</sup> <http://www.moh.gov.gh/>



association, building member capacity, and ensuring self-regulation and voluntary compliance with fisheries legislation in Ghana and internationally. GITA claims that it complies with the regulations of fishing outside the inshore exclusive zone (IEZ), and as well as using approved mesh size, pays the approved fishing license fees. On the other hand, trawl vessels are known for intentionally targeting small pelagic stocks (as 'by-catches') and underreporting catch volumes to the Fisheries Scientific Survey Division (FSSD).

In January 2009, aquaculture industry actors formed the Ghana Aquaculture Association (GAA), aimed at promoting sustainable aquaculture practices. The GAA seeks to bring together individuals and organizations that are engaged in aquaculture operations. Industry players report that the GAA is beset by several challenges, including lack of financial resources, disproportionate attention to large-scale farmers, and non-compliance with GAA regulations on the part of Chinese-owned, large-scale farms. Aquaculture operators who farm fish in ponds have a subsidiary association, the Ghana National Association of Fish Pond Farmers (GNAFPF). MOFAD and the Fisheries Commission (FC) remain the key stakeholders in this sector. Other stakeholders are the Environmental Protection Agency (EPA), which ensures that fish farmers conduct EIAs in order to ensure good environment practices; the Food and Drugs Authority (FDA), which ensures that aquaculture operators use quality feed in production; the Water Research Institute (WRI), responsible for conducting research on water quality; and the Volta River Authority (VRA) – as noted, cage culture is mainly in Lake Volta.

#### *District-level Institutions*

At the district level, District Assemblies (DAs) play a key role in fisheries management. They are authorized by the FC to pass and enforce fisheries by-laws. However, as noted by Tsamenyi (2013), the Local Government Act does not grant the DAs the powers to make and enforce by-laws related to fisheries management. Since the DAs are under the Local Government, the potency of the law is diminished. However, local and informal institutions are strong within fishing communities along the coast. In each community, there are three traditional institutions responsible for small-scale fisheries management: the village chief; the chief fisherman and his council of elders; and the fish queen, who presides over marketing of fish at the beach. These traditional

institutions enforce fishing regulations and by-laws, resolve fishing-related conflicts, negotiates with government on subsidies to fishing inputs, which are then distribute to fishers within the local community (Overa, 2000; Finegold et al., 2010). These institutions have been effective in enforcing several laws and by-laws, including the ban on fishing with poison and dynamite. There is some scope for local institutions to work with formal ones for sustainable management of local fish stocks, if the authority of the former is not undermined.

#### *Overview of International Actors*

Many international actors are active in fisheries governance in Ghana. The Food and Agriculture Organization of the United Nations (FAO) is responsible for many international agreements on fisheries management. The World Bank undertakes many projects that target the fisheries sector, most recently the West Africa Regional Fisheries Program (WARFP), aimed at improving the management of the fisheries and aquatic resources. Or donors, including United States Agency for International Development (USAID), the EU and the Norwegian government, have supported fisheries management programs in Ghana; and the Environmental Justice Foundation, an international non-governmental organization, has an office in Ghana.

# The political economy of fisheries in Ghana

In this section, we describe the actors, interests and conflicts in Ghana's fisheries sector, focusing on the political challenges and constraints. Since the actors and the nature of conflicts and constraints differ among the various parts of the sector, the industrial fishing sector and the canoe fishing sector are discussed separately. Tuna fisheries is regulated by and are excluded from our analyses.

## 5.1. Industrial fishing

Recognizing the existence of general overcapacity in the fishery sector, it is the stated aim of the government to reduce the number of industrial trawlers. Industrial and artisanal fishing vessels compete for space in Ghana's waters, resulting, *inter alia*, in collisions and damage to fishing gear. There have also been instances where trawlers fish within the Inshore Exclusion Zone (IEZ) which is reserved for artisanal fishers. Given the migratory nature of some of the stocks, industrial activities impose negative externalities on artisanal fisheries (Akpalu and Vondolia, 2012). Industrial trawlers are also known to have infringed on the rights of small-scale fishers in other ways, as by adapting fishing gear to illegally target juvenile fish and small pelagics.<sup>7</sup> Moreover, tuna vessels also rely on capture anchovies as baits.

Currently, there are 76 registered industrial trawlers in Ghana,<sup>8</sup> down from the peak number of 103 in 2014. On the other hand, according to the World Bank, average fishing efforts of trawlers have increased,<sup>9</sup> so it is not clear that the reduction in the number of trawlers has led to a reduction in total trawling activities. Trawlers are obliged to purchase licenses in order to operate. These fees, which have been assessed as being too low (Akpalu and Vondolia, 2012), are the main

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<sup>7</sup> Hen Mpoano (2018) *Issue Brief: Principles of Good Governance for Ghana's Fisheries*,

<sup>8</sup> Interview with MOFAD official, 22 August 2018

<sup>9</sup> Interview with World Bank official, Accra, 28 August

source of government revenue from the trawling sector.<sup>10</sup> As part of the government's policy of local content requirements, industrial trawlers are required to have majority Ghanaian ownership. In practice, this requirement is met by setting up joint ventures where Ghanaians own the minimum requirement of 51%, while the rest is owned by foreigners. Further, licenses must be registered with a Ghanaian partner, and the crew must be at least 75% Ghanaian. The majority share is usually held by one main Ghanaian license holder. However, actual control lies predominantly with Chinese fishers. The remaining crew, which often numbers 20+ Ghanaians, control the lower positions on the boat, and are required to follow the commands of their Chinese captains. The catch of these boats is often split, with 70% sold to local markets and 30% sold as export, due mainly to the composition of small pelagic and demersal catches. Much of the export goes through one of the local fish processors that belong to the Chinese National Fishing Cooperation (CNFC).

In addition, the joint venture agreement governing the ownership must expire within five years of operation, after which time the Ghanaian counterpart is expected to assume full ownership of the vessel. All trawl vessels fly the flag of Ghana, but are in practice owned by foreign nationals. Their Ghanaian counterparts, who are supposed to be majority shareholders, typically receive a fixed income of USD 1,000 a month and a fraction of the by-catches. Furthermore, to avoid transferring ownership to the Ghanaian counterparts when the five-year period expires, the foreign owners of vessels simply negotiate new hire-purchase agreements with a Ghanaian every four years, and the new agreement overrides the preceding ones.

Currently, multiple Chinese companies in joint-arrangement trawling partnerships with Ghanaians dominate the industrial fishing sector in Ghana. Chinese trawlers began coming to Ghana some 25 to 30 years ago. However, the mode of operation has changed, from being an entirely state-owned fleet to one dominated by private companies, now constituting 70% of the Chinese fleet (Penney, Wilson and Rodwell, 2017).

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<sup>10</sup> Currently, trawl licensing and fishing licensing fees are USD 1,350.00 and USD 35.00, respectively.

It is alleged that many officials within the government have some stake in these businesses and receive significant sums of money. Although we have not seen detailed information about ownership of individual vessels, we were told that each trawl vessel is linked to a politician, which makes it difficult for IUU offenses to be prosecuted. We were also informed that, in many cases, the Ghanaian owners were not actively involved in the operation of the vessels.

As part of the agreement with the World Bank when the WARSP programme was initiated, the government's stated aim is to reduce the number of trawlers to 45. The inability to reach this target has created some tension with the World Bank, which is currently considering withdrawing its support for a second phase of the programme. The government claims that it is difficult to reduce the number of trawlers significantly in the short term, because it is legally obliged to respect the license agreements. These agreements have no stipulated time limits and are therefore permanently valid, unless a trawler can be shown to have violated the terms of the license (for instance, by engaging in IUU fishing). Licenses expire, but are renewable (quarterly, biannually, annually, or such period the FC may recommend), as long as the owner of the vessel submits the documents required as per the Fisheries Act.

According to official data, catches from the trawlers constitute about 6% of total marine catches. However, these figures are likely to be an underestimation. First, the Fisheries Commission lacks the capacity to control actual catches: catch figures are based on self-reporting by the trawlers; according to the FC, these reports are not reliable. Second, fish caught by trawlers and subsequently sold to canoe fishermen at sea (*saiko*) is not reported. Although transshipment is legal under Ghanaian law if it is supervised or landed at designated ports, the *saiko* trade is illegal, as it involves trawlers targeting small pelagic species instead of demersal stocks and transshipping the catches at sea without supervision – both of which are illegal activities.

*Saiko* has become a highly organized and lucrative industry, much of which is bought by canoe fishers. Initially, *saiko* arose as a form of informal trading system, where unwanted catches of industrial fishing vessels were exchanged at sea for food, fruit and livestock brought by canoes. Today, industrial trawlers – licensed to fish for bottom-dwelling

species – target fish specifically for the *saiko* trade. This includes small pelagic species like sardinella and chub mackerel that are in high demand for local consumption. These catches, which often include large quantities of juvenile fish, are frozen in blocks and transferred at sea to specially adapted “saiko canoes”. According to the Environmental Justice Foundation,<sup>11</sup> an estimated 100,000 tonnes of fish were landed through *saiko* in 2017. This is equivalent to approx. 40% of the total landings of Ghana’s artisanal fishing sector, and more than twice the official landings of small pelagics in the country. The value of fish traded through *saiko* in 2017 is estimated at between USD 26 and 41 million (value of fish sold at sea), with an estimated landed (pre-processing) value of USD 34 to 65 million. Assessing actual catches is difficult, but it seems clear that they are significantly higher than official figures. According to the Environmental Justice Foundation, official catches from the trawling sector amount to only 18,500 tonnes. If their estimates of the scale of *saiko* catches are correct, only 16% of the actual catches are reported.<sup>12</sup>

By its own admission, the Fisheries Commission does not have sufficient resources to regulate fishing activities effectively, because it lacks both staff and information. For the industrial fishing sector, shortages can be identified at several levels. One factor is the lack of reliable data on catches. Although the Commission does have a VMS system monitoring the location of all trawlers, it is not able to check all trawler activity. The VMS system makes it possible to monitor that the trawlers do not enter the coastal zone earmarked for canoe fishing, except for the purpose of landing their catches – but it does not enable monitoring whether the vessels are complying with regulations at sea. For instance, incidences of transshipment (*saiko*) are not registered. Also, fishing with illegal equipment or fishing for species that they are not entitled to catch is not registered, as such catches are not reported – so trawlers sell illegal catches.

To address such issues, observers have been recruited who go with the trawlers at sea and report back on their activities and any breaches

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<sup>11</sup> <https://ejfoundation.org/resources/downloads/Saiko-briefing-Ghana-EJF-HM-final.pdf>

<sup>12</sup> <https://ejfoundation.org/resources/downloads/Saiko-briefing-Ghana-EJF-HM-final.pdf>

of regulations. However, there are not enough observers – according to the Fisheries Commission, because of lack of resources. Moreover, observers have been intimidated and threatened if they report on illegalities. We were also told that there have also been cases where observers have colluded with the trawler management, and accepted payment for not reporting violations. Hence, despite the introduction of in-ship observers, the authorities have not been able to create an efficient surveillance system.

There is a shortage of staff and equipment in the regulatory institutions. As regards equipment, there is currently no surveillance system that can monitor the actual activities of trawlers. One remedy might be to install surveillance cameras, whether on the trawlers or through satellites or drones. Most likely, a combination of new technological equipment for surveillance and increased staffing of regulatory bodies is required. Funding for such staff and equipment is lacking, and would have to come from the government or from donors.

There are also weaknesses in the system for prosecution of offenders. When trawlers are caught violating regulations, the case may either be taken to court or transferred to the arbitration arrangement known as Alternative Dispute Resolution (ADR). Reportedly, most cases are transferred to the ADR. Here, settlements are made, and violators fined. However, we were informed that these settlements fail to deter offenders, probably because the fines are too low.

A key factor that impedes the enforcement of effective regulations is that there are different forms of political interference. This can be seen at several levels. First, many informants held that the licensing system is politicized, and that licenses are issued as political rewards to those in political positions or with close ties to such persons. The issuing of licenses is thus part of the political system known as ‘competitive clientelism’. This can represent an obstacle to effective management, as political leaders and their key supporters could see their interests threatened by reforms aimed at stricter enforcement of regulations and at making prosecution of violators more effective, thereby weakening their control over the issuing of licenses.

Second, the enforcement of regulations is weakened by the above-mentioned ADR system of out-of-court arbitration. This arrangement enables trawler-owners to avoid strict punishment and is open to political interference. There is little transparency here, but we were told that the fines are too low to serve as an effective deterrent. Moreover, because of the lack of transparency, it may well be that this system is susceptible to bribery.

The lack of political will to implement effective controls in the industrial trawling sector, as noted by the World Bank and others, is therefore related to the structure of political and economic interests. When key actors have an interest in preventing changes that are necessary to improve effectiveness, effective reforms will be difficult to implement, no matter how well- designed the policies are.

Political will and sufficient backing from the top is necessary for effective reform of the trawling sector. One way to create such political will is to improve transparency in the sector. Information about ownership, licenses, profits and fines imposed must be made available to the Parliament, interest groups, and the general public, in order to create greater public awareness and put political pressure on decision-making bodies. That could make it more difficult for those who benefit from the current system to block the necessary reductions in the number of trawlers and their fishing efforts.

## **5.2. Canoe fisheries**

Canoe fishing is by far the largest part of the fishing industry in Ghana, with the artisanal fishing sector employing some 80% of fishers in the country (Republic of Ghana, 2014). According to the Fisheries Commission, data on catches in the artisanal sector are more reliable than those for the trawling sector. Given the under-reporting of industrial fishing described above, this means that the proportion of total catches by the artisanal sector is likely to be lower than the official figures. More than 200 coastal villages have limited alternative sources of livelihood or employment, and rely on fisheries as their primary source of income (Nunoo et al., 2014). Over the past 10 to 15 years, average annual income per artisanal canoe has dropped by as much as 40% (Republic of Ghana, Fisheries and Agricultural Sector Development Plan 2011–2016). Illegal, unreported and unregulated (IUU) fishing



activities characterize the artisanal marine-capture fishery sector. These include the use of nets with very small mesh sizes to target juvenile stock and anchovies, and light-aggregating equipment when there is no moon, to aggregate and catch more fish, and the use of dynamite to incapacitate schools of fish and catch them. Only 5% of artisanal fishers use the approved mesh size of 25mm in stretched diagonal, and 50% of the fishers use artificial lights with high intensity ranging from 220V to 440V. All these activities are illegal as per the Fisheries Act of 2002 (625). The Monitoring, Control and Surveillance (MCS) unit, together with the marine police and the navy, who are charged with the task of seizing illegal gears and arresting the fishers who violate the regulations, are poorly resourced. Moreover, when illegal gears are confiscated, the enforcement officers are often ordered by politicians to return them. Recently, fishers have even attacked enforcement officers when they attempted to regulate IUU fishing. A typical incident occurred at Axim when a police officer working with the Fisheries Enforcement Unit was nearly drowned by some fisher who were fishing with light-aggregation devices.<sup>13</sup>

Seeking to deal with the overfishing problem, MOFAD and the FC decided to impose one-month moratorium on fishing this year. The closure was slated for August, which is the spawning season for some dominant pelagic species. The policy was fiercely protested by the fishers on the grounds that the announcement of the policy was made very close to August, which also happens to be the month that the fishers have bumper harvest.<sup>14</sup> For fear of losing its political capital among the fishers, the government withdrew the moratorium. The threat of voting against the ruling political party was expressed at rallies, following the announcement of the closure. An example is the remark made by one Chief Fishermen:

“We cannot fight the government. We voted for the government, so if the government is imposing something on us, it should have at least engaged us in some negotiations. We are not opposed to the closed season concept *per se*, but we feel it

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<sup>13</sup> <http://spicefmonline.com/2018-09-04-w-r-fon-condemns-attack-on-fisheries-enforcement-unit-by-some-fishermen-in-axim/>

<sup>14</sup> <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Fishermen-fishmongers-demonstrate-against-August-ban-668433> (13 July 2018)

should be postponed to next year for the government to sensitize the fishing communities before the implementation of the policy.”<sup>15</sup>

The government spends about GHC 200 mill. (USD 40 mill.) annually on subsidizing premix fuel used by artisanal fishers. This 50–70% subsidy constitutes about 8% of the revenue from total artisanal landings in 2016. The National Premix Committee (NPC), established in July 2009 by the government of Ghana, is mandated to oversee the administration and distribution of premix fuel but has no authority to prosecute individuals who divert the fuel for industrial use. In 2017, there were 200 recorded cases of premix fuel diversion from the fisheries sector to industries in Ghana. According to personal communications with fishermen, the premix fuel administration has significant political influence, and members of the political party in power benefit from the proceeds from diverted fuel. Thus, the premix fuel subsidy has continued due to reasons of political expediency (to win the votes of artisanal fishers) as well as for financial gains to the political elites involved in fuel diversions to industries.

As in the industrial sector, canoe fishing has severe overcapacity, which exacerbates overfishing and depletion of stocks. The many reasons for this concern rules and policies, the structure of incentives, administrative capacity, and political interests and interference.

Firstly, canoe fisheries management in Ghana is characterized by open access, where every citizen has the right to engage in fishing. Thus, there are license requirements and no fishing quotas. With limited opportunities for alternative employment for members of fishing communities, this creates a classic ‘tragedy of the commons’ situation, where each fisher has an incentive and is entitled to increase fishing efforts. This is reinforced by the fact that the government provides subsidies for fuel, which lowers the cost of fishing and strengthens the incentive to increase efforts. However, representatives of canoe fishers indicated that they would be willing to accept cuts in fuel subsidies if they were guaranteed that the funds currently spent on subsidies were

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<sup>15</sup> <https://www.graphic.com.gh/news/general-news/this-year-s-ban-on-fishing-postponed-to-2019.html>

returned to the fishing communities in a different form, whether as cash transfers, social services or alternative employment.<sup>16</sup>

Secondly, the government has limited capacity to enforce existing rules and regulations. As a result, it has not managed to prevent the use of illegal fishing methods, despite the official ban and its declared policy of combatting the use of such methods. One reason is the shortage of staff in fisheries administration. The large number of vessels, in combination with their dispersed geographical distribution, makes it extremely difficult to create an effective management system. As canoe fishing takes place along the entire coast, from hundreds of villages, effective monitoring would call for substantial government presence and staffing significantly larger than currently available. In particular, it would require a great many local-level officers, on shore and in patrol boats at sea. Hence, establishing proper management and enforcement of canoe fishing would require resources on a scale unlikely to be feasible, at least in the short to medium term.

However, the size of the administration is not the only constraint. Staff members do not perform effectively. We were told of problems of absenteeism (perhaps related to low salary levels) and various forms of collusion/corruption, such as not reporting the use of illegal fishing methods and not prosecuting offenders. There are also problems of a more administrative nature. For instance, the division of responsibilities between MOFAD and the Fisheries Commission is not clear. This is acknowledged by the former, which is working to resolve the problem.<sup>17</sup>

Given the dispersed nature of canoe fishing and the government's limited administrative capacity, a reduction in fishing efforts can be achieved only if fishers comply voluntarily, or if local institutions (chief fishermen and their elders, and the fish queen) are better-resourced. Non-compliance with regulations among canoes fishers may be a protest against illegalities among industrial and semi-industrial fisheries.

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<sup>16</sup> Interview with fishing organizations, 22 August

<sup>17</sup> Interview with MOFAD official, 21 August.

What would be required to achieve voluntary compliance? One challenge is that fishing communities have little trust in the authorities – as was clearly expressed in our meeting with representatives of organizations in this sector. They believe that resources allocated to the sector have been diverted to other uses, and that for political reasons, the overfishing and violation of fishing regulations by the industrial sector are overlooked. This lack of trust makes it difficult to create a climate of cooperation and compliance, and also reflects the fact that fishers' organizations do not feel included in the decision-making process, which they see as being entirely top-down.

On the other hand, it must be acknowledged that the organizations themselves are divided and poorly coordinated. And while the different organisations have a common long-term interest in sustainable management of fish resources, there are also conflicts of interest among them. In particular, canoe fishers' interests may conflict with the interests of industrial trawlers.

However, the organizations recognize that there is a crisis, and that overfishing is a major cause. While canoe fishers acknowledge that the use of illegal methods is a problem that needs to be addressed, they claim that the main reasons for the decline in catches are natural fluctuations in the stocks and greater activity in the trawling sector. Be this as it may, the implication is that canoe fishers are unwilling to reduce their own activity, at least until there is a clear reduction in industrial fishing.

It is a major challenge to persuade canoe fishermen to scale down their efforts in the absence of alternative livelihoods. In such a situation, it is understandable that their response to lower catches is to step up their fishing efforts. While they may be aware of the long-term implications of overfishing, their main concern is to secure a livelihood here and now. Any effective reduction in canoe fishing would have to be accompanied by a good strategy for creating alternative sources of income and employment. Without alternatives, it is unlikely to be possible to create voluntary compliance with a policy which restricts fishing opportunities.

Another problem, perhaps of even greater importance, is that the nature of electoral politics makes it extremely difficult to implement policies that restrict access to fishing for canoes. Since more than two million people depend on canoe fishing, political parties and leaders are reluctant to impose such restrictions, fearing electoral losses. In a competitive clientelist system with two parties of more or less equal size, losing votes in fishing communities could prove decisive in elections, swinging the result in favour of the opposing party. This is a risk few politicians would be willing to take. All stakeholders interviewed saw this as a major reason for the lack of enforcement of restrictions on canoe fishing. For the same reason, it is also politically difficult to cut or reduce fuel subsidies, which in turn contribute to intensified fishing efforts.

These challenges – limited administrative capacity, lack of trust in authorities, lack of alternative livelihoods and electoral risks – all make it very difficult to reduce fishing activity in the canoe sector. It is our assessment that the problems in the canoe sector can be addressed only if overfishing in the industrial sector has been dealt with. We believe that the best place to start is to focus on limiting industrial fishing, by reducing the number of trawlers and by limiting fishing activities of each trawler (shorter season, rotations in fishing periods), with monitoring and enforcement of fisheries regulations among industrial and semi-industrial vessels.

There are two main reasons for focusing the trawlers. First, the relatively limited number of trawlers makes the sector more manageable for the administration. Better trawler surveillance can be achieved by a combination of more staff in the administration, more observers and better equipment (cameras, drones, satellites). Second, visible reduction of industrial fishing will help to give greater legitimacy to subsequent cuts in canoe fishing. Canoe fishers are more likely to comply voluntarily with restrictions if they can see that the activities of industrial trawlers have been reduced. In turn, if reductions are seen as legitimate by canoe fishermen, the political leaders could become less afraid of losing votes by imposing restrictions on canoe fishing.

However, something could be done in relation to the canoe sector as well. First, subsidies of premix fuels could be eliminated or reduced. To lower the political risk associated with such cuts, a guarantee could be

given that the savings from such cuts could be used for other types of support to fishing communities. Second, there could be greater enforcement and prosecution of illegal fishing methods, like the use of dynamite and poison. Third, government support could be given to training and education in fishing communities, to develop alternative livelihoods for those who leave the fishing sector.

### **5.3. Aquaculture**

According to personal communications with actors in this industry, the sector is facing several serious, imminent challenges. The most critical are the high costs of feed, which constitute over 80% of production cost, far exceeding the global average. At present there is one dominant local feed producer: Raanan Fish Feed West Africa, which started production in 2011 and now produces over 30,000 metric tons. The high cost of this locally produced feed is attributable to high import tariffs, taxes and other fees on inputs for production, coupled with the depreciation of the local currency. Import tariffs have made imported feeds far more expensive than locally produced ones. In June 2018, the government introduced a 25% tax on the feed, further increasing the production cost of aquaculture and causing several farms to run up losses and finally fold.

The second challenge facing medium and small-scale aquaculture operators concerns the poor marketing opportunities for their produce, especially during the low season. Large-scale operators generally transport the output to sales points or outlets where they retail them directly to consumers. Medium and small operators, however, often rely on middlemen who offer lower prices and may not come to the farms regularly. One solution recommended by actors in the industry is to establish hubs within the aquaculture areas.

Thirdly, the currently banned GIFT strain takes only four or five months to mature, as against seven to eight months for the Akosombo strain. Given the rising costs of feed, the survival of the aquaculture industry depends on the productivity of the tilapia species or strain that is grown. A complete and comprehensive scientific study must be undertaken to determine whether the GIFT strain poses a credible threat to the freshwater ecosystem. It is alleged that some large-scale operators are already using the GIFT strain, and that a flooding incident at Akuse

caused the GIFT strain to spill over into the Lake Volta – which, as a result, already has mixed breeds.

Finally, other constraints often identified by those in the industry include extreme climate events like flood or drought, poor seed (fingerlings) quality, theft of fish from cages, and inadequate training in fish farming and potential environmental impacts. The cage culture is supposed to be governed by regulatory bodies, but enforcement is far from complete.

## Cooperation areas: Review of the proposal

The proposal submitted by the Government of Ghana identifies three main areas of cooperation:

- Support for sustainable management of fishery resources and aquaculture development
- Support for research and educational institutions to enhance the government's capacity to assist the private sector with knowledge products, data and advice about sustainable fisheries management and aquaculture development
- Support to the private sector to enhance its ability to exploit fishery resources and develop aquaculture in a sustainable manner.

Various activities are proposed under each of these areas. In the proposal, the second area is envisaged to require the greatest proportion of the budget: NOK 35 million of a total of 50 million. The largest individual components are training of MOFAD and FC staff (NOK 10 million) and a canoe frame survey (NOK 10 million).

### **6.1. Assessment**

It is our opinion that the main priority of the Fish for Development Programme should be on fisheries management and enforcement of existing policies and regulations (area 1 of the proposed areas of cooperation). However, the proposal does not detail how the specific objectives are to be achieved. For instance, under component 1.3: Implementation of the Marine Fisheries Management Plan, the only specific activity mentioned is a review of the existing plan. It is also stated that the programme will support implementation of the plan, without specifying how this will be done.

While training and education are important, we do not think that the main obstacles to more efficient fisheries management in Ghana are lack of education or qualifications. The real problems are weaknesses in



management and enforcement due to lack of resources, lack of trust between the industry and MOFAD, and corruption. These problems will not necessarily be addressed by improving the educational levels of staff. Improvement of management and enforcement, in turn, will depend on the political context, the structure of interests, the resources available and the political will of actors in the sector. As explained in the analysis of the political economy of the sector (section 5 above), a major obstacle to better fisheries management fisheries is that, in both the trawling sector and in the canoe sector, there are strong political interests that prevent the implementation of reforms.

Some training may be needed (for instance, strengthening capacity for socioeconomic analyses at the Fisheries Scientific Survey Division, FSSD), but the current proposal fails to provide any specification of the kind of training needed, or a justification of why a particular type of training should be undertaken. As for the canoe survey, that is undertaken on a regular basis in any case, the most recent one being funded by the World Bank under the Ghana West Africa Regional Fisheries Project (P124775). What may be required are updates in the sampling method and revision of the survey instrument used in the canoe frame survey.

Research is indeed needed – for example, on rent losses in the fishery due to the current management regimes and IUU; and on the impact of alternative policies for implementing the management plan. Such research may require a certain amount of capacity and/or collaboration for socioeconomic analyses at FSSD. Moreover, inspection on trawl vessels is failing, because of inadequate training of the inspectors.

It is our opinion that both the two largest components in the budget (Output 2.1 Courses for MOFAD and FC staff, and Output 2.3: Surveys of fisheries) lack proper justification. They could be cut significantly, unless more specific justification is provided. However, the case could be made for support to training and research in aquaculture, which is a relatively new sector in Ghana and with a largely untapped potential. For example, training to improve capacity in fish health and veterinary services is required. However, any training needs must be specific, and not general as in the current proposal.

Further, as the specific sub-components under the three cooperation areas are not justified or described in any detail, it is difficult to assess their relevance and importance.

## 6.2. Risks

The document identifies five risks associated with the proposed programme:

- (1) inadequate political will to support enforcement of laws and regulations in fisheries
- (2) low staff strength and limited logistics as regards MOFAD and FC, collaborating agencies and stakeholders, for effective implementation of project activities
- (3) low compliance with fisheries laws and regulations on the part of private-sector operators
- (4) weak coordination among collaborating stakeholders
- (5) low/inappropriate adoption of improved technology.

Overall, MOFAD considers the programme risk to be low, although the consequences, if shortcomings are not effectively dealt with, are seen as very serious. It is striking, however, that no justification is provided for why the overall risk is seen to be low.

### *Lack of political will to reform*

Fisheries management is not uppermost on the political agenda in Ghana. Despite the officially declared commitment to sustainable fisheries management, there is a lack of day-to-day leadership and commitment to addressing the problem of overcapacity. This is related to the interests associated with preservation of the status quo, as described above. The repeated delays in the preparation of the Fish for Development Programme may be seen as reflecting low political interest in tackling such problems. In addition, there are strong indications that the government prioritizes other sectors, including oil and gas; and that skilled civil servants and top graduates are drawn to such sectors. That makes it especially important to provide a justification for why the risk of a lack of political will is considered to be low. There are important political interests in the sector that can undermine attempts at more effective management.

*Insufficient administrative capacity*

This has three aspects: inadequate number of staff; lack of qualifications among the staff; ineffective organization of the sector. Of these, we consider the first and the third to be the most important. The shortage of staff in MOFAD and FC needs to be addressed. There are also problems of unclear division of responsibility between the Ministry and the Commission. Nevertheless, in our opinion, the lack of certain types of qualifications does not mean general lack of qualified staff. It is a central objective of the programme itself to address these risks, through support for staff strengthening and improved organization of the sector. To be effective, these efforts will require government commitment. Moreover, sustainability must be ensured beyond the project period; here we recommend that the government commit itself to retaining the staff recruited and trained under the programme when the project period ends.

*Lack of compliance*

Of the five stated risks, this is the only one deemed serious by MOFAD. This is also a serious risk in line with our assessment. However, we think the mitigation measures described in the document need to be further specified. It is stated that this risk will be mitigated by sensitization and education of private sector stakeholders, enhanced enforcement and provision of incentives for compliance. However, it is not specified how enhanced enforcement will be secured and how incentives will be changed. In the absence of such specifications, it is not clear how this risk will be managed. Moreover, it is unclear how the activities of the political elites that impede enforcement of regulation and prosecution of those who violate will be addressed.

*Weak coordination among stakeholders*

Norwegian support to the fisheries sector is almost totally dependent on government cooperation. Given limited state capacity in Ghana, it is critical to assist the government in steering effective and transparent coordination of its activities in the sector. Within the government, this applies particularly to the division of labour between MOFAD and the Fisheries Commission. Beyond the government, the same applies to coordination and cooperation with private actors (most importantly, the fisheries organizations, as well as NGOs and civil society organizations). Main responsibility for such coordination lies with MOFAD, but it is not

clear whether MOFAD has the capacity for managing or ensuring synergies here.

In addition, it is important to ensure that other partnerships do not duplicate or compete with Norwegian support. Norway should ensure that the Fish for Development programme is incorporated into existing formal mechanisms of state–donor coordination. There should be a focus on information sharing and coordination with other donors. That will also reduce the risk of ‘double dipping’ – receiving technical or financial assistance from several partners for the same activity.

### **Other risks**

While the risks discussed in the draft document are real and important, there are also other risks that the document does not mention. We would emphasize the following:

#### *Lack of accountability and government legitimacy*

As argued above, there is a lack of trust towards the government from actors in the fishing industry. Representatives of trawlers and canoe fishers claim that they do not trust the government authorities, whom they consider to be inefficient, corrupt, and not responsive to their concerns. As some kind of cooperation and voluntary compliance is required, this lack of trust represents a risk for any reform programme for the sector. Mechanisms for holding relevant actors accountable are needed. This applies both to government institutions and industry actors.

With the exception of university cooperation, it is not clear how the programme intends to engage or support other key stakeholders from civil society business and the parliament. Support to other natural resource sectors, including the Norwegian Oil for Development programme, emphasizes the importance of stakeholders, especially non-government actors, by making the sector more accountable, transparent and sustainable. The fisheries project document should make clear how civil society, citizens, and businesses will be able to use fisheries sector information to bring public pressure to bear on the government to address governance challenges.

The project should consider supporting, or at a minimum informing, relevant parliamentary committees, so that they can better understand

and review the current situation of fisheries sector development in Ghana. This is likely to strengthen parliamentary support and engagement on reforms crucial to achieving results, as set out in connection with Ghana's bilateral cooperation with Norway.

We propose the establishment of a Steering Committee for the programme, to improve accountability. This Committee should include representatives of all key stakeholders in fisheries management in Ghana, including MOFAD, the Fisheries Commission, parliament/political parties, fisher organisations (both trawlers and canoe fishers) and representatives of civil society, such as the Environmental Justice Foundation or Friends of the Nation.<sup>18</sup> This Committee would then need access to information about catches, controls, decision-making about licenses, restrictions on fishing efforts, prosecution of violators and any other matter related to fisheries management. By providing them with such information, the Committee could, it is hoped, help to create creating political pressure for compliance with regulations and sustainable management.

Norwegian support should seek to support the production of more and better information, data and research in the fisheries sector. Such information needs to be made available to stakeholders, including the citizenry and civil society. This will require an effective strategy for public engagement, where MOFAD/FC can demonstrate tangible benefits from the project to on-the-ground needs. It is essential to keep stakeholders – especially local communities and civil society – informed of what the project is trying to achieve, as well as producing relevant sector information.

#### *Access to project benefits*

In Ghana, training, educational and travel opportunities with international partners are often the preserve of senior officials, who may also use such privileges to reward their cronies. Norwegian partners will need to ensure that the selection of project staff and counterparts is based on actual skills and departmental needs.

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<sup>18</sup> <https://ejfoundation.org/> ; <http://fonghana.org>

*Human rights and gender*

The project document does not directly address the issues of gender and human rights, so it does not discuss how the project will affect the human rights situation. Reference should be made to other relevant donor projects in the sector, including the efforts of the International Labour Organization in labour rights and the combat of trafficking. There have been instances where enforcement officers have physically assaulted by fishers who have illegal gear, with impunity. Officers who attempt to enforce regulations have also been threatened with dismissal.

Norway's extensive international experience in combatting illegal fishing and organized crime in the fisheries sector is also highly relevant for promoting cross-cutting principles of human rights. Human rights should be recognized as part of Norway's work on rule-of-law (control and sanctions) cooperation in the Fish for Development programme.

*Potential negative impact on fishing community livelihoods*

If efforts are made to limit canoe fishing, there is a risk that fishing communities will be adversely affected. Canoe-fishing communities are among the poorest communities in Ghana, and they rely entirely on fishing. Any limitations of fishing activity should therefore be accompanied by support to the affected communities, in the form of alternative employment, training and education or direct economic transfers.

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