



A HUMAN RIGHTS LENS ON THE IMPACTS OF INDUSTRIAL ILLEGAL FISHING AND OVERFISHING

on the socio-economic rights of small-scale fishing
communities in Ghana

A report by the Environmental Justice Foundation



Protecting People and Planet

The Environmental Justice Foundation

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OUR MISSION

Protecting People and Planet

EJF believes environmental security is a human right.

EJF strives to:

- Protect the natural environment and the people and wildlife that depend upon it by linking environmental security, human rights and social need
- Create and implement solutions where they are needed most – training local people and communities who are directly affected to investigate, expose and combat environmental degradation and associated human rights abuses
- Provide training in the latest video technologies, research and advocacy skills to document both the problems and solutions, working through the media to create public and political platforms for constructive change
- Raise international awareness of the issues our partners are working locally to resolve

Our Oceans Campaign

EJF's Oceans Campaign aims to protect the marine environment, its biodiversity and the livelihoods dependent upon it. We are working to eradicate illegal, unreported and unregulated fishing and to create full transparency and traceability within seafood supply chains and markets. We conduct detailed investigations into illegal, unsustainable and unethical practices and actively promote improvements to policy making, corporate governance and management of fisheries along with consumer activism and market-driven solutions.

EJF is working to secure sustainable, legal and ethical seafood.

Our ambition is to secure truly sustainable, well-managed fisheries and with this the conservation of marine biodiversity and ecosystems and the protection of human rights.

EJF believes that there must be greater equity in global fisheries to ensure developing countries and vulnerable communities are given fair access and support to sustainably manage their natural marine resources and the right to work in the seafood industry without suffering labour and human rights abuses.

We believe in working collaboratively with all stakeholders to achieve these goals.

For further information visit www.ejfoundation.org

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Executive summary

Fishing communities in Ghana are struggling to sustain their livelihood and avoid extreme poverty. Fisheries resources have declined severely over the past two decades, creating competition over access and resulting in conflicts at various levels. Despite national, regional, and international policies which focus on giving small-scale fishers and fish workers access to marine resources and markets, Ghana's fishing communities and their human rights are often overlooked, marginalised, or violated.

This research looks into the impacts of illegal, unreported and unregulated (IUU) fishing and overfishing by industrial vessels on the socio-economic situation of small-scale fishing communities in Ghana. The issues are analysed through a human rights lens, with a focus on the right to decent work and to an adequate standard of living. Working with human rights standards can help illuminate critical issues impacting the realisation of rights of small-scale fishers, while providing the basis for fisherfolks to claim their rights through legal processes and advocacy. They can be used as guidance for formulating policies and initiatives that can support the development of sustainable fisheries and improve livelihoods and dignity of coastal fishing communities.

The study draws on primary data collected in five fishing communities in the Central Region of Ghana. The study focuses specifically on the effects of overfishing and illegal fishing by industrial trawlers in Ghana on local fishing communities, with the caveat that other factors, including overfishing and illegal activities among small-scale fishing communities themselves, are undoubtedly also playing a role in fisheries declines. The vast majority of industrial trawlers in Ghana, although operating under the Ghanaian flag, are controlled and financed by distant water fishing companies based in China¹.

The information in this report is intended to provide a basis for small-scale fishers, fish workers and their communities, as rights holders, to claim their social and economic rights and to hold the government, as duty bearer, to account for infringements of their rights. There is a role for civil society organisations and Ghana's National Human Rights Institution, the Commission on Human Rights and Administrative Justice (CHRAJ), to build capacity and support small-scale fishing communities to claim access to marine resources and secure their livelihoods through the use of human rights standards and monitoring mechanisms. The findings also provide a basis for the CHRAJ to work with the Fisheries Commission and Ministry for Fisheries and Aquaculture Development to develop and implement a rights-based approach to fisheries management, which prioritises the needs of vulnerable small-scale fishing communities who make up the majority of fish workers in the country yet are often marginalised in decisions concerning their livelihoods.

Importance of small-scale fisheries in Ghana

- Ghana's marine fisheries provide livelihoods for around 2.5-3 million people² along the value chain, or around 10% of the population.
- Small-scale fisheries employ around 107,500 fishermen or 80% of all fishers in Ghana³.
- An additional 500,000 individuals are engaged in processing, distribution and marketing of fish throughout Ghana, including many women⁴.
- More than 14,700 canoes⁵ operate across 300 landing beaches⁶, accounting for around 11% of canoes in West Africa⁷.
- Ghana has the highest fish dependence in Africa, providing 60% of animal protein intake⁸ with a yearly per capital fish consumption of an estimated 28 kg⁹.



Fish landed by an industrial trawler operating in Ghana.

Key findings

The study identified potentially serious human rights issues which are indicative of inadequate measures on the part of the government of Ghana to protect, respect and fulfil the human rights of fishing communities in the country, as required under international law. As duty bearer, Ghana is under a legal obligation to ensure fishing communities enjoy social and economic rights, and to provide remedies in the event these rights are violated.

The study revealed declining incomes and living conditions for small-scale fishers and fish workers, high levels of employment and income insecurity, a lack of access to social security, adequate sanitation and clean water, as well as food insecurity and poor school completion rates, among others. For small-scale fishers and fish workers in Ghana, having no access to employment for three or months of the year is a relatively common occurrence, with few alternative income generating opportunities available in the communities. As a result of fish population declines, fishers are also travelling further out to sea in search of catches, with implications for their basic safety and well-being. A number of the issues identified relate to Ghana's minimum core obligations under international law, particularly to guarantee the right to social security, to minimum essential food, to free and compulsory primary education for every child, and access to an adequate clean water supply, sanitation and medical services.

Declining fish populations and incomes of fishers, processors and traders point to a failure to protect and fulfil the rights of small-scale fishers and fish workers to work, and to just and favourable conditions of work, including the right to a level of income that allows workers to support themselves and their families. This is impeding realisation and enjoyment by small-scale fishers, fish workers and their families of the right to an adequate standard of living and to the continuous improvement of living conditions. A further concern relates to apparent inequalities in fulfilment of key socio-economic rights for men (fishers) compared to women (processors and traders) in the study, warranting further attention.

The findings indicate that small-scale fishers and fish workers are a vulnerable and marginalised group, calling for special measures to ensure their human rights are respected, protected and fulfilled. This is a group of rights holders that the government of Ghana should be highly concerned about and should prioritise in policymaking.

Critically, there is a need for further investigation by the government of Ghana and the CHRAJ in several key areas to determine whether government acts of omission or commission in relation to the management of the fisheries sector constitute a violation of fundamental human rights. In recent years, the government has failed to address illegal "saiko" fishing, while authorising intensive trawling activity, despite severe declines in artisanal fish landings. The lack of action to prevent trawling companies from violating the right to work of small-scale fishers and fish workers could be construed as retrogressive under international law, resulting in the deterioration of key human rights of fishing communities. In neglecting to regulate these activities, it is unclear whether Ghana is discharging its minimum core obligation to protect the rights of small-scale fishers and fish workers, as a disadvantaged and marginalised group, to access employment that enables them to live a life of dignity.

A summary of the key human rights issues identified is provided below. The study did not attempt to review all possible human rights issues and potential violations, but to highlight key issues for further examination and action.

Key human rights issues identified in the study:



Around **80-90%** of fishers and processors/traders surveyed reported **declines in income** over the past five years.



Over **75%** of fishers and **70%** of fish processors/traders reported a **worsening of their living conditions** over the past five years.



Almost **75%** of fishers reported that they encounter **industrial trawlers more frequently** during their fishing expeditions compared to five years ago.



Around **15-20%** of school children in the survey **had left school** prior to completing primary education.



Around **70%** of fishers had suffered **damage to their fishing gear** by industrial trawlers.



Over **50%** of fishers and almost **60%** of processors/traders reported going **without access to sufficient food** over the preceding 12-month period.



In less than **15%** of cases were fishers able to obtain **compensation for damage** caused.



Almost **70%** of fishers and over **40%** of processors/traders had gone **without access to sufficient clean water** during the preceding 12-month period.



Over **93%** of respondents obtained at least **90%** of their **livelihood** from fishing, fish processing or trading activities.



Just **one third** of fisher households and less than **20%** of processor/trader households had access to an improved toilet facility.



Less than **4%** of fishers and **2%** of processors/traders surveyed were participating in a **social security scheme**.



Just over **30%** of fishers and **60%** of processors/traders reported complete coverage of their households under the **National Health Insurance (NHI) scheme**.

Issue 1: Decline in effective income for small-scale fishers and fish workers in Ghana due to IUU fishing and overfishing

- Almost 95% of fishers reported a decline in landings during the major fishing season.
- Around 70% of respondents perceived the state of the fisheries as “much worse” compared to five years prior to the survey.
- Fisheries declines have resulted in declining incomes which have fallen in many cases below the level of decent remuneration. **Around 80-90% of fishers and processors/traders surveyed reported declines in income over the past five years.**
- Vulnerability has been increased by the COVID-19 pandemic, which has resulted in income losses.
- Fishing expeditions resulting in zero catches are now relatively common: an average of 11.7 zero catch days were reported during the major fishing season (equating to 12.7% of fishing days), and 17.4 zero catch days during the minor fishing season (equating to 19.3% of fishing days).
- Processors and traders reported facing difficulties obtaining sufficient fish to process.
- Average monthly expenditures exceeded income in many cases, resulting in fishers and fish-workers being unable to cover basic needs.

Issue 2: Increasing competition with large-scale, industrial trawl vessels for access to resources

- Competition between small-scale fishers and commercial trawl operators has increased in recent years.
- **Almost 75% of fishers reported that they encounter industrial trawlers more frequently during their fishing expeditions compared to five years ago.**
- Activities of trawlers and saiko operators are having a significant negative impact on small-scale fisher/fish worker livelihoods and their access to fisheries resources.
- The ratio of small-scale compared to industrial trawl catches has declined to almost equal magnitudes when illegal and unreported (saiko) catches are taken into account.
- Fishers are now fishing increasingly beyond the IEZ reserved for small-scale vessels as fish stocks decline, resulting in increased interactions with industrial vessels and presenting risks to health and safety.
- Fishers regularly encounter trawlers in their fishing grounds and suffer damage to their fishing gear.
- Over 90% of fishers had observed trawlers in their fishing grounds during the preceding 12-month period.
- **Around 70% of fishers had suffered damage to their fishing gear by industrial trawlers. In less than 15% of cases were fishers able to obtain compensation for damage caused.**

Issue 3: Government failure to eliminate the illegal practice of saiko and address other forms of illegal and unsustainable fishing by industrial trawl vessels

- Illegal activities of industrial trawlers and saiko operators are having a significant negative impact on the livelihoods of small-scale fishers and fish workers.
- Saiko continues openly at ports such as Elmina.
- Fishers report illegal incursions into the IEZ by industrial trawlers and sightings of illegal activities.
- Fishers report threats and abuse when trying to approach trawlers fishing illegally within the IEZ.

Issue 4: High levels of income insecurity and a lack of social security for small-scale fishers and fish workers

- Small-scale fishers and fish workers are highly vulnerable to unemployment and temporary loss of work-related income (due to poor catches, damage to fishing gear, falling prices, closed seasons, etc.). Income insecurity is high.
- Reported incomes of fishers and fish workers fall to zero in some of months of the year.
- Over 80% of fishers experienced damage to their fishing gear during the preceding 12-month period yet were rarely able to obtain compensation for losses incurred.
- **Over 93% of respondents obtained at least 90% of their livelihood from fishing, fish processing or trading activities.**
- Just 6.5% of fishers and 3% of processors and traders had received skills upgrading or training to help transition into additional income generating activities.
- **Less than 4% of fishers and 2% of processors and traders surveyed were participating in a social security scheme.**
- Government support in the form of fuel and engine subsidies are not accessible to all fishers when needed.
- Very limited government support is available to women working in fish processing and trading activities.

Issue 5: Living conditions in small-scale fishing communities have worsened in recent years due to declining incomes

- Around 75% of fishers and 65% of processors and traders rated their current living conditions as unsatisfactory.
- **Over 75% of fishers and 70% of fish processors and traders reported a worsening of their living conditions over the past five years.**
- Fisheries declines have resulted in incomes falling below the level necessary to provide a decent living, resulting in fishers and fish workers unable to cover basic needs.

Issue 6: Incidences of non-attendance or non-completion of primary education, in some cases due to cost

- A minority of fishing households were unable to send their children to primary school due to cost.
- **Around 15-20% of school children in the survey had left school prior to completing primary education.**
- Primary school completion rates were lower for children from processor/trader households compared to fishing households.
- Secondary school completion rate was less than 50% for both boys and girls, and around 5% lower for girls. Cost was the main factor preventing fishers from sending children to school.
- Secondary school completion rates were lower for children from processor/trader households compared to fishing households.

Issue 7: Food insecurity/lack of access to sufficient food for small-scale fishers, fish workers and their families

- Fisheries and related income declines have had an impact on food availability in fishing communities.
- Almost 80% of fishers and 98% of processors and traders reported declines in the availability of fish for consumption over the preceding five-year period.
- **Over 50% of fishers and almost 60% of processors/traders reported going without access to sufficient food over the preceding 12-month period.**

Issue 8: Irregular supply of clean drinking water and low rates of access to improved toilet facilities

- Drinking water supplies are irregular, resulting in fishing households regularly going without access to sufficient clean water.
- **Almost 70% of fishers and over 40% of processors and traders had gone without access to sufficient clean water during the preceding 12-month period.**
- High levels of deprivation were reported in relation to sanitation facilities.
- **Just one third of fishing households and less than 20% of processor/trader households had access to an improved toilet facility (flush toilet or Kumasi Ventilated Improved Pit, KVIP, latrine).**
- 18% of fishers and 14% of processors/traders reported lacking access to sanitation facilities altogether, using the beach as their main toilet facility.

Issue 9: Incomplete coverage of fishing communities by the National Health Insurance scheme; instances of individuals from fishing households going without medical treatment due to cost

- Incomplete coverage of small-scale fishing households by the National Health Insurance (NHI) scheme.
- **Just over 30% of fishers and 60% of processors/traders reported complete coverage of their households under the scheme.**
- Multiple reported instances of individuals going without medical treatment when needed during the preceding 12-month period.
- Inability to access treatment is most commonly due to cost.

Ghana's small pelagic fishery is in a perilous state with severe implications for the economic and social rights of small-scale fishing communities. In addition to regulating industrial trawling activity, improving social and economic safeguards for these workers is particularly crucial in the context of collapsing fishery resources and implementation of measures, such as fishing closed seasons, to stem fisheries declines. There is a need to reform the current programme of subsidies to ensure these are effective in supporting fishers to improve their standard of living and in fulfilling human rights. Reducing fleet capacity is necessary in both the artisanal and industrial sectors but must begin with the industrial fleet and be accompanied by the development of realistic alternative income generating activities for fishing communities.

Improving governance of the sector through enhanced transparency and involvement of small-scale fishing communities in decision-making, particularly in the authorisation of industrial fishing activity, is key to securing the rights of fishers and fish workers to their livelihoods, food security and sustainable development. This should be complemented by specific measures to secure small-scale fisher rights of access to fisheries resources, including through extension of the IEZ boundary to reflect current patterns of canoe fishing effort, and ensuring the IEZ boundary is clearly defined and can be enforced.

The report sets out a number of recommendations to the government of Ghana to address key human rights concerns identified and enhance progress towards the achievement of the 2030 SDG Agenda. The recommendations cover aspects such as: improving access to resources for small-scale fishers; addressing overfishing and ensuring the effective regulation of industrial fishing; improving fisheries governance, with a focus on enhancing transparency and accountability; securing meaningful and effective participation of small-scale fishing communities in management and decision-making; providing support for alternative income generating activities, cooperatives and trade associations; and ensuring access to social security protection and essential services. The planned reform of Ghana's fisheries law framework provides an opportunity to establish a clear and unequivocal legal basis to respect, protect and fulfil the human rights of small-scale fishing communities, enshrining into law the recommendations set out in this study.



Artisanal fishers hauling in their net in Ghana's waters.

Table: Recommendations to the government of Ghana to address human rights issues identified in this study, with a focus on decent work and an adequate standard of living

(a) Right to work, to free choice of employment and to just and favourable conditions of work

Issues identified	Relevant human rights obligations	Recommendations to the government of Ghana
Issue 1: Decline in effective income for small-scale fishers and fish workers in Ghana due to IUU fishing and overfishing	<p><u>Human rights instruments:</u> Art. 7 ICESCR Art. 18 UNDROP</p> <p><u>Minimum core obligations:</u> Para. 31 General Comment No. 18 on the Right to Work</p> <p><u>Key SDG Targets</u> Target 2.3 Target 8.5 Target 10.1 Target 12.2 Target 14.2 Target 14.4 Target 14.b Target 14.c</p>	<ol style="list-style-type: none"> 1. Take all appropriate measures to secure and prioritise access of small-scale fishers to fisheries resources in the Ghanaian EEZ. 2. Prioritise implementation of strict controls on the industrial trawl sector and elimination of harmful practices such as saiko. 3. Take immediate and robust enforcement action to end illegal saiko fishing by industrial trawl vessels and ensure trawlers use compliant gear. 4. Reduce capacity and fishing effort within the industrial trawl fleet, taking into account both legal and illegal catches including by-catch. 5. Adopt and implement a management plan based on best available scientific evidence, in accordance with the precautionary principle and ecosystem-approach to fisheries, to address over-capacity across all fleets, leading with the industrial trawl sector. 6. Ensure all offences by industrial trawl vessels are investigated and sanctions applied in accordance with minimum requirements in the law to ensure they have a deterrent effect. 7. During the reform of the 2002 Fisheries Act, ensure regulations are in place to prohibit the activities of industrial vessels that undermine the sustainable management of fisheries, e.g., saiko. 8. Address illegal and destructive fishing practices by the artisanal fleet.
Issue 2: Increasing competition with large-scale, industrial trawl vessels for access to resources	<p><u>Human rights instruments:</u> Art. 6 ICESCR Art. 4(2)(h) UNDROP Art. XIX Protocol to ACHPR on the Rights of Women in Africa</p> <p><u>Minimum core obligations</u> Para. 4 General Comment No. 18 on the Right to Work</p> <p><u>Key relevant SDG targets</u> Target 1.4 Target 5.a Target 10.2 Target 14.b Target 16.6 Target 16.7 Target 16.10</p>	<ol style="list-style-type: none"> 1. Adopt measures to facilitate equitable access and the granting of preferential access to fishery resources for small-scale fishing communities. 2. Extend the IEZ reserved for small-scale fishers to reflect the current fishing patterns of the small-scale fleet. Ensure the IEZ boundary is clearly defined and can be enforced. 3. Strictly enforce the IEZ reserved for small-scale fishers and ensure all detected incursions by industrial vessels are investigated and sanctioned in accordance with the law. 4. Improve transparency and community participation in decision-making, particularly concerning the allocation of licences to industrial or foreign vessels. 5. Establish a mechanism for the provision of inputs from stakeholders and for such inputs to be taken into consideration in deciding whether or not to grant licences to industrial or foreign vessels. 6. Require all industrial licences to be subjected to parliamentary approval as required for exploitation of any natural resource by the 1992 Constitution.¹ 7. Enshrine in law and fully implement the National Fisheries Co-Management Policy as a basis for meaningful and effective participation of small-scale fishing communities in fisheries management and decision-making and advancing their human rights. 8. Set out mandatory requirements for publication of licence lists, access agreements, vessel details including beneficial ownership and sanctions for IUU fishing to improve transparency and accountability in the sector.

¹ Taylor Crabbe Initiative (2020). *Legal opinion on the requirement for parliamentary approval for industrial fishing licences in Ghana –Summary*. March 2020. <https://ejfoundation.org/reports/legal-opinion-parliamentary-fishing-licenses>.

<p>Issue 3: Government failure to eliminate the illegal practice of saiko and address other forms of illegal and unsustainable fishing by industrial trawl vessels</p>	<p><u>Human rights instruments:</u> Arts. 6 and 7 ICESCR</p> <p><u>Minimum core obligations</u> Paras. 31 and 32 General Comment No. 18 on the Right to Work</p> <p><u>Key relevant SDG targets</u> Target 14.2 Target 14.4 Target 14.b Target 14.c</p>	<ol style="list-style-type: none"> 1. Ensure all offences by industrial trawl vessels are investigated and sanctions applied in accordance with minimum requirements in the law to ensure they have a deterrent effect. 2. Take immediate and robust enforcement action to end illegal saiko fishing by industrial trawl vessels and ensure trawlers use compliant fishing gear. 3. During the reform of the 2002 Fisheries Act, ensure regulations are in place to prohibit the activities of industrial vessels that undermine the sustainable management of fisheries, e.g., saiko.
<p>Issue 4: High levels of income insecurity and a lack of social security for small-scale fishers and fish workers</p>	<p><u>Human rights instruments:</u> Art. 22 UDHR Art. 9 ICESCR Art. 11(1)(e) CEDAW Art. 4(2)(c) and 22 UNDROP</p> <p><u>Minimum core obligations</u> Para. 31, General Comment No. 19 on the Right to Social Security</p> <p><u>Key SDG Targets</u> Target 1.3 Target 1.4 Target 1.5 Target 5.a Target 8.3 Target 10.4</p>	<ol style="list-style-type: none"> 1. Identify and address barriers to accessing social security schemes by small-scale fishing communities. 2. Progressively extend labour protections and social safeguards to small-scale fishers and fish workers in the informal economy, including the national minimum wage, social security, compensation for workplace accidents and mortalities, and retirement benefits. Amend the Labour Act 2003 to include provisions on small-scale fishers and fish workers. 3. Establish non-contributory social security programmes, and/or subsidised pension, life and/or health insurance in fishing communities to provide protection in the event of accident or illness. 4. Support the development of informal social security schemes, such as community-based insurance (e.g., to cover damage to fishing gear). 5. Support development of and access to appropriate financial services at community level, including savings, credit and insurance schemes. 6. Provide support to the development of supplementary or alternative income generating opportunities in fishing communities, including through relevant education and vocational training programmes and financial assistance. 7. Provide support to fishers and fish workers to organise into cooperatives and trade associations at all stages of the value chain to enhance livelihood security, while strengthening existing cooperatives and trade associations. 8. Ensure measures aimed at reducing fishing effort, including closed seasons and capacity reduction, are accompanied by support to small-scale fishers and fish workers in the form of cash transfers or other compensation. 9. Reform the current programme of fisheries subsidies to ensure these are effective in supporting fishers to improve their standard of living and in fulfilling human rights.

(b) Right to an adequate standard of living, to the continuous improvement of living conditions and to development

Issues identified	Relevant human rights obligations	Policy recommendations to the government of Ghana
<p>Issue 5: Living conditions in small-scale fishing communities have worsened in recent years due to declining incomes</p>	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. 22 ACHPR Art. XIX Protocol to the ACHPR on Rights of Women in Africa</p> <p><u>Key SDG Targets</u> Target 2.3 Target 8.3 Target 8.5 Target 10.1 Target 14.2 Target 14.4 Target 14.b</p>	<ol style="list-style-type: none"> 1. Take all appropriate measures to secure access of small-scale fishing communities to fisheries resources in the Ghanaian EEZ as a basis for food production and a decent living. 2. Implement strict controls on fishing activities and capacity reduction within the industrial trawl sector. 3. Eliminate harmful and destructive fishing practices such as saiko. 4. Ensure the meaningful and effective participation of small-scale fishing communities in the negotiation of industrial fishing licences and foreign access agreements. 5. Promote decent work in small-scale fishing communities to ensure remuneration is sufficient to cover basic needs. 6. Develop, adjust or extend social security systems to small-scale fishing communities, ensuring programmes are accessible, context-appropriate (e.g., informal, community-based or non-contributory schemes) and cover at least essential needs. 7. For further Recommendations, see under <i>Issue 1</i> and <i>Issue 4</i> above on access to decent and productive work and a decent living.
<p>Issue 6: Incidences of non-attendance or non-completion of primary education, in some cases due to cost</p>	<p><u>Human rights instruments:</u> Art. 26 UDHR Art. 13 ICESCR Art. 17 ACHPR</p> <p><u>Key SDG Targets</u> Target 4.1 Target 4.5 Target 4.6</p>	<ol style="list-style-type: none"> 1. Develop targeted programmes and policies to address barriers to access to primary education in small-scale fishing communities. 2. Implement targeted programmes and policies to develop and improve accessibility of secondary education for every child, directed especially at households of fish processors and traders. 3. Provide support to the development of secondary and higher-level education and vocational training programmes in small-scale fishing communities and ensure financial assistance is available for households in need. 4. Conduct further research into the causes of marginalisation/inequality that result in lower attendance or completion rates for girls to inform further interventions.
<p>Issue 7: Food insecurity/lack of access to sufficient food for small-scale fishers, fish workers and their families</p>	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD</p> <p><u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health</p> <p><u>Key SDG Targets</u> Target 2.1 Target 2.4 Target 4.1 Target 4.5 Target 4.6 Target 14.b</p>	<ol style="list-style-type: none"> 1. Prioritise implementation of measures to improve sustainable fisheries management and secure access for small-scale fishers and fish workers to fisheries resources and markets. See further the Recommendations under <i>Issue 1</i> and <i>Issue 2</i> above. 2. Consider policy options such as food ration support in times of difficulty, e.g., during closed seasons. 3. Develop, adjust or extend social security systems to small-scale fishing communities, ensuring programmes are accessible, context-appropriate (e.g., informal, community-based or non-contributory schemes) and cover at least essential needs. See further Recommendations under <i>Issue 4</i> above.

<p>Issue 8: Irregular supply of clean drinking water and low rates of access to improved toilet facilities</p>	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. XV Protocol to the ACHPR on the Rights of Women in Africa <u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health <u>Key SDG Targets</u> Target 6.1 Target 6.2</p>	<p>1. Ensure clean water and sanitation programmes are effectively reaching small-scale fishing communities and address issues related to marginalisation that may be preventing fishing households from accessing these rights.</p>
<p>Issue 9: Incomplete coverage of fishing communities by the National Health Insurance scheme; instances of individuals from fishing households going without medical treatment due to cost</p>	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. 16 ACHPR Art. XIV(2) Protocol to the ACHPR on the Rights of Women in Africa <u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health <u>Key SDG Targets</u> Target 3.8</p>	<p>1. Identify and address barriers to accessing essential health care for small-scale fishing communities 2. Adjust existing or develop context-appropriate health insurance schemes that provide at least essential health care for small-scale fishers, fish workers and their families.</p>

Abbreviations: ACHPR – African Charter on Human and Peoples’ Rights; CEDAW – Convention on the Elimination of all Forms of Discrimination Against Women; DRD – Declaration on the Right to Development; ICESCR – International Covenant on Economic, Social and Cultural Rights; UDHR – Universal Declaration of Human Rights; UNDROP – United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas.

1. Introduction

1.1. Human rights and small-scale fisheries

The government of Ghana (as duty bearer) has an obligation to ensure that human rights enshrined in international human rights instruments and labour standards are protected, respected, and fulfilled for all individuals in the country, including for those living in fishing communities. For small-scale fishers, fish processors and fish traders in Ghana (the rights holders), the promotion, protection, and fulfilment of their human rights is intricately connected with their employment in the fisheries sector. From pre-harvest through to harvest and post-harvest activities, fisheries not only play a critical role in food security, livelihoods, and local economies, they are integral to the social fabric, traditions, and way of life of coastal communities.

Ideally, the regulation and management of Ghana's fisheries sector should be in line with the 2030 Agenda for Sustainable Development and the country's obligations to promote, protect and fulfil human rights (see **Box 1**). Sustainable Development Goal (SDG) 14 of the 2030 Agenda provides a global and national platform for addressing the depletion of marine resources, including illegal, unreported and unregulated (IUU) fishing, and for promoting access of small-scale fishers to marine resources and markets. The Government of Ghana has expressed its strong commitment to this agenda, as reiterated in the most recent Voluntary National Review of implementation of the 2030 Agenda, published in 2019¹⁰.

However, due to marine resource depletion, and with few other employment and livelihood opportunities available, the human rights of people living in fishing communities are under pressure in several respects. Fishing communities in Ghana are struggling to sustain their livelihood and avoid extreme poverty. The depletion of resources creates competition over who gets access to fish the remaining resources and results in conflicts at various levels. Despite national, regional, and international policies which focus on giving small-scale fishers access to marine resources and markets (see **Box 1**), fishing communities and their human rights are often overlooked, marginalised, or violated in the battle over access to marine resources.



Hook and line fishers unloading their catches at Elmina fishing harbour in Ghana's Central Region.

Box 1: Human rights and sustainable development

The achievement of human rights is widely recognised internationally as an integral part of the process of development. A human rights-based approach (HRBA) to development is normatively based on international human rights standards and operationally directed to promoting and protecting human rights¹¹. It recognises that development must contribute to the realisation of human rights while providing a strong basis for individual citizens, as “rights holders”, to make claims for infringements of their human rights and hold states to account as the “duty bearers”.

The 2030 Agenda for Sustainable Development is “the result of the most consultative and inclusive process in the history of the United Nations”¹² and is firmly grounded in the Universal Declaration of Human Rights (UDHR) and other international human rights treaties. It seeks to realise human rights for all and emphasises the need for human rights and the Sustainable Development Goals (SDGs) to be implemented in a mutually reinforcing manner. It offers a critical opportunity to advance the full spectrum of human rights, including economic, civil, cultural, political and social rights¹³, in the context of international and national development action.

Small-scale fisheries are central to achieving SDG 14 on sustainable oceans and, specifically, Target 14.b on access for small-scale fishers to marine resources and markets¹⁴. This target has bearing on a wide range of human rights, including the right to work, to food, to an adequate standard of living, to protection from discrimination, labour exploitation and hazardous work conditions, among others. SDG Target 14.b is directly underpinned by the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). The SSF Guidelines promote a human rights-based approach to small-scale fisheries.

Small-scale fisheries are also essential for achieving a number of other targets under the SDGs, including SDG 1 (no poverty), SDG 2 (no hunger), SDG 3 (good health and well-being), SDG 5 (gender equality), SDG 8 (decent work and economic growth) and SDG 10 (reduced inequalities) and supporting achievement of the entire 2030 Agenda¹⁵. More specifically, this includes:

- **Target 1.3:** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- **Target 1.4:** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services including microfinance.
- **Target 1.5:** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
- **Target 2.1:** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.
- **Target 2.3:** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- **Target 5.a:** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

- **Target 8.3:** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
- **Target 8.5:** By 2030, achieve full and productive employment and decent work for all and equal pay for work of equal value.
- **Target 8.8:** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
- **Target 10.1:** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
- **Target 10.2:** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
- **Target 10.4:** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
- **Target 12.2:** By 2030, achieve the sustainable management and efficient use of natural resources
- **Target 14.2:** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive ocean
- **Target 14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
- **Target 14.b:** Provide access for small-scale artisanal fishers to marine resources and markets
- **Target 14.c:** Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want
- **Target 16.6:** Develop effective, accountable and transparent institutions at all levels
- **Target 16.7:** Ensure responsive, inclusive, participatory and representative decision-making at all levels
- **Target 16.10:** Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

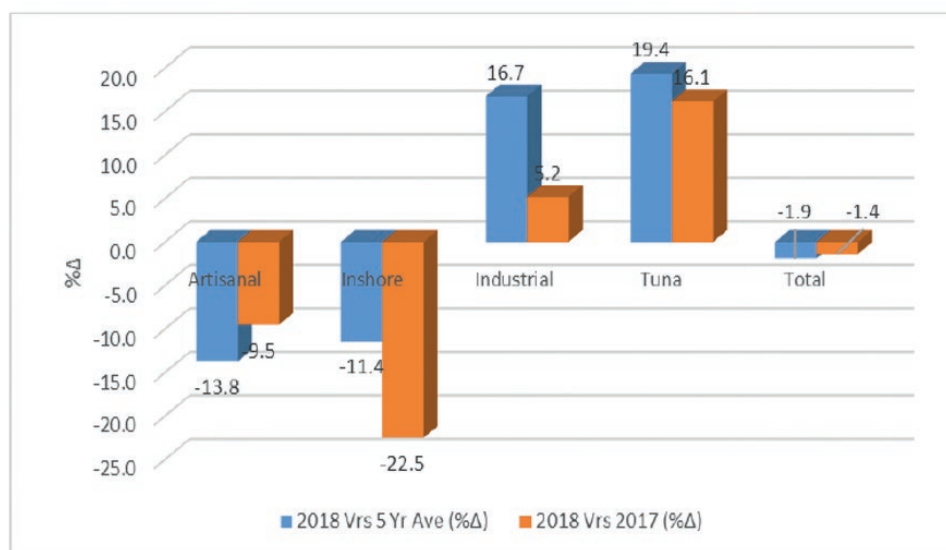
1.2. Trends in Ghana's small-scale (artisanal) fisheries sector

Ghana's marine fisheries provide livelihoods for around 2.5-3 million people¹⁶ along the value chain, or around 10% of the population. Small-scale fisheries employ around 107,500 fishermen or 80% of all fishers in Ghana¹⁷, with an additional 500,000 individuals engaged in processing, distribution and marketing of fish throughout the country, of which many are women¹⁸. More than 14,700 canoes¹⁹ operate across 300 landing beaches²⁰, accounting for around 11% of canoes in West Africa²¹. Ghana has the highest fish dependence in Africa, providing 60% of animal protein intake²² with a yearly per capita fish consumption of an estimated 28 kg²³.

However, recent years have seen severe declines in Ghana's fish populations and the incomes of small-scale fishers. This has implications for the enjoyment of the right to an adequate standard of living, to the continuous improvement of living conditions, and to development. Landings in Ghana's artisanal sector declined from 298,249 metric tonnes in 1996 to 179,721 metric tonnes in 2016 (despite an increase in the number of canoes from 8,626 in 1996 to 11,583 in 2016)²⁴. In 2018, total artisanal landings declined by 13.8% as compared to the preceding five-year average (**Figure 1**)²⁵. The mainstay of Ghana's fishing communities is the small pelagic fishery. Known as the 'people's fish' due its critical role in food security and local livelihoods, this includes the *Sardinella aurita* (Round Sardinella), *Sardinella maderensis* (Flat Sardinella), *Engraulis encrasicolus* (European Anchovy) and *Scomber colias* (Atlantic Chub Mackerel). Historically, the *Sardinella* spp. (known locally as *Eban*) have been the most important component of catches of the artisanal sector. However, populations of these species have declined significantly over the past two decades, from landings of 135,628 metric tonnes in 1996, to landings of 29,111 tonnes in 2016 (**Figure 2**). In 2017, scientists predicted the collapse of the small pelagic fishery within 3-7 years in a business-as-usual scenario²⁶. A 2019 assessment by FAO recommended the closure of the sardinella fishery shared between Côte d'Ivoire, Ghana, Togo and Benin to allow fish populations to recover²⁷.

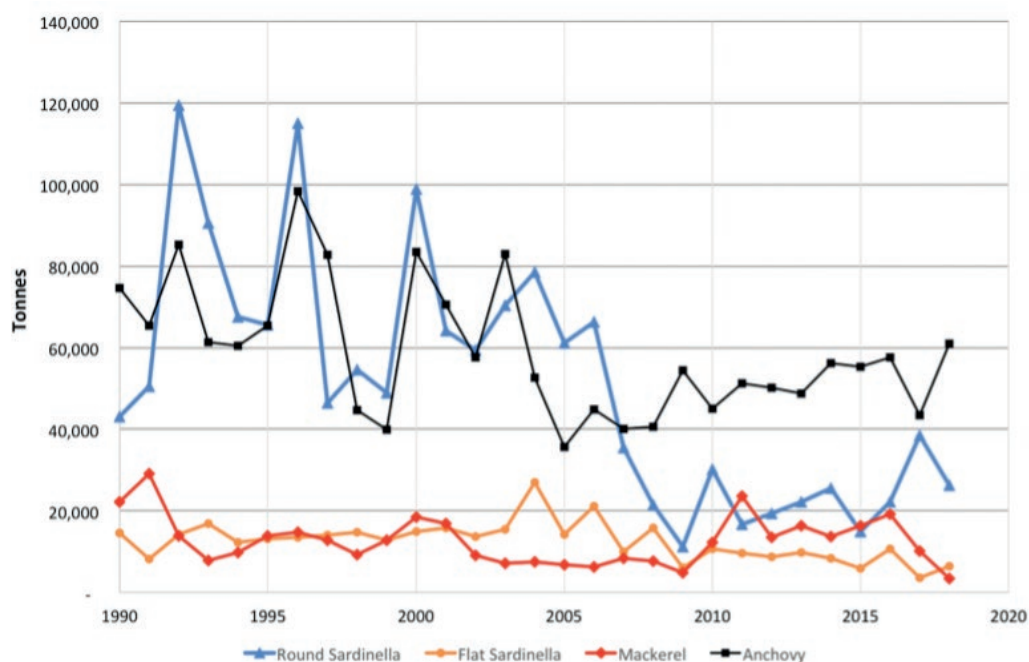
There is evidence that declining trends in fisheries output are contributing to declining incomes and rising poverty levels in coastal communities (**Box 2**)²⁸. Fishers are travelling further out to sea in search of fish – well beyond the six nautical mile/30 metre depth Inshore Exclusion Zone (IEZ) reserved for artisanal fishing²⁹ (**Figure 3**) – yet are increasingly reporting fishing days with zero catch³⁰. Incomes of small-scale fishers declined by an estimated 40% between 2001 and 2011³¹, and by an estimated 46.6% in 2019 compared to the preceding five-year average (from US\$ 191.6 million to US\$ 102.4 million)³² (see **Figure 4**). Whereas historically Ghana's fisheries were able to sustain the nutritional needs of the population³³, the country today imports more than half of the fish it consumes³⁴.

Figure 1: Percentage change of fish landings by marine fisheries sub-sector in Ghana



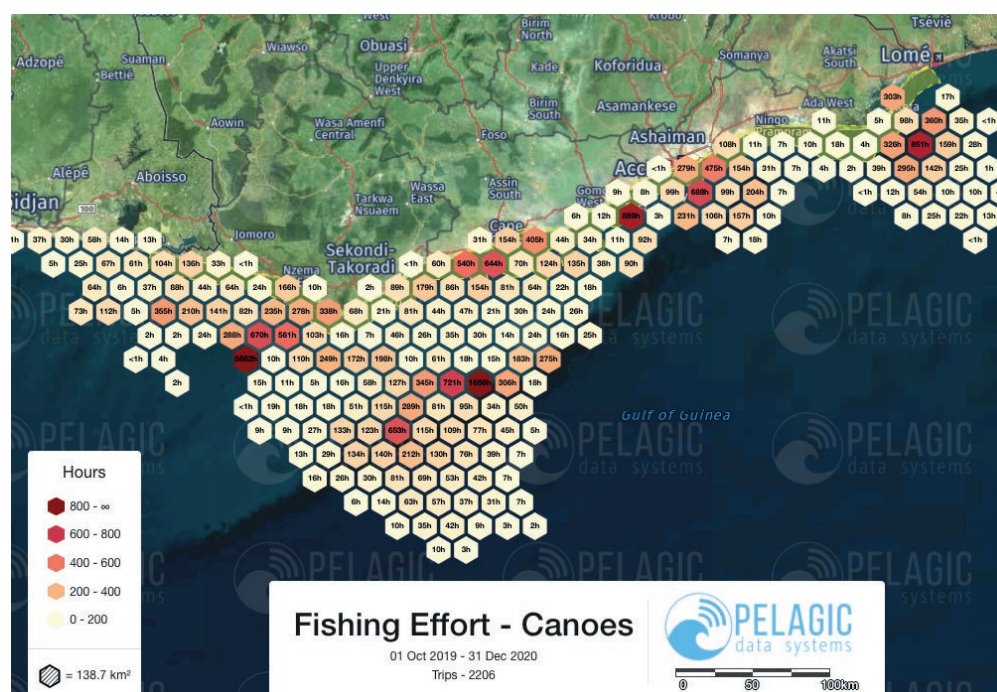
Source: Fisheries Commission (2019, unpublished)

Figure 2: Small pelagic landings by major species (1990-2018, metric tonnes)



Source: Scientific and Technical Working Group (STWG) (2019, unpublished)

Figure 3: Fishing effort recorded from tracking devices on 21 canoes (set net and hook and line gears) during the period October 2019 to December 2020



Source: Pelagic Data Systems

Note: Tracking devices were installed on 21 canoes and 4 semi-industrial vessels. 81.5% of canoe fishing effort (canoes fishing with set nets and hook and line gears) was found to have taken place beyond the IEZ boundary during the period October 2019 to December 2020, in some cases at significant distances from shore.

Box 2: Multidimensional poverty index for Ghana

The Multidimensional Poverty Index (MPI) is a measure of acute multidimensional poverty. It complements traditional monetary poverty measures by providing an assessment of deprivation of basic survival needs, tracking 12 indicators across the three dimensions of health, education and living standards. It is measured as a product of two factors: the incidence of poverty (H) (i.e., the proportion of households who are multidimensionally poor), and the intensity of poverty (A) (i.e., the average percentage of deprivation experienced by households who are multidimensionally poor).

The first MPI report for Ghana was published in June 2020³⁵. The report uses data from the seventh round of the Ghana Living Standards Survey (GLSS)³⁶, conducted in 2016/17, to shed light on inequalities and vulnerabilities across the different regions of Ghana. The findings provide a tool to assist government and stakeholders in identifying effective interventions that reflect the development needs of all Ghanaians, towards achieving the targets in the 2030 SDG Agenda.

While the national MPI report does not disaggregate data to the level of fishing and non-fishing households in Ghana, the present study computed values based on data collected for the GLSS Round 7. The data revealed a significant difference ($p < 0.01$) in MPI values between fishing (0.402) and non-fishing (0.275) households in the same districts, with the proportion of multidimensionally poor households significantly higher among fishing households than non-fishing households (**Table 1**). The disparities were particularly pronounced for school attainment, assets, overcrowding and housing, as well as access to sanitation and cooking fuel (**Table 2**).

Table 1: Multidimensional poverty in fishing communities in Ghana

Variables	Fishing district/region (all households)	Non-fishing households	Fishing households
Head Count (H)	0.594*** (0.0145)	0.562*** (0.0158)	0.784*** (0.0319)
MPI (= H x A)	0.293*** (0.00758)	0.275*** (0.00816)	0.402*** (0.0183)
# of Observations	1,150	983	167

Notes:

The data are based on GLSS 7.

Standard errors in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

MPI: Multidimensional Poverty Index

H: Proportion of population who are multidimensionally poor

A: # of indicators on which H is deprived.

Table 2: Deprivation by indicators

Indicators	Weight	Fishing district/region (all households)	Non-fishing households	Fishing households
Education				
School attainment	1/9	35.74%	33.57%	48.50%
School attendance	1/9	4.00%	3.87%	4.79%
School lag	1/9	7.65%	7.22%	10.18%
Health				
Illness and injury	1/6	44.09%	42.32%	54.49%
Health insurance	1/6	64.61%	63.89%	68.86%
Living Standards				
Sanitation	1/21	84.26%	83.52%	88.62%
Electricity	1/21	12.00%	11.29%	16.17%
Cooking fuel	1/21	62.26%	58.29%	85.63%
Overcrowding	1/21	23.83%	21.26%	38.92%
Assets	1/21	40.26%	38.86%	48.50%
Water	1/21	68.61%	69.69%	62.28%
Housing	1/21	23.65%	21.47%	36.53%

Table 3: MPI by dimension

	Fishing district/region (all households)	Non-fishing households	Fishing households
Education	0.159	0.159	0.161
Health	0.487	0.493	0.464
Living Standards	0.353	0.348	0.375

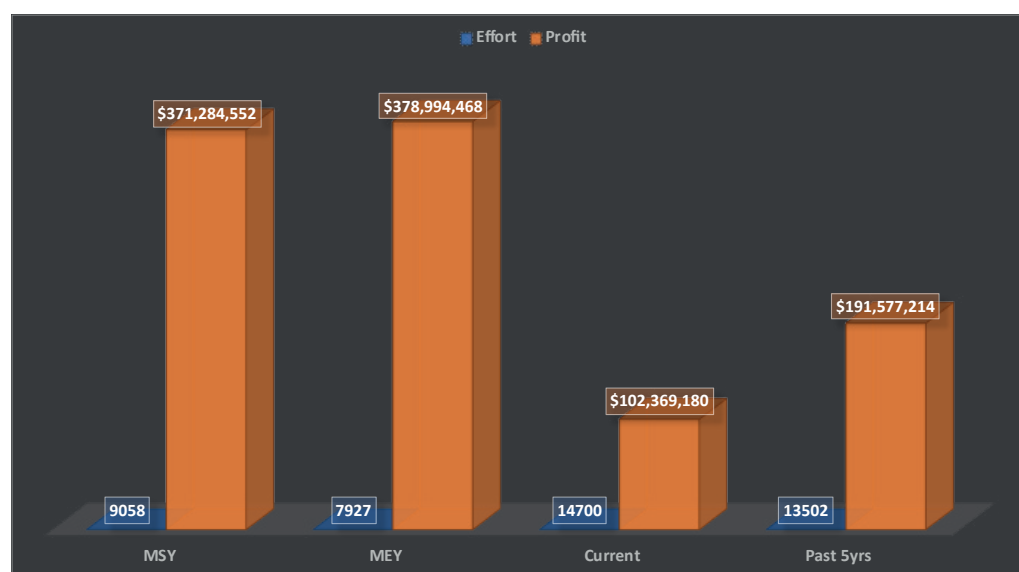
Assessing the performance of Ghana's artisanal fisheries sector requires a focus not only on ecological outcomes, but on the economic and community benefits derived from the fishery³⁷. Indeed, it is the latter benefits that play a critical role in the fulfilment of key human rights of fishing communities and the attainment of sustainable development objectives.

Previous research on the ecological, economic and community benefits of Ghana's artisanal fisheries found the sector to be under-performing across all three dimensions³⁸. This is supported by data on poverty levels within fishing communities in Ghana, as reflected in Multidimensional Poverty Index (MPI) values, which indicate a failure to secure minimum social outcomes for fishing households in the country (**Box 2**).

In terms of economic benefits, data on profit and fishing effort highlight how current profits of Ghana's artisanal fishers are falling far below the level that may potentially be generated at Maximum Sustainable Yield (MSY) or at Maximum Economic Yield (MEY)³⁹ (**Figure 4**). Catch per unit effort for artisanal fishers has declined steadily over the past two decades (**Figure 5**), and by around 22.6% in the years from 2009 to 2018⁴⁰. Profits currently stand at less than a third of potential profits at MSY, at US\$102.4 million with 14,700 canoes compared to US\$371.3 million with 9,058 canoes (**Figure 4**)⁴¹.

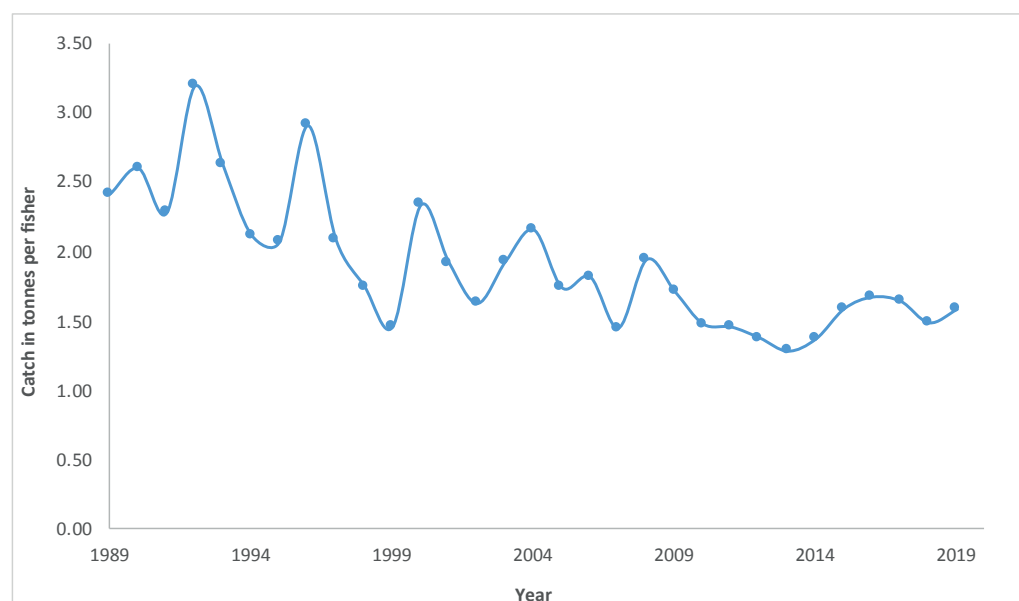
Official landings data are indicative of a possible shift in resource allocation from small-scale fishers to the industrial trawl fleet over time. The ratio of reported canoe landings to reported trawler landings declined by over 50% from 10.9 to 1 in 2009, to 4.7 to 1 in 2018 (**Figure 6**)⁴². In 2017, an estimated 100,000 tonnes of additional unreported catches were traded illegally by trawlers through 'saiko', competing directly with canoe fishers for catches of small pelagics (**Box 3**)⁴³. Based on this estimate, the ratio of reported canoe landings to total industrial trawl landings (reported and unreported catches), would equate to 1.2 to 1 in 2017, or approximately equal in magnitude. With industrial trawlers now competing with artisanal fishers for the same fishing grounds and catches (**Box 3**), addressing over-capacity and illegal fishing in the trawl sector should allow for a greater number of canoes to operate in the fishery (than the projected 9,058 vessels in **Figure 4**) yet still achieve MSY.

Figure 4: Model of fishing effort and potential profit in the artisanal sector at Maximum Sustainable Yield (MSY) and Maximum Economic Yield (MEY)



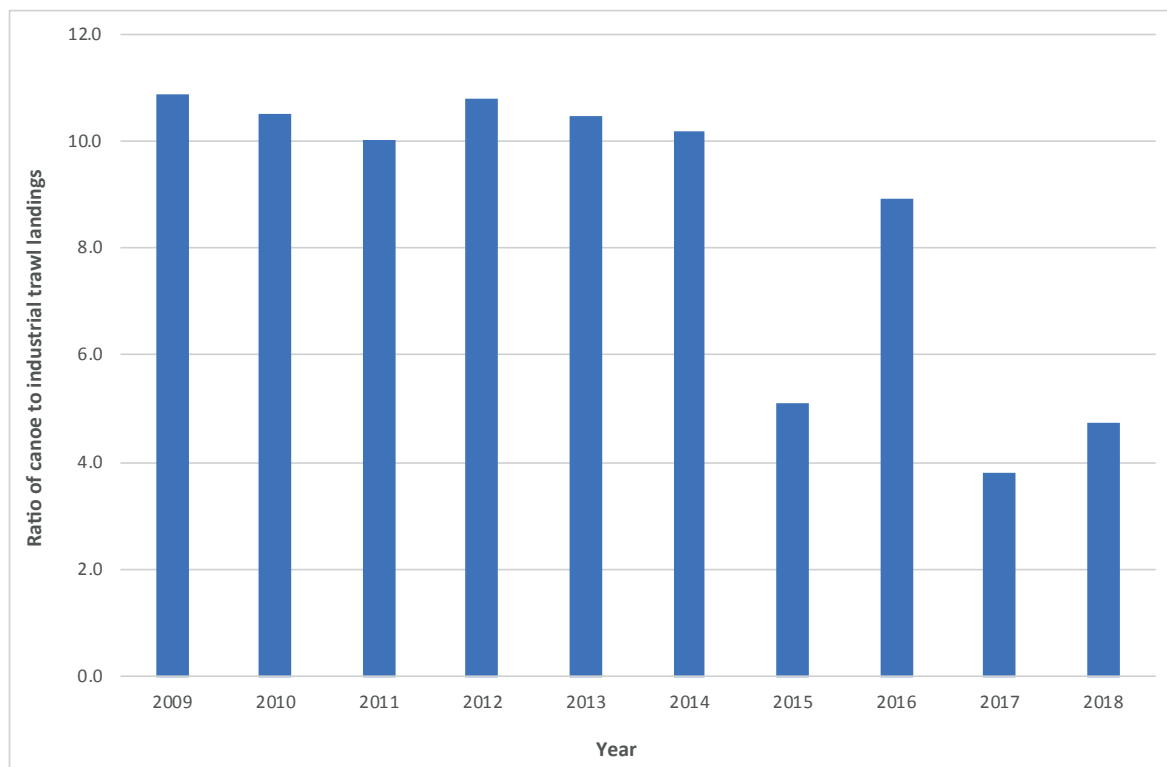
Source: Akpalu, W. (unpublished). Based on data provided by the Fisheries Scientific Survey Division of the Fisheries Commission.

Figure 5: Catch per unit effort for small-scale fishers in Ghana (1989-2019)



Source: Calculations based on data provided by the Fisheries Scientific Survey Division of the Fisheries Commission

Figure 6: Ratio of canoe landings to industrial trawl landings in Ghana (2009-2018)



Source: Calculations based on data provided by the Fisheries Scientific Survey Division of the Fisheries Commission



An industrial trawler operating in Ghanaian waters.

1.3. Management failures in Ghana's fisheries sector

Declines in Ghana's fish populations are linked to both over-capacity and illegal practices across all fishing sub-sectors: artisanal, inshore (semi-industrial) and industrial. These issues arise from government failures to sustainably manage Ghana's fisheries, through effective regulation of fishing effort and robust enforcement action to address illegal fishing. These management failures have an impact on the human rights of fishing communities, as will be explored further in this report.

According to Ghana's Fisheries Management Plan for 2015-2019, in 2014, all sectors were operating above the capacity required to generate Maximum Sustainable Yield (MSY) in the fishery⁴⁴. The Management Plan provided recommendations for reducing fishing effort in line with MSY, including a 50% reduction in the number of fishing days for the trawl fleet by the end of 2018, through a reduction in the number of vessels and implementation of measures such as closed seasons⁴⁵.

However, several of these recommendations were not implemented by the deadlines set out in the Management Plan⁴⁶. New trawlers continued to arrive in Ghana from China in 2017 and 2018⁴⁷, in spite of a moratorium on the issuance of new licences (dating from February 2012)⁴⁸ and severe depletion of stocks. While the number of trawlers has since been reduced to around 75 vessels compared to 107 vessels in 2014, it is unclear if this has led to an effective reduction in fishing effort⁴⁹. The majority of these vessels –an estimated 90% –are furthermore linked to Chinese beneficial owners⁵⁰, in spite of Ghana's laws prohibiting foreign involvement in the trawl sector⁵¹. A recent study identified eight Chinese companies that currently, or in the recent past, have beneficially owned industrial trawlers operating under the Ghanaian flag, with two companies found to be particularly dominant in the sector, accounting for 44% of licensed trawl vessels at the end of 2019⁵².

In addition to widespread over-capacity, all sectors are recognised as engaging in illegal and destructive fishing practices. This includes: (i) the engagement in light fishing and use of dynamite, chemicals and under-sized mesh nets in the artisanal sector; (ii) the engagement in light fishing and use of bottom trawls within the IEZ by semi-industrial vessels; and (iii) the use of prohibited fishing gear, capture of juvenile fish, incursions into the IEZ and illegal trans-shipment in the industrial trawl sector⁵³. The failure to address these practices, especially large-scale illegalities within the industrial trawl sector, led the EU to issue a second formal warning (yellow card) to Ghana in June 2021 for non-compliance with the country's obligations under international fisheries law to prevent, deter and eliminate IUU fishing⁵⁴.

While illegal activities are present across all sectors of Ghana's fishing industry, illegal fishing by artisanal vessels may be considered a response to broader fisheries declines and severe depletion of stocks, particularly by industrial trawlers⁵⁵. Until recently, the impact of the mainly foreign-owned trawl fleet on the fishery was largely overlooked in management decisions⁵⁶. As data on illegal and unreported fishing by the fleet have become available, it has become increasingly clear that these vessels are having a devastating impact on critical small pelagic populations in the country and the livelihoods of artisanal fishers⁵⁷ (see **Box 3**).



Slabs of saiko fish for sale at Elmina fish market. Elmina is the major hub for saiko landings in Ghana, accounting for around 80% of estimated saiko landings in 2017.

Box 3: The illegal saiko trade – an ecological and human catastrophe

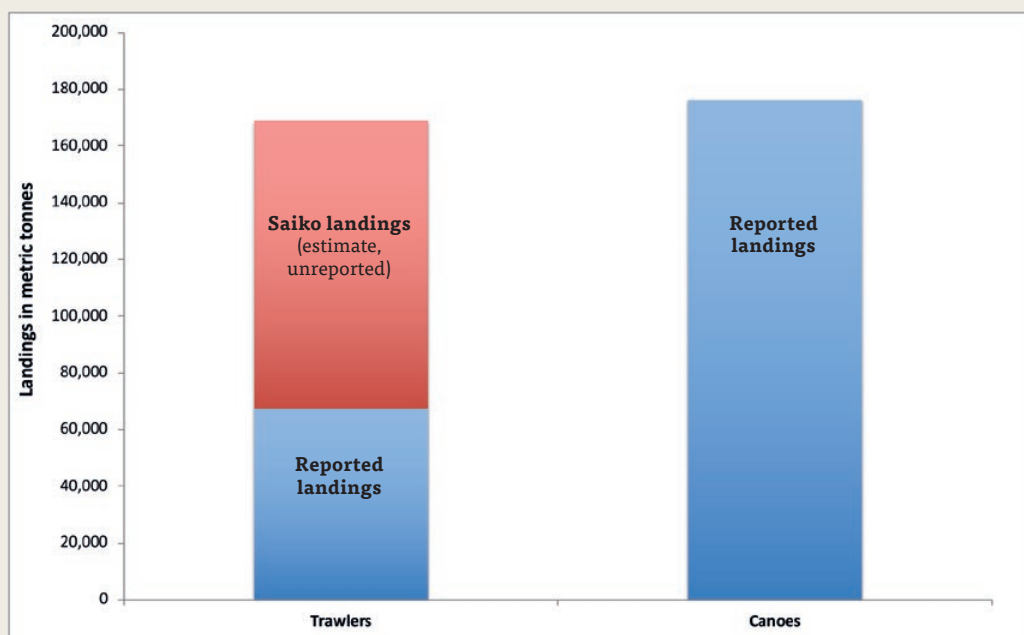
As fishing communities have seen their catches plummet, industrial trawlers have been observed landing small pelagics –the mainstay of artisanal fishers –in significant quantities⁵⁸. A major portion of these catches are destined for the illegal ‘saiko’ trade, in which fish are trans-shipped at sea to purpose-built canoes, for onward landing at ports such as Elmina and sale on local markets⁵⁹. Driven by this lucrative trade, trawlers enter prohibited zones and illegally adapt their fishing gear⁶⁰ to target species such as sardinella, which are in high demand for local consumption. Many of the fish landed are juveniles, harvested before they have had a chance to reproduce and contribute to rebuilding the fishery⁶¹.

In 2017, an estimated 100,000 tonnes of fish were traded illegally through saiko –of which around 80% was landed in Elmina alone –with a landed value of over US\$50 million⁶². **When illegal and unreported catches are taken into account, in 2017 landings of 76 industrial trawlers were similar in magnitude to the entire artisanal sector of more than 11,500 canoes or 107,500 fishers (Figure 6)**⁶³.

A recent study found that small pelagic species dominate saiko catches, with the proportion of juveniles analysed ranging from 67-100%⁶⁴. An EJF analysis of saiko catches identified *Sardinella* spp. in two-thirds of samples analysed, contributing up to 44.4% of individuals per sample, almost all of which were juveniles below the minimum accepted landing size in Ghanaian law⁶⁵.

In 2019, the Government of Ghana committed to banning all vessels that are engaged in saiko fishing from operating in Ghanaian waters⁶⁶. Yet, despite the practice being illegal⁶⁷, saiko landings continue to take place openly⁶⁸: so far, in 2021, an estimated 11,801 - 19,668 tonnes of fish have been landed illegally through saiko at Elmina port, with as many as 15 saiko canoes landing in a single day⁶⁹.

Figure 7: Landings of the industrial trawl and artisanal sectors in 2017



Source: EJF and Hen Mpoano (2019)

Note: Reported landings for the trawl and artisanal sectors are derived from the annual report of the Fisheries Commission for 2017 (unpublished)

1.4. Rationale for study

A number of human rights standards enshrine the rights of fisherfolks to their livelihoods and dignity. These include the right to decent work, the right to an adequate standard of living, political rights and fundamental freedoms, labour rights, the right to a healthy environment, and the right to equality and non-discrimination. Working with human rights standards can help illuminate critical issues impacting the realisation of rights of small-scale fishers, while providing the basis for fisherfolks to claim their rights through legal processes and advocacy. This may include, for example, securing effective participation in the negotiation of fishing agreements, increasing access for rural women to income-generating opportunities, and the adoption of legislation to protect access to fishing grounds.

This research looks specifically into the impacts of industrial IUU fishing and overfishing on coastal communities, and analyses these through a human rights lens, with a focus on the rights outlined above, particularly the right to decent work and to an adequate standard of living. These rights are central to unpacking and addressing the impacts of IUU fishing and overfishing on coastal communities and can be used as guidance for formulating policies and initiatives that can support the development of sustainable fisheries and improve livelihoods and dignity of coastal fishing communities.

The study draws on primary data collected in five fishing communities in the Central Region of Ghana, supplemented by data from the government of Ghana, and examines the socio-economic circumstances of fishers, fish processors and traders through a human rights lens. The study focuses specifically on the effects of overfishing and illegal fishing by industrial trawlers in Ghana on local fishing communities, with the caveat that other factors, including overfishing and illegal activities among small-scale fishing communities themselves, are undoubtedly also playing a role in fisheries declines. The nature and extent of illegal fishing and overfishing by industrial trawlers in Ghana has been documented in detail in previous literature⁷⁰ and is not elaborated in detail here, although key aspects have been summarised in the preceding sections. The vast majority of trawlers in Ghana, although operating under the Ghanaian flag, are controlled and financed by distant water fishing companies based in China⁷¹.

The issues of human rights and labour abuses concerning workers on board industrial vessels, who are often from coastal fishing communities in Ghana, are addressed in detail in a previous report⁷² and are therefore not considered in the present publication.



An industrial trawler fishing off the coast of Cape Coast in Ghana's Central Region in December 2019. The vessel was observed with its nets allegedly deployed within the Inshore Exclusion Zone (IEZ) reserved for artisanal fishers. The image was captured by artisanal fishers using a geotagged camera provided by EJF.

2. Methodology

The first stage of this research involved identifying the key provisions of human rights instruments relevant to the socio-economic rights of small-scale fishing communities. The status of ratification by Ghana of these instruments is set out in **Table 4**. The review also considered declarations adopted by the United Nations General Assembly (UNGA), including the United Nations Declaration on the Right to Development (DRD), the United Nations Declaration on Human Rights (UDHR) and the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (UNDROP), as well as non-binding texts such as the SSF Guidelines and the Code of Conduct for Responsible Fisheries (CCRF).

Table 4: Ratification by Ghana of binding regional and international instruments relevant to the socio-economic rights of fishing communities

Instrument	Status
International Human Rights Instruments	
International Covenant on Economic Social and Cultural Rights (1976)	Ratified: 2000
Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (2013)	Signed: 2009, Ratified: N/A
International Covenant on Civil and Political Rights (1976)	Ratified: 2000
Optional Protocol to the International Covenant on Civil and Political Rights (1976)	Ratified: 2000
Convention on the Rights of the Child (1989)	Ratified: 1990
Convention on the Elimination of All Forms of Discrimination against Women	Ratified: 1986
Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women	Ratified: 2011
Regional Conventions	
African Charter on Human and People's Rights	Ratified: 2004
African Charter on the Rights and Welfare of the Child	Ratified: 2005
Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa	Ratified: 2007
Fundamental ILO Conventions	
C87 – Freedom of Association and Protection of the Right to Organise Convention, 1948	Ratified: 1965
C98 – Right to Organise and Collective Bargaining Convention, 1949	Ratified: 1959
C29 – Forced Labour Convention, 1930	Ratified: 1957
P029 – Protocol of 2014 to the Forced Labour Convention, 1930	Not ratified
C105 – Abolition of Forced Labour Convention, 1957	Ratified: 1958
C138 – Minimum Age Convention, 1973 (No. 138)	Ratified: 2011
C182 – Worst Forms of Child Labour Convention, 1999	Ratified: 2000
C100 – Equal Remuneration Convention, 1951	Ratified: 1968
C111 – Discrimination (Employment and Occupation) Convention, 1958	Ratified: 1961
ILO Conventions concerning work on fishing vessels	
C188 – Work in Fishing Convention, 2007	Not ratified
Other relevant ILO Conventions	
Co81 – Labour Inspection Convention, 1947	Ratified: 1959
Co95 – Protection of Wages Convention, 1949	Not ratified
C154 – Collective Bargaining Convention, 1981	Not ratified
C155 – Occupational Safety and Health Convention, 1981	Not ratified
C158 – Termination of Employment Convention, 1982	Not ratified
Other relevant fisheries conventions	
United Nations Convention on the Law of the Sea, 1992	Ratified: 1983

Based on a review of these instruments and texts, the following socio-economic rights were identified:

- (1) Right to work, to free choice of employment, to enjoyment of just and favourable conditions of work
- (2) Right to an adequate standard of living, to the continuous improvement of living conditions, and to development
- (3) Right to equality before the law, equal protection of the law, right of non-discrimination
- (4) Right to participate in public life, to take part in the government of his country, directly or through freely chosen representatives
- (5) Right to remedy

To restrict the scope of the study and considering the emphasis on socio-economic data collection in fishing communities, rights (1) and (2) were selected as the focus for this research. This resulted in two broad thematic areas: the first concerning work in small-scale fisheries; the second concerning living conditions and socio-economic development (**Table 5**). The right to social security, being closely related to the right to work, was included under the first thematic area; however, it also has a direct impact on living conditions and socio-economic development and is recognised as an area of intervention that can strengthen human rights in both thematic areas.

An assessment of rights (3)-(5) was considered beyond the scope of the present study, necessitating a broader stakeholder perspective and in-depth analysis of Ghana's fisheries law framework. An assessment of Ghana's fisheries laws for alignment with the SSF Guidelines has previously been undertaken (see **Appendix 4**), and a consultation on the findings held with small-scale fisher, fish processor and trader associations in March 2019⁷³.

Rights (1) and (2) were distilled into key attributes and draft indicators were developed for the attributes identified, following guidance published by the Office of the United Nations High Commissioner for Human Rights (OHCHR)⁷⁴. The attributes and indicators are set out in **Table 5**.

In the second stage, survey instruments were designed to capture data to allow for the assessment of these indicators. Separate surveys were developed for fishers (who are generally male) and fish processors and traders (who are generally female). Where possible, survey questions were developed to align with questions in the Ghana Living Standards Survey (GLSS) carried out by the Ghana Statistical Service (GSS). This was aimed at providing a broader context for the interpretation of results and allowing for comparisons between findings for fishing communities and other demographic groups.

Surveys were designed in structured format to facilitate analysis, comparison, and measurement of indicators. Survey questions aimed to gather information on fishing activity, household characteristics, living conditions, access to health care, medical services, and social security, working conditions and livelihood issues, and interactions with industrial vessels. Where relevant, questions were designed to elicit information relevant to socio-economic conditions during the two fishing seasons (termed major and minor, respectively), which are a key dynamic in the artisanal fisheries sector. These seasons align with the major and minor periods of upwelling and biological productivity, from July to September and from December/January to February, respectively. The survey instruments are included in **Appendices 1 and 2**.

Five communities in the Central Region of Ghana were selected for the surveys, representing 10.4% of communities in the region. Communities were selected to represent a range of characteristics in terms of number of fisherfolk, location/accessibility, and intensity of interactions with industrial trawlers/saiko operators. To facilitate identification of respondents and delivery of surveys, communities were prioritised where EJF has established relationships with Chief fishermen. Based on these criteria, the following communities were selected: Elmina and Apam (as known hubs for saiko activities), Ankaful, Cape Coast and Gomoa Fetteh. The decision was taken to replace Ankaful with Abandze in the latter stages of data collection due to political and logistical issues encountered in the field.

A sample size of 100 fishers and 100 fish processors and traders was selected for the survey. Although a small fraction of fisherfolk in the Central Region, this took account of time and resource constraints, while allowing for detailed data collection in each community. An additional seven fishers and eight fish processors/traders were surveyed during trials of the survey instruments in Cape Coast and Gomoa Fetteh. As no significant changes were made to the survey instruments during the test phase, these responses are also included in the analysis.

Table 5: Human rights instruments, attributes and indicators relevant to the socio-economic rights of fishing communities

Right (instrument/ provision)	Attributes	Indicator (outcome)	Data collection
1. Right to work, to free choice of employment, and to enjoyment of just and favourable conditions of work			
<p><i>General</i> ICESCR (Art. 7(a)(ii)) UDHR (Art. 23) DRD (Art. 8) ACHPR (Art. 15)</p> <p><i>Specific to SSF</i> SSFG (Section 6.6, 6.7) UNDROP (Art. 4(2)(i), 13.1) CCRF (Section 6.17, 6.18)</p>	Access to decent and productive work; access to a decent living, just and favourable remuneration	<ul style="list-style-type: none"> • Proportion of fisherfolks with no employment for 3 months/year • Proportion of fisherfolks reporting an improvement in effective income over the past 5 years • Ratio of monthly expenditure for fishing trips to monthly income • Proportion of household budget spent on housing • Proportion of household budget spent on water supply, sanitation, electricity, waste disposal • Proportion of fisherfolks able to access and receiving public support (in the form of subsidies, grants, other) • Annual trend in CPUE • Annual trend in artisanal landings • Growth in revenue generation by small-scale fishers 	Field surveys, desk-based
SSFG (Section 6.8)	Access to diversified livelihoods/alternative income generating opportunities	<ul style="list-style-type: none"> • Proportion of fisherfolks reporting at least 90% of livelihood obtained from fishing, processing or trading • Proportion of fisherfolks engaged in 1 or more income generating activities, in addition to fishing • Proportion of fisherfolks engaged in alternative income generating activities after skill upgrading/training 	Field surveys
<p><i>General</i> CEDAW (Art. 13)</p> <p><i>Specific to SSF</i> SSFG (Section 6.4) UNDROP (Art. 4(2)(g))</p>	Access to financial services, credit and loans	<ul style="list-style-type: none"> • Proportion of fisherfolks accessing formal financial services, credit, loans when needed during past 12 months 	Field surveys
<p><i>General</i> UDHR (Art. 23(4)) ICESCR (Art. 8) ICCPR (Art. 22) ACHPR (Art. 10(1))</p> <p><i>Specific to SSF</i> SSFG (Section 7.4) UNDROP (Art. 9.3)</p>	Formation of organisations, trade unions, cooperatives; support for development of organisational capacities to enhance income and livelihood	<ul style="list-style-type: none"> • Proportion of fisherfolks that have joined an organisation, cooperative or other association for the protection of their interests • Proportion of target population that has received support to organise into cooperatives, marketing mechanisms, etc 	Field surveys
<p><i>General</i> UDHR (Art. 22) ICESCR (Art. 9) CEDAW (Art. 11(1)(e))</p> <p><i>Specific to SSF</i> SSFG (Section 6.3) UNDROP (Art. 4(2)(c), 22)</p>	Access to social security protection	<ul style="list-style-type: none"> • Proportion of fishers and fish workers participating in social security schemes 	Field surveys
<p><i>General</i> ACHPR (Art. 24)</p> <p><i>Specific to SSF</i> SSFG (Section 5.13, 5.20) UNDROP (Art. 5.1, 17.1, 18.1)</p>	Conservation and sustainable use of fisheries resources; access to sustainably use and manage natural resources; general and satisfactory environment favourable to development	<ul style="list-style-type: none"> • Number of zero catch days reported by fishers • Proportion of fishers reporting an improvement in landings over the past 5 years • Proportion of fishmongers and processors reporting an improvement in availability of fish over the past 5 years • Perceived state of fisheries resources compared to 5 years ago • Proportion of fisherfolks reporting an improvement in the availability of fish for consumption by their household compared to 5 years ago • Increase in CPUE for SSF sector • Improvement in the status of target fish populations for the SSF sector 	Field surveys, desk-based

SSFG (Section 5.7, 5.8, 5.9) UNDROP (Art. 4(2)(h) and 17.4) CCRF (Section 6.18)	Preferential access to SSF; creation and enforcement of exclusive zones for SSF	<ul style="list-style-type: none"> Proportion of fishers reporting a negative impact of industrial trawlers on their livelihood Proportion of fishers reporting an increase in encounters with industrial trawlers at sea compared to 5 years ago Proportion of fishers regularly encountering industrial vessels in their fishing grounds Proportion of trawlers observed carrying out incursions into the IEZ Proportion of small-scale fishers fishing outside of exclusive zones Proportion of fisherfolk that have experienced damage to their fishing gear by industrial trawlers over the past year Proportion of fisherfolk that have received compensation for damaged fishing gear Proportion of fishers sighting industrial vessels engaging in illegal fishing (e.g. saiko, dumping, catching small pelagics, entering prohibited zones) Proportion of fishers reporting a negative impact of saiko activities on their livelihood Proportion of fishers reporting negative encounters or conflicts with saiko operators Improvement in ratio of small-scale landings to industrial landings Ratio of saiko landings to small-scale landings 	Field surveys, desk-based
2. Right to an adequate standard of living, to the continuous improvement of living conditions and to development			
<i>General</i> ICESCR (Art. 11(1)) UDHR (Art. 25, 26) ACHPR (Art. 17(1), 22) <i>Specific to SSF</i> SSFG (Section 6.7) UNDROP (Art. 5.1, 16.1, 17.1)	Adequate and continuous improvement of living conditions	<ul style="list-style-type: none"> Proportion of fisherfolks that would rate living conditions as satisfactory Proportion of fisherfolks that would rate their living conditions as the same or better than: (i) 12 months ago; (ii) 5 years ago Proportion of school age children not attending primary school Proportion of households citing cost as primary factor preventing them from sending children to school Proportion of children aged 12 or over having completed primary school: (i) girls; (ii) boys Proportion of children aged 18 or over having completed secondary education: (i) girls; (ii) boys 	Field surveys
<i>General</i> ICESCR (11(1)) UDHR (Art. 25) DRD (Art. 8) ACHPR (Art. 13(2) and (3), 17) CEDAW (Art. 10, 12) <i>Specific to SSF</i> SSFG (Section 6.2, 6.7, 6.14) UNDROP (Art. 4, 15, 21.1, 23.1, 24.1)	Access to essential services (health, education, literacy, adequate housing, basic sanitation, safe drinking water, sources of energy)	<ul style="list-style-type: none"> Proportion of fisherfolks that have gone without access to food in the past: (i) week; (ii) year Proportion of fisherfolks that have gone without access to fuel for cooking in the past: (i) week; (ii) year Average number of persons per room among target households Proportion of households living in a permanent structure Proportion of households with access to an improved drinking water source Proportion of fisherfolks with access to sanitation facilities (toilet, water closet or latrine) Proportion of fisherfolks that have gone without access to clean water in the past: (i) week; (ii) year Proportion of households with access to electricity 	Field surveys
<i>General</i> UDHR (Art. 25) ICESCR (Art. 12) DRD (Art. 8) ACHPR (Art. 16) CEDAW (Art. 12) <i>Specific to SSF:</i> SSFG (Section 6.2) UNDROP (Art. 4(2)(b), 23)	Access to medical care/ health services	<ul style="list-style-type: none"> Proportion of households covered by National Health Insurance Proportion of fisherfolks that have gone without health-care services during past 12 months for economic reasons Proportion of persons who reported ill during previous month and consulted a health practitioner for remedy 	Field surveys

Abbreviations: ACHPR – African Charter on Human and Peoples' Rights; CEDAW – Convention on the Elimination of all Forms of Discrimination Against Women; DRD – Declaration on the Right to Development; ICESCR – International Covenant on Economic, Social and Cultural Rights; UDHR – Universal Declaration of Human Rights; UNDROP – United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas.

Sample numbers were proportionate to the number of fishers per community⁷⁵ (see **Table 6**). The replacement of Ankaful with Abandze, with 1786 and 586 fishers, respectively, meant that Abandze was proportionally over-represented in the final sample. However, it was not possible to adjust the number of respondents at this late stage of data collection. Due to the absence of precise numbers of fish processors and traders, respondents were stratified based on the number of fishers in each community.

Table 6: Stratification of respondents for surveys in communities (small-scale fishers)

Town	Total number of fishers	% of total fishers in this survey	Number of respondents surveyed	% of respondents surveyed
Abandze	586	9.8%	25	23.4%
Apam	1437	24.1%	20	18.7%
Cape Coast	1222	20.5%	20	18.7%
Elmina	2006	33.7%	29	27.1%
Fetteh	702	11.8%	13	12.1%
Total	7165	100.0%	107	100.0%

Data enumerators (all members of EJF staff) were provided with training on the survey instrument and protocols prior to the start of data collection. Prior to each survey, respondents were informed of the reasons for the research and the measures to be taken to ensure privacy/confidentiality of data provided. To ensure confidentiality, data collectors did not record respondent names or canoe identification information. Data collectors also ensured respondents were aware of the option to refuse to provide answers in respect of any question in the survey.

Survey findings were assessed against the rights enshrined in international instruments and national laws identified in the first phase of this research (**Table 5**). Additional information from discussions with key informants, as well as fishing effort and landings data provided by the Fisheries Commission, was used to supplement information from the field surveys.

Although the survey sought to elicit information on fishing-related income (per fishing trip/month/season) and expenditure, a preliminary analysis of these data found significant discrepancies/inconsistencies in the data supplied by respondents. It was therefore decided that the data were not sufficiently accurate for inclusion in the final analysis. For any future assessment, it would be advisable to conduct recurring surveys to monitor income and expenditure closely, over a period of time, to assess more accurately the economic situation of individual fishers.



Artisanal fishers deploying purse seine gear to catch small pelagics in Ghana.

3. Results

3.1. Respondent demographics

A total of 215 respondents were surveyed for the study, comprising 107 fishers and 108 fish processors/traders. Respondents were drawn from five fishing communities in the Central Region of Ghana: Abandze, Apam, Cape Coast, Elmina and Gomoa Fetteh.

Fishers – demographics

All fishers were male, the majority (61.3%) aged between 31 and 50 years. Most respondents (94.2%) had more than 11 years of experience in the fishing business (**Figure 8**). Canoe owners represented over half of respondents (53.3%), followed by crew members (25.2%), captains (12.1%) and boatswains (8.4%). 65.4% of fishers reported owning fishing gear and/or at least one canoe. The most observed fishing gears were bottom set gillnets (tenga), surface gillnets (ali) and purse seine (poli, watsa). Canoe lengths varied between 3 and 40 metres, with the majority falling between 4 and 9 metres in length. The larger canoes (over 10 metres in length) and larger crew sizes (more than 15 crew members) were associated almost exclusively with purse seine (poli, watsa, encircling) gears.

The majority (85.0%) of fishers were married or co-habiting, with 13.1% in polygamous relationships. Fishers commonly supported as many as 10 dependents, or more in around 20% of cases. Households of between 4 and 10 individuals dominated the sample. Number of children ranged from 0 to 12, with a modal value of 4 children per household. 65.4% of fishers had no formal education or had not completed primary school (**Figure 9**). Less than 3.0% had completed secondary education. Property or landowners made up 59.0% of respondents, while almost a third of respondents were from other communities or regions of Ghana. The majority (81.3%) of respondents were Christian.



Fishers inspect their fishing gear at a landing site in Ghana.

Figure 8: Number of years of fishing experience of respondents

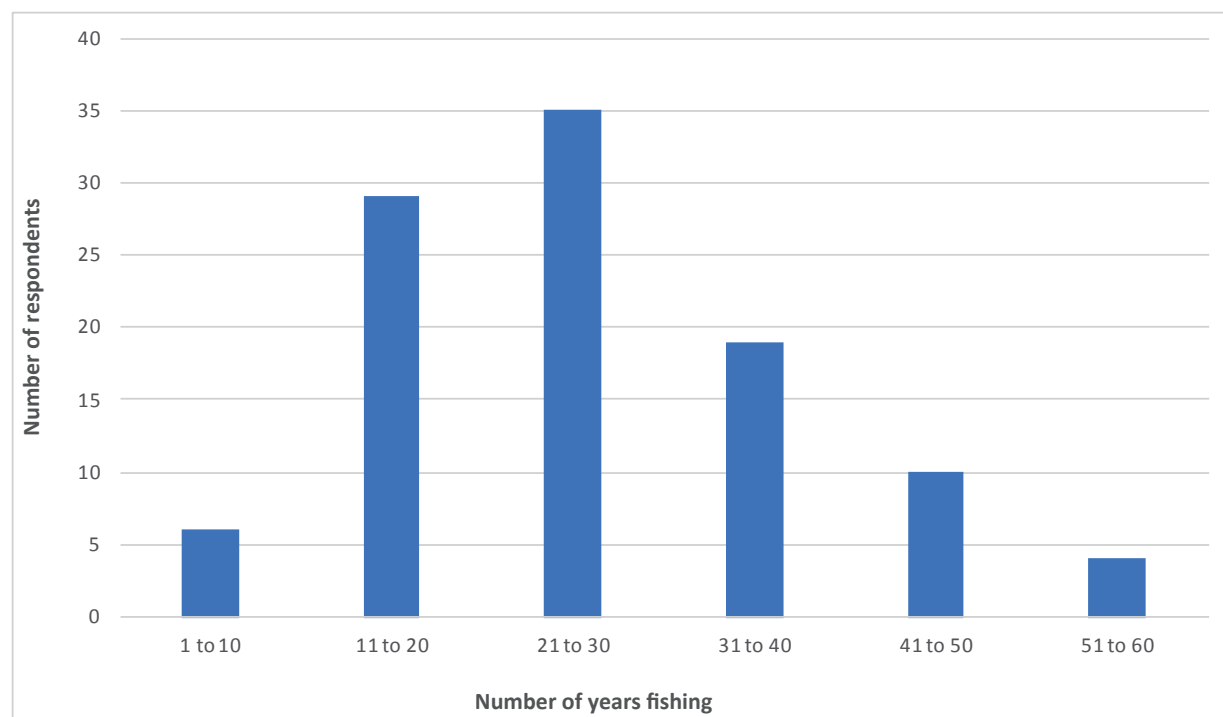
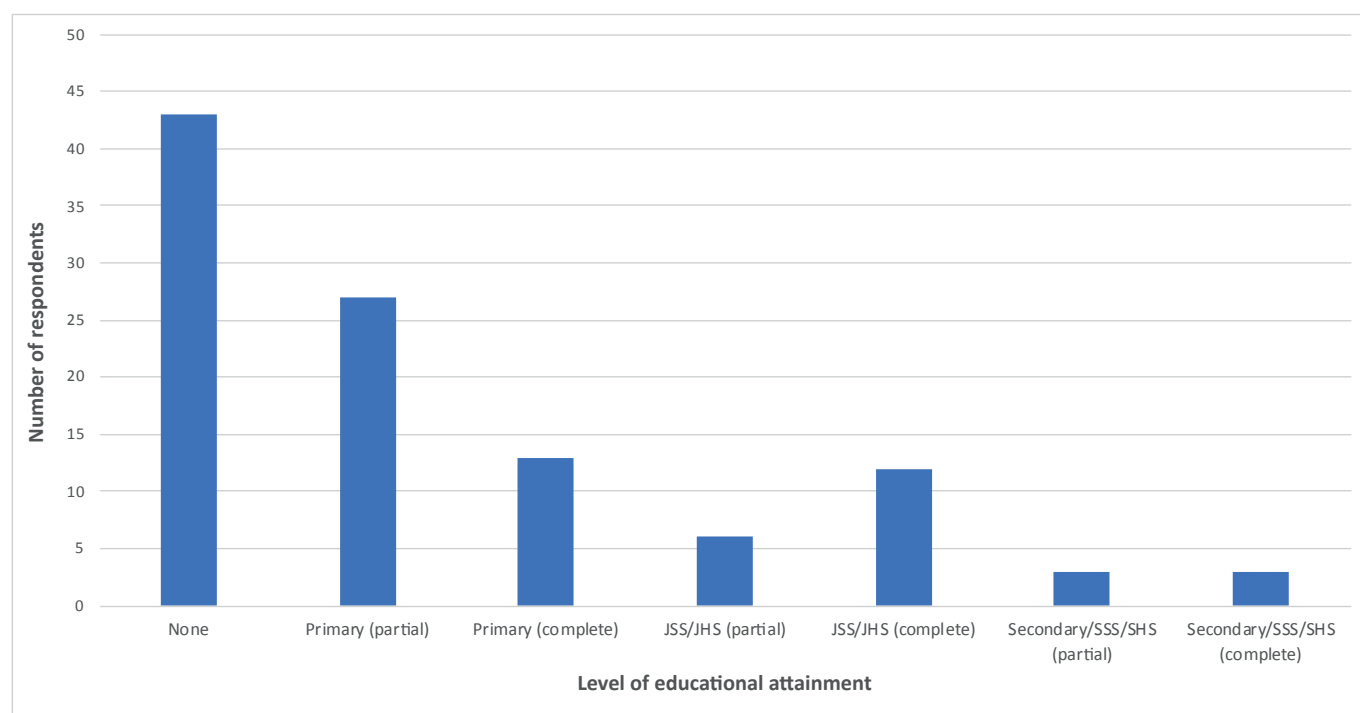


Figure 9: Level of educational attainment (fishers)



Fish processors and traders – demographics

All processors and traders, except for one respondent from Apam, were female, the majority (68.9%) aged between 31 and 50 years. Around 75% of respondents had been in the fish processing and/or trading business for 11 or more years (**Figure 10**). The majority of respondents (78.3%) were engaged in smoking fish, mainly using the Chorkor oven (60.4% of processors) with a small number using the improved, more efficient Ahotor oven introduced with development funding, e.g., under the USAID-funded Sustainable Fisheries Management Project (7.5% of processors)⁷⁶. Around two-thirds (63.2%) of processors and traders reported owning their ovens. According to responses, 30.2% of respondents owned canoes and/or fishing gears, mostly bottom set gillnets (tenga) or surface gillnets (ali), with 75.5% of respondents also involved in the finance of fishing expeditions.

Just over half (51.9%) of processors and traders were married or co-habiting, with 5.7% in polygamous relationships. Around 20% of respondents were widowed and a further 15% were either divorced or separated. Numbers of dependents were similar to those of fishers: processors/traders commonly supported as many as 8 dependents, or more in around 20% of cases. Households of between 3 and 8 individuals dominated the sample. Number of children ranged from 0 to 10, with a modal value of 3 children per household. Over half (58.5%) of processors and traders were the sole or main breadwinner, with an additional 37.7% sharing financial responsibilities with another member of their household.

Level of education was slightly higher than for fishers: 54.7% of processors and traders had no formal education or had not completed primary school. Just over 5% had completed secondary education (**Figure 11**). Property or land ownership was slightly lower than for fishers: property or landowners made up 41.5% of respondents, while 39.6% of respondents were from other communities or regions of Ghana. The vast majority (98.1%) of respondents were Christian.



Women selling fish at Bawjiase market in Ghana.

Figure 10: Number of years of fish processing and/or trading experience of respondents

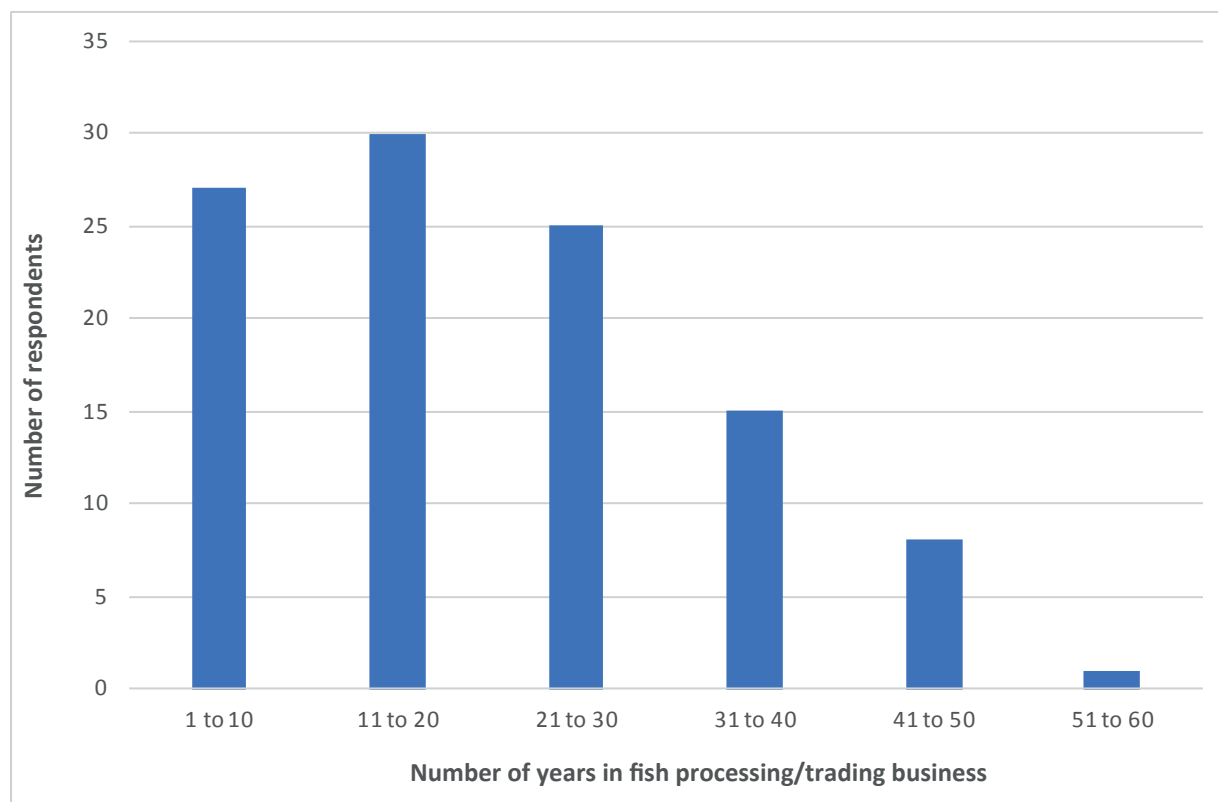
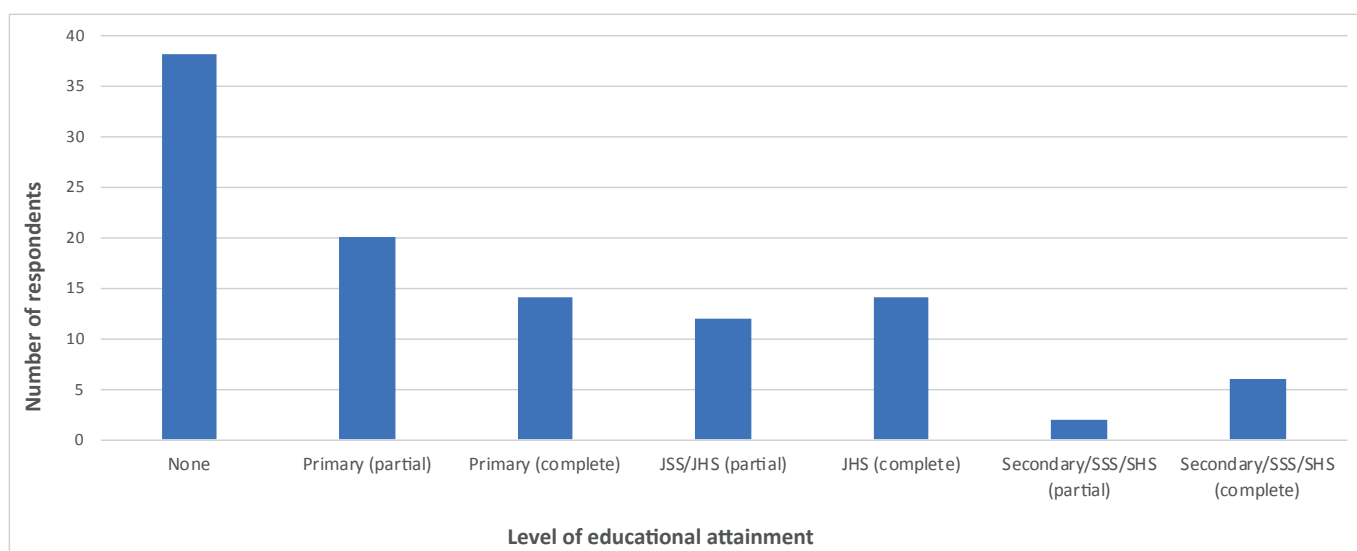


Figure 11: Level of educational attainment (fish processors and traders)



3.2. Right to work, to free choice of employment, and to just and favourable conditions of work

The right to work, to free choice of employment and to just and favourable conditions of work was broken down into the following key attributes:

1. Access to decent and productive work, a decent living and just and favourable remuneration
2. Access to diversified livelihoods/alternative income generating opportunities
3. Access to financial services, credit and loans
4. Formation of organisations, trade unions, cooperatives; support for development of organisational capacities to enhance incomes and livelihoods
5. Access to social security protection
6. Conservation and sustainable use of fisheries resources; access to sustainably use and manage natural resources; a general and satisfactory environment favourable to development
7. Preferential access to SSF; creation and enforcement of exclusive zones for SSF

An overview of the assessment of key indicators under these attributes, based on the survey findings, is set out in **Table 7**. Further detail on the key findings is provided in the sections below.

Trends in income

The majority of fishers reported a decline in effective income over the preceding five-year period: 82.2% of fishers reported declines during the major fishing season (**Figure 12a**); 85.0% reported declines during the minor fishing season (**Figure 12b**). In most cases, fishers reported that incomes were “much lower” at the time of survey compared to five years previously. The situation has been exacerbated by the COVID-19 pandemic, which had a negative impact on the work and income of 68.2% of fishers in the survey (**Figure 13**).

Fish processors and traders reported similar declines in effective income: 90.6% reported declines during the major fishing season compared to five years ago (**Figure 14a**); 91.5% reported declines during the minor fishing season (**Figure 14b**). An even greater majority of processors and traders had experienced a worsening of their financial situation due to the COVID-19 pandemic, with 80.2% of respondents reporting a significant or moderate negative impact of the pandemic on their work and income (**Figure 15**).

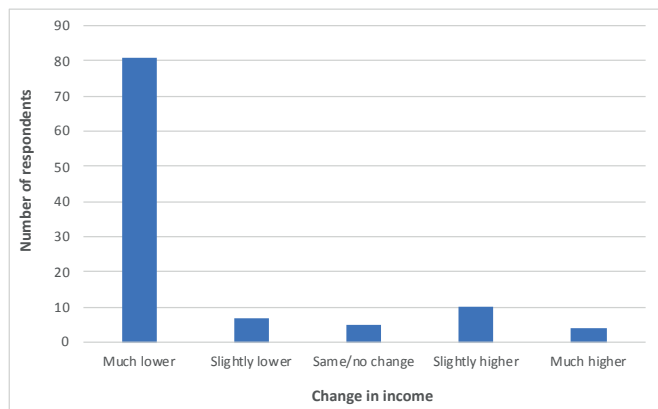
These findings are consistent with national level data on declines in profit generated by the artisanal sector. According to bio-economic models, profits in the sector declined by 46.6% in 2019 compared to the preceding five-year average (from US\$ 191.6 million to US\$ 102.4 million) (see **Figure 4**).

In both major and minor fishing seasons, reported monthly expenditure exceeded income, by two-fold and almost ten-fold, respectively, for fishers, and by ten-fold and seven-fold, respectively, for fish processors and traders. Further investigation is warranted to understand the profitability of fishing, processing and trading activities in light of these findings and how income and expenditure are distributed throughout the year.

During both major and minor fishing seasons, fishers reported experiencing difficulties covering the costs of their fishing expeditions, often multiple times per month (**Figures 16a and b**). This, they attributed, to poor catches, with damage to fishing gear, bad weather and declining prices for fish a factor in both seasons (**Figures 17a and b**).

Figure 12: Change in income reported by fishers during the (a) major season; and (b) minor season over the preceding five-year period

(a) Major season



(b) Minor season

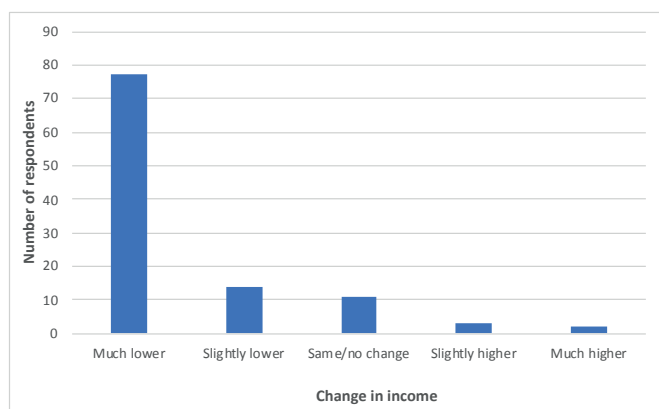


Figure 13: Perceived impact of the COVID-19 pandemic on fisher's work and income

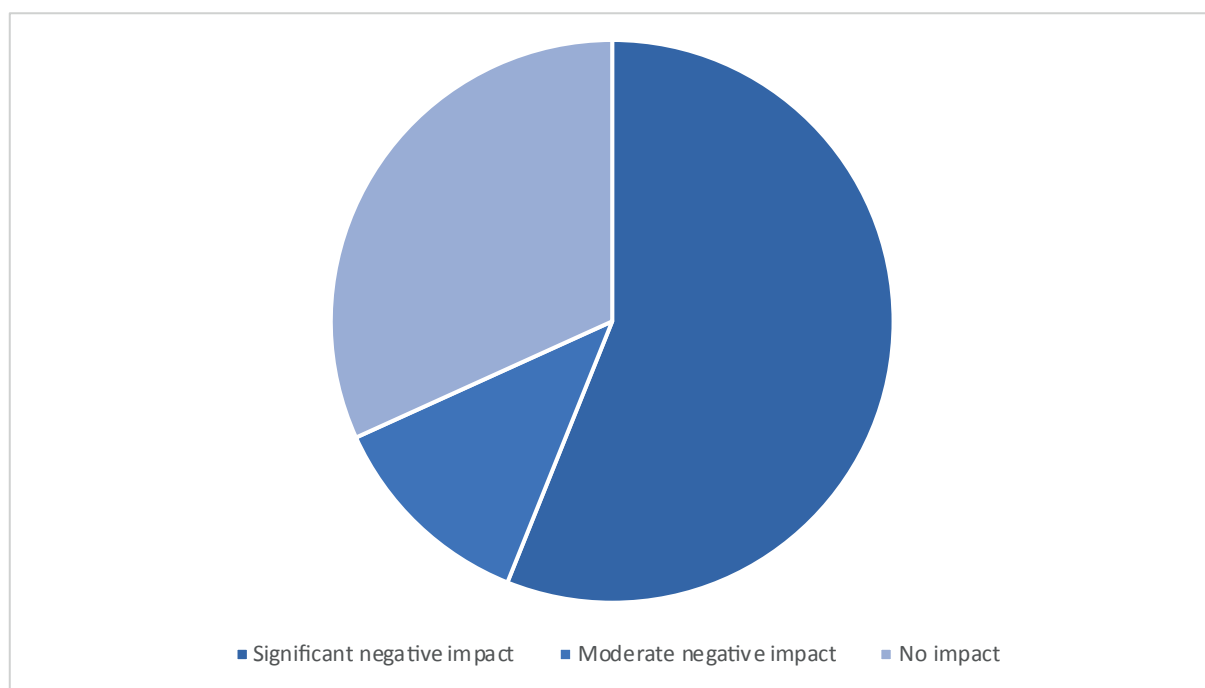
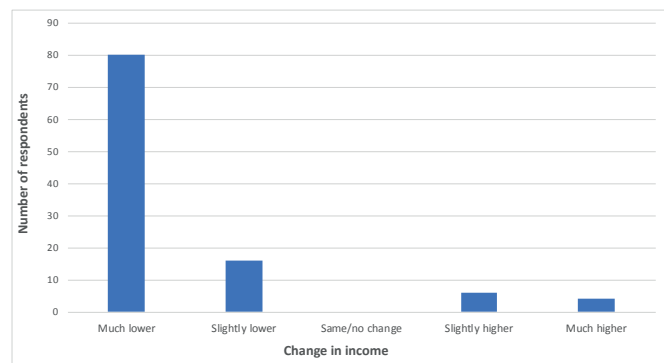


Figure 14: Change in income reported by processors/traders during the (a) major season; and (b) minor season over the preceding five-year period

(a) Major season



(b) Minor season

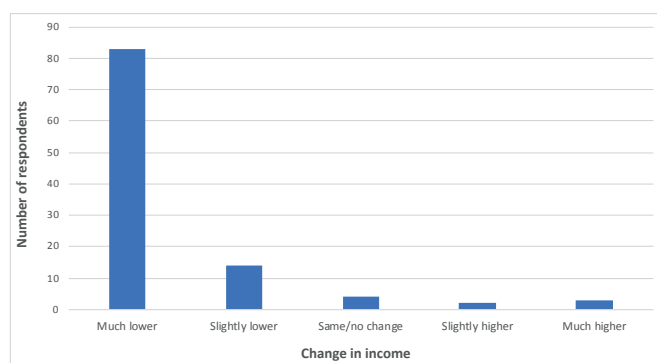


Figure 15: Perceived impact of the COVID-19 pandemic on the work and income of fish processors and traders

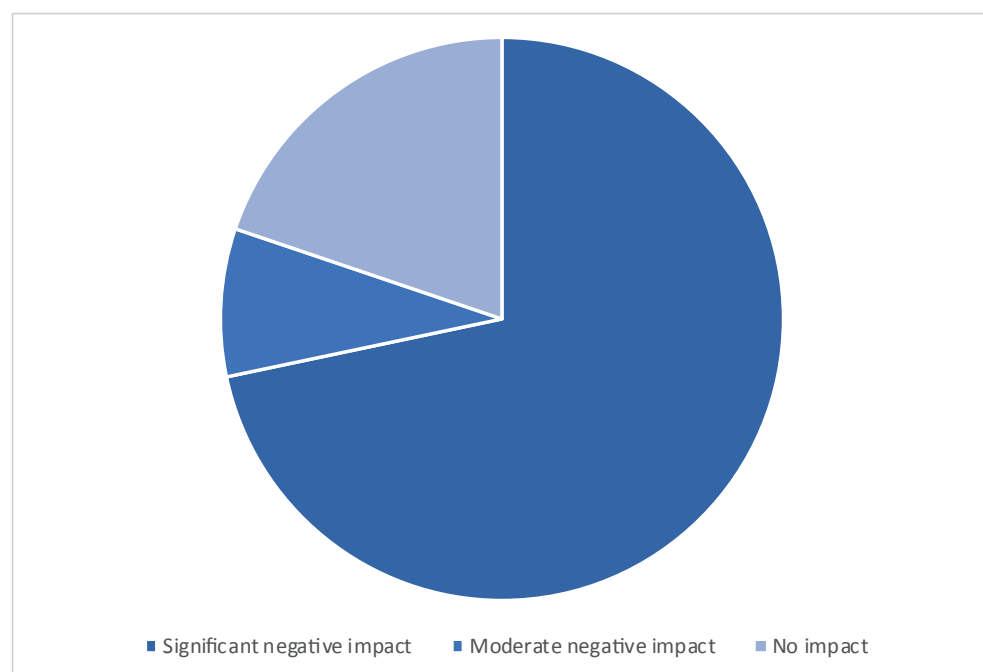
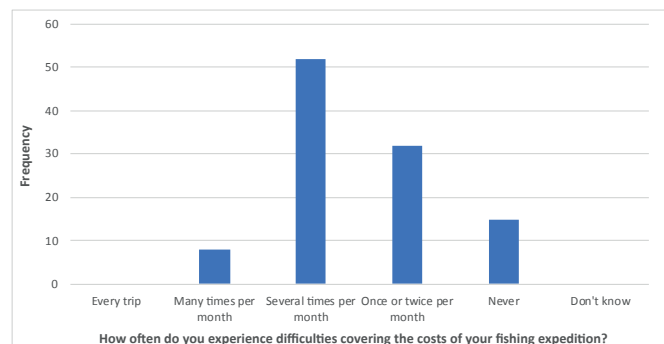


Figure 16: Fishers reporting difficulties covering the costs of their fishing expedition during (a) the previous major season; and (b) the previous minor season

(a) Major season



(b) Minor season

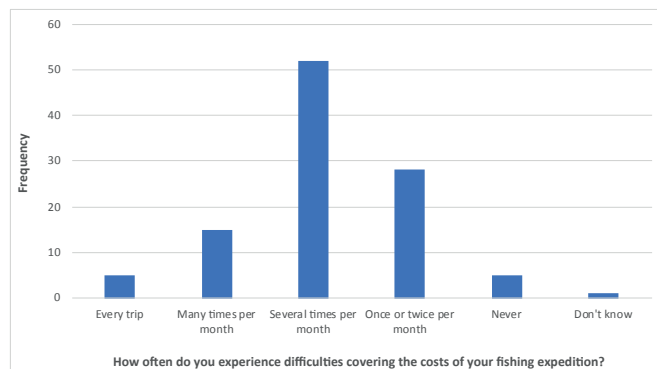
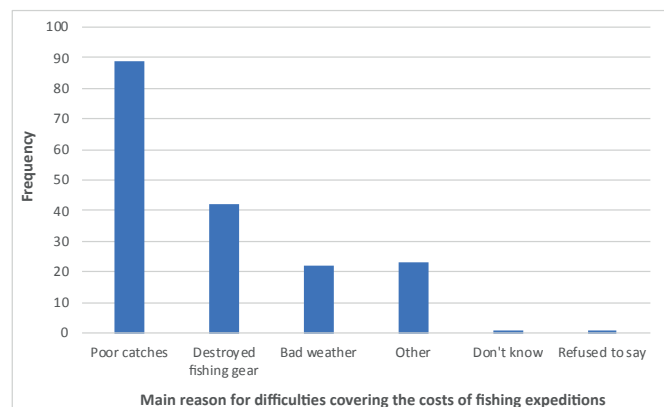
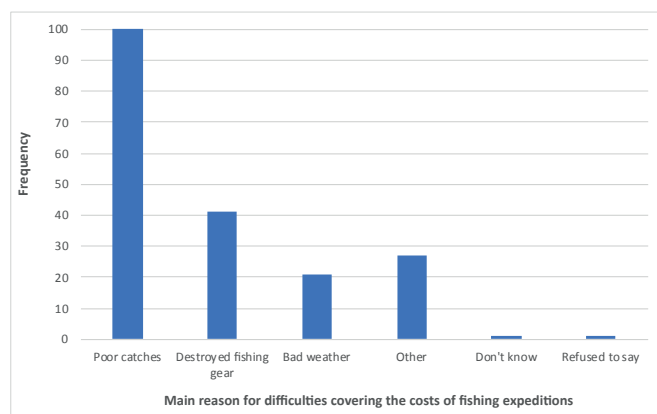


Figure 17: Reasons cited for difficulties covering the costs of fishing expeditions during (a) the previous major season; and (b) the previous minor season

(a) Major season



(b) Minor season



Status of the fishery

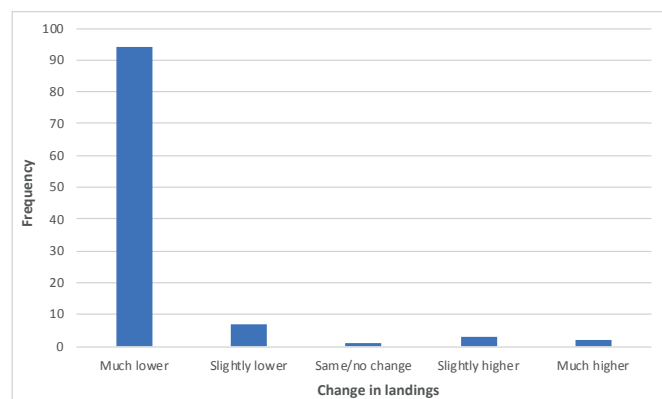
Declines in income were mirrored in fisher and processor/trader reported data on the status of fish populations. Fishers reported a decline in landings over the preceding five-year period: 94.4% of fishers reported declines during the major fishing season (**Figure 18a**); 88.8% reported declines during the minor fishing season (**Figure 18b**). Over 90% of processors and traders reported a decline in the availability of catches to purchase compared to five years ago (98.1% and 93.4% of respondents reporting declines during the major and minor seasons, respectively) (**Figures 19a and b**). 86.0% of fishers and 91.5% of processors and traders perceived the state of the fisheries as much worse (fishers: 68.2%; processors/traders: 72.6%) or slightly worse (fishers: 17.8%; processors/traders: 18.9%) compared to five years prior to the survey (**Figures 20 and 21**).

Fishers often return from fishing expeditions with no catch: an average of 11.7 zero catch days were reported during the major fishing season (equating to 12.7% of fishing days)⁷⁷, and 17.4 zero catch days during the minor fishing season (equating to 19.3% of fishing days)⁷⁸. As a result, processors and traders report facing difficulties obtaining enough fish to process; half of respondents reported a lack of fish for processing during the major season (**Figure 22a**); 68.9% of respondents reported a lack of fish for processing during the minor season (**Figure 22b**).

These observations are consistent with data on CPUE declines in the small-scale sector (**Figure 5**). According to government data, landings per canoe declined by 22.6% between 2009 and 2018⁷⁹, with total artisanal landings declining by 13.5% in 2018 compared to the preceding five-year average⁸⁰. Landings of small pelagics, the key target catch of the canoe fleet, have declined significantly over the past two decades, currently standing at around 14% of their recorded maximum⁸¹, suggesting a fishery close to collapse (**Figure 2**).

Figure 18: Change in landings reported by fishers during the (a) major season; and (b) minor season over the preceding five-year period

(a) Major season



(b) Minor season

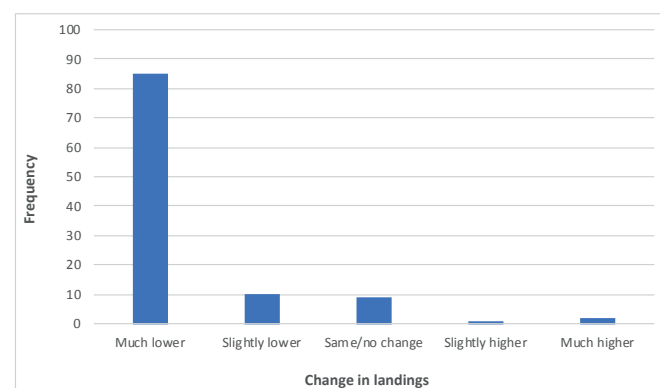
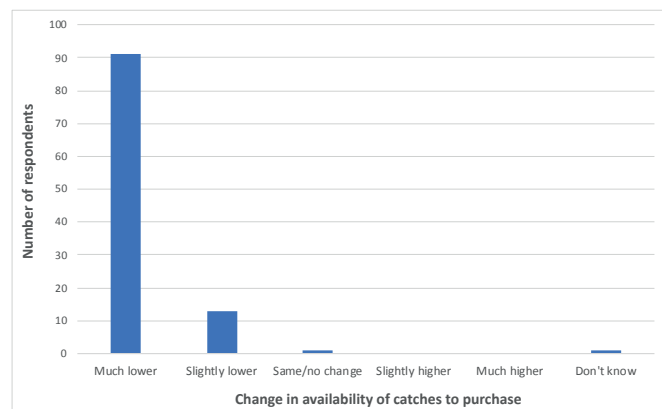


Figure 19: Change in availability of catches for purchase reported by processors/traders during the (a) major season; and (b) minor season over the preceding five-year period

(a) Major season



(b) Minor season

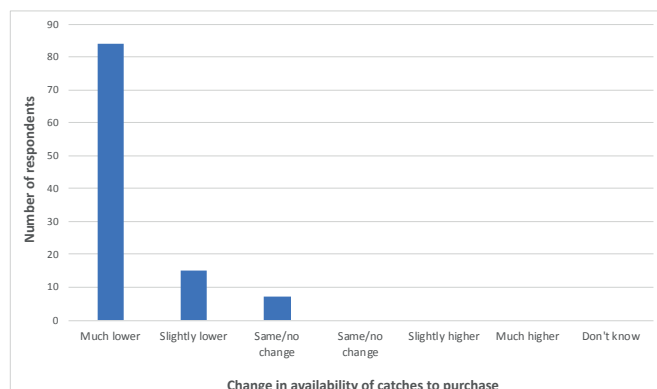


Figure 20: Fisher perceptions of the state of fisheries resources compared to five years ago

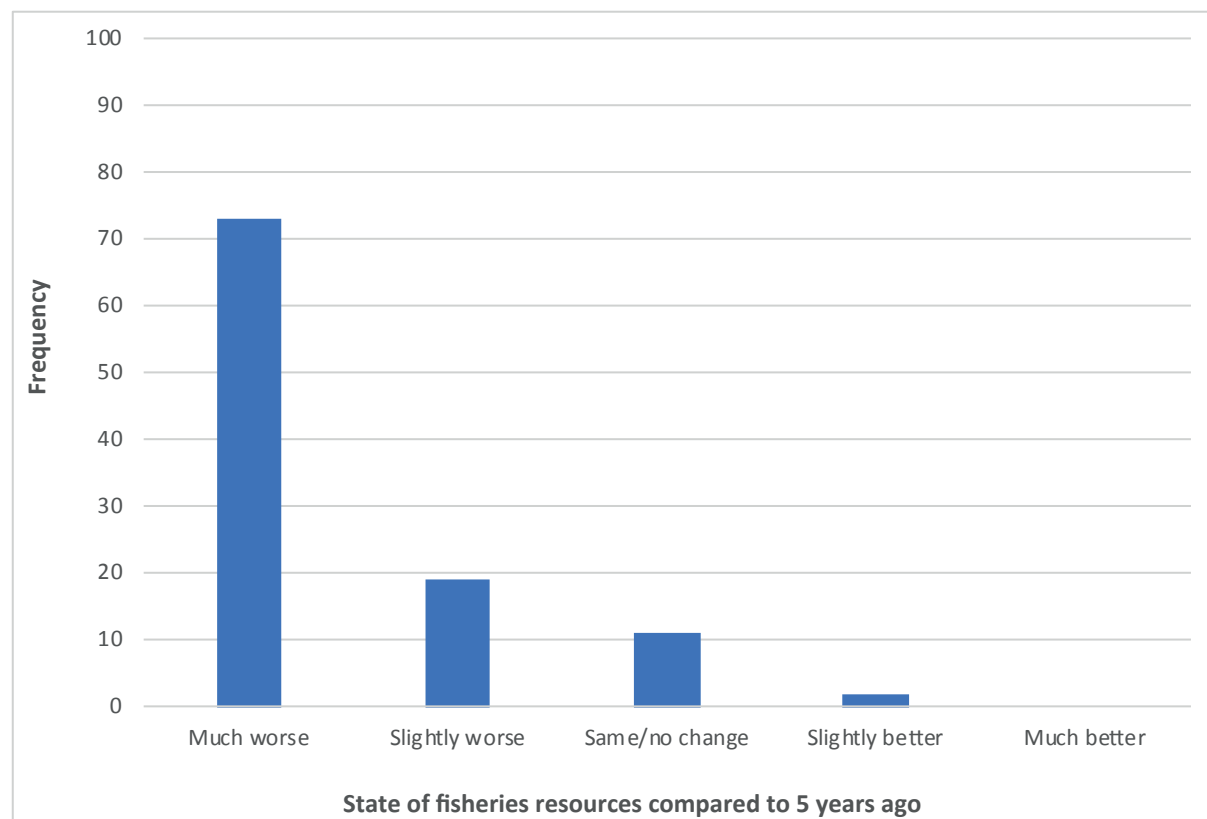


Figure 21: Fish processor/trader perceptions of the state of fisheries resources compared to five years ago

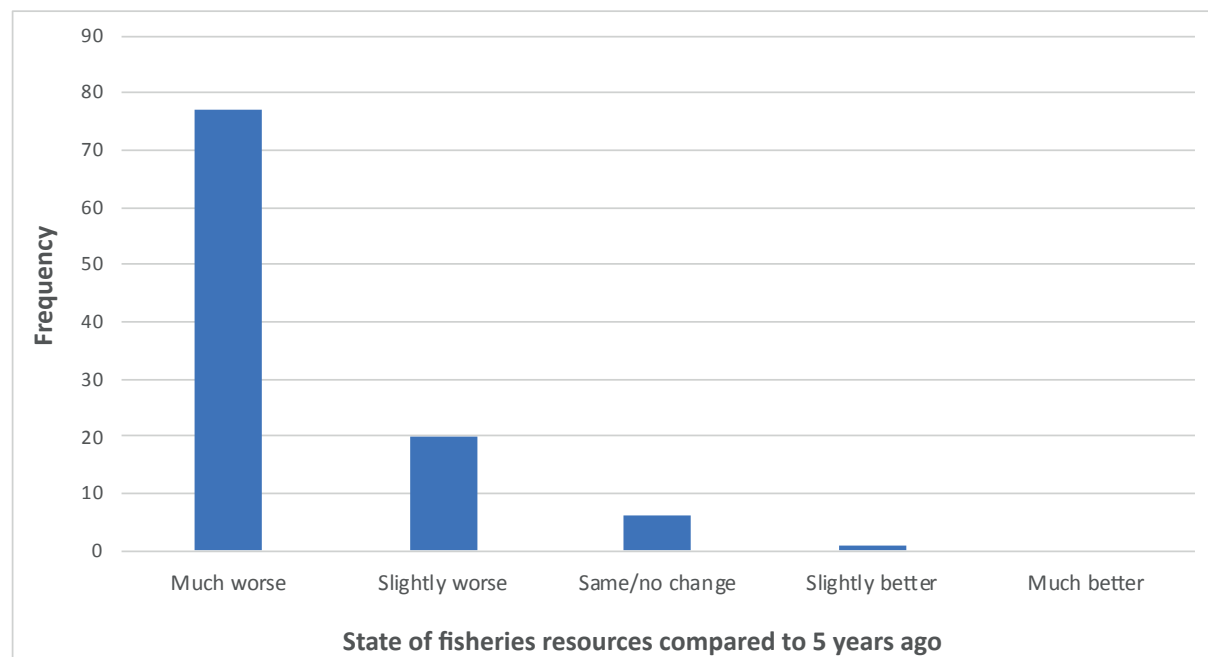
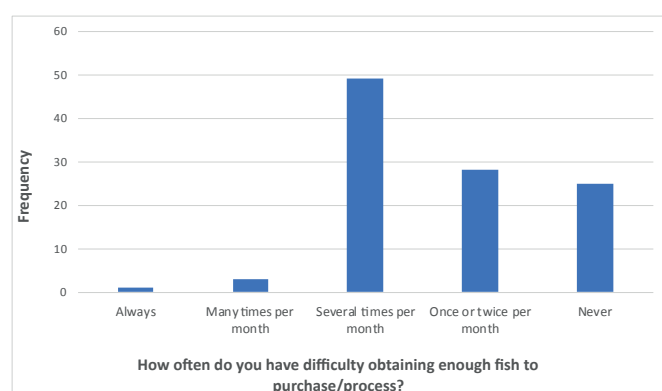
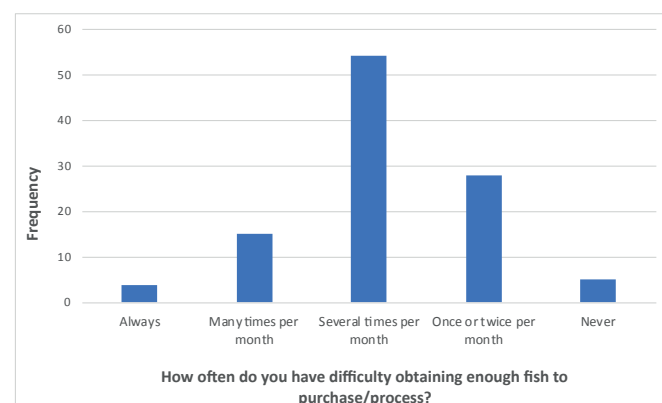


Figure 22: Fish processor/trader responses on the availability of fish for purchase/process

(a) Major season



(b) Minor season

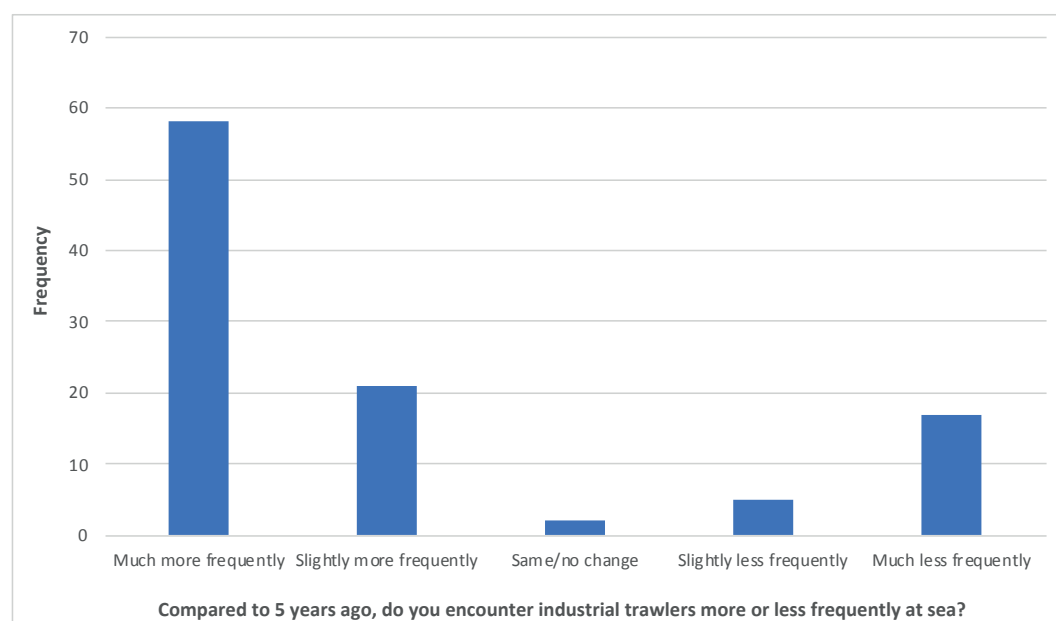


Interactions between small-scale fishers and industrial trawlers

The findings of this study suggest that small-scale fishers are interacting increasingly with industrial trawlers during their fishing expeditions. The majority of fishers (73.8%) reported increased encounters (i.e., sightings, interactions or conflicts) with industrial trawlers compared to five years previously (**Figure 23**). 92.5% of fishers had encountered industrial trawlers in their fishing grounds during the preceding 12-month period, with 81.3% of fishers reporting multiple encounters of this nature.

Increased encounters between small-scale fishers and industrial trawlers may be indicative of increased illegal incursions into the Inshore Exclusion Zone (IEZ). A desk-based review of Automated Identification System (AIS) data and reports from fishers on potential or confirmed incursions by industrial trawlers into the IEZ identified 27 such events during the period 2017 to date, involving 17 individual vessels, equating to around 22% of licensed trawlers during this period (**Appendix 3**). The actual number of incursions may be higher, as vessels may go dark (switch of their AIS transmission) to avoid detection when engaging in illicit behaviours⁸². Indeed, at least two further cases of IEZ incursions were settled out of court during this period, according to data from the Fisheries Commission⁸³. Each event is, nevertheless, potentially significant, associated with a minimum fine of US\$1 million under Ghana's fisheries law, or more in the case of repeat offences⁸⁴.

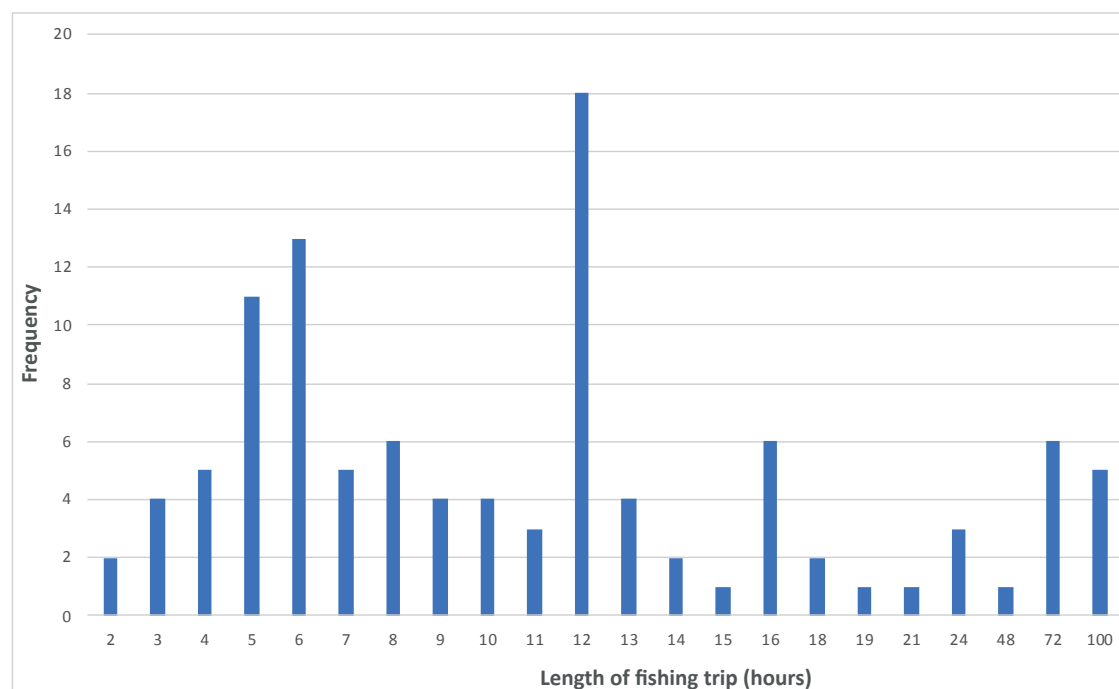
Figure 23: Fisher perceptions of the frequency of encounters with industrial trawlers compared to five years previously



Reports of IEZ incursions from fishers should, however, be considered with caution as a lack of clarity regarding the IEZ boundary, which extends to six nautical miles from shore or the 30-metre bathymetry, whichever is farther, has created confusion among fishers and led to erroneous reports of trawlers operating within the IEZ⁸⁵. Fishers are also travelling further out to sea in search of fish as resources become increasingly scarce (**Figure 2**). This means that encounters between small-scale fishers and industrial trawlers may increasingly take place beyond the limit of the IEZ. Indeed, more than one-third of fishers (35.5%) in this study reported fishing at or beyond the 30-metre depth limit. This is consistent with data from a small-scale vessel tracking programme in Ghana, which found that 81.5% of canoe fishing effort (canoes fishing with set nets and hook and line gears) took place beyond the IEZ boundary during the period October 2019 to December 2020, in some cases at significant distances from shore⁸⁶ (**Figure 3**).

The trend towards longer fishing expeditions to fishing grounds further from shore has implications for the health and safety of fishers. Although the majority (70.1%) of fishing trips reported by fishers were 12 hours or less, 18.7% of fishers reported fishing trips of between 13 and 24 hours, and 10.3% of fishers reported fishing trips of 72 hours or more (**Figure 24**). Canoes are generally not equipped for longer fishing expeditions, with no area for sleeping and limited capacity to carry food and water supplies for the crew. They also rarely (if ever) carry safety at sea equipment such as life jackets, flares, first aid kits, transponders or radio devices, making workers particularly vulnerable to loss of life in the case of accident or stranding at sea⁸⁷.

Figure 24: Length of fishing trips reported by fishers



Nearly all fishers (98.1%) and the majority of processors/traders (88.7%) reported that industrial trawlers have had a significant negative impact on their livelihood (**Figures 25 and 26**). Over 90% of fishers reported they had sighted industrial vessels engaging in illegal fishing during the past year (e.g., incursions into the IEZ, engagement in saiko, dumping of fish⁸⁸ or capture of small pelagics) (**Figure 27**). 70.1% of fishers reported that industrial trawlers had damaged their fishing gear over the past year (**Figure 28**), with some reporting threats and abuse when trying to approach trawlers fishing illegally within the IEZ. In just 14.0% of cases were fishers able to obtain compensation for damaged fishing gear, which was in all cases insufficient to cover the full cost of the damage suffered. Fishers may experience difficulties accessing compensation for damaged fishing gear due to an inability to provide evidence of conflicts at sea, the use of prohibited (monofilament) nets which are ineligible for compensation, and a lack of knowledge/understanding of conflict resolution processes⁸⁹.



An artisanal canoe in the Volta Region of Ghana.

Figure 25: Fisher perceived impacts of trawlers on their livelihoods

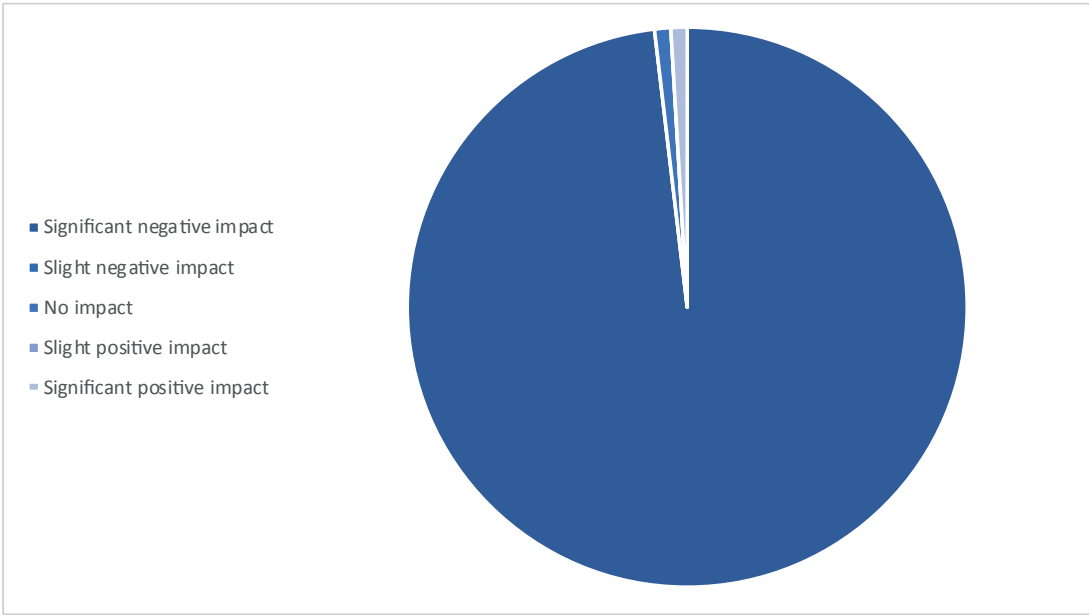


Figure 26: Fish processor/trader perceived impacts of trawlers on their livelihoods

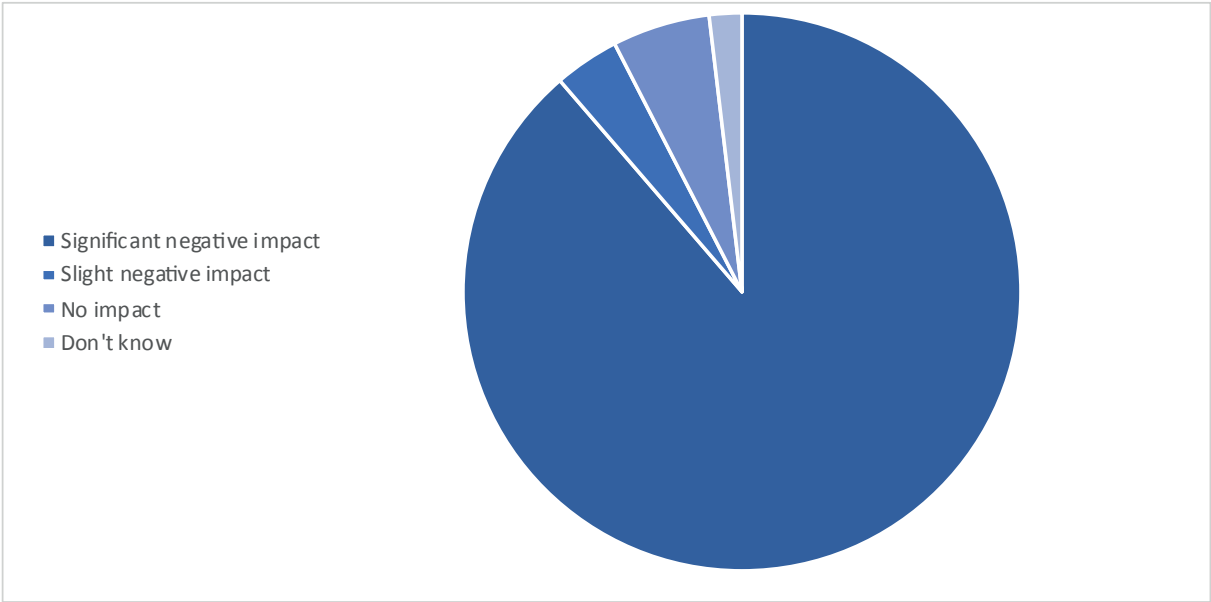


Figure 27: Fisher observations of illegal activities by industrial trawlers during the preceding 12-month period

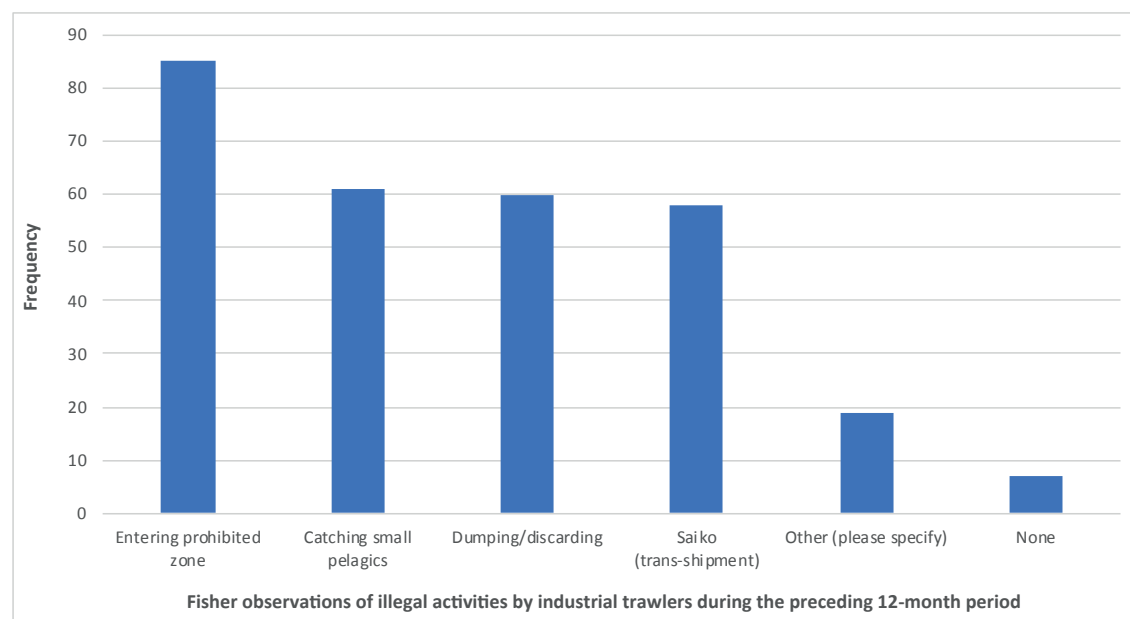
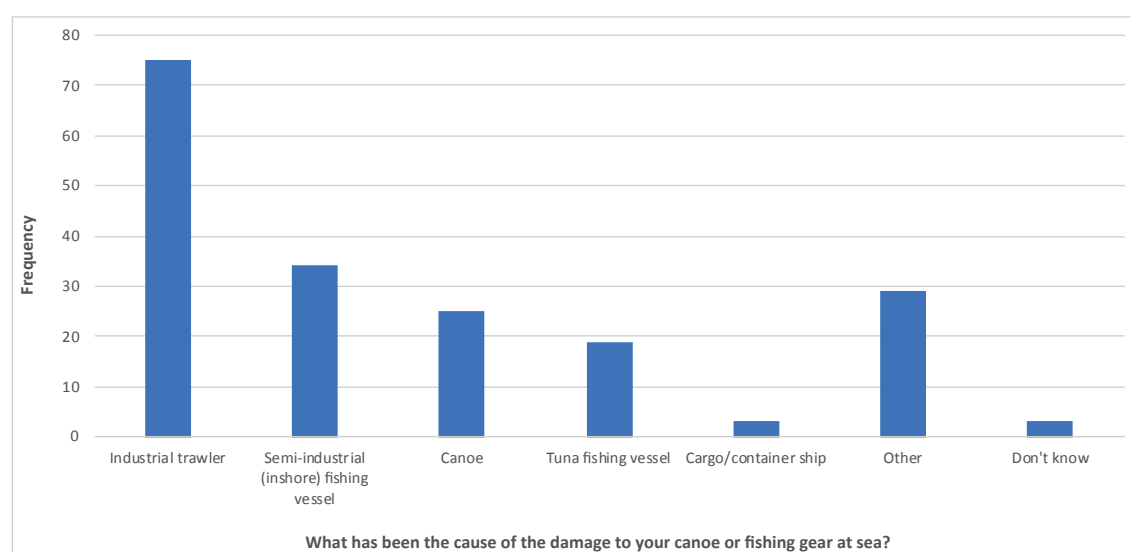


Figure 28: Causes of damage to canoes and fishing gear cited by fishers in the survey



A similar proportion of fishers (96.3%) and the majority of processors/traders (76.4%) reported that saiko activities have had a significant negative impact on their livelihood (**Figures 29 and 30**). Tensions between artisanal fishers and saiko operators are high: 82.2% of fishers assessed the relationship between these groups as “very bad”, with 67.3% of fishers reporting negative encounters or conflicts with saiko operators.

Around 45% of processors and traders reported having purchased saiko fish in the past. This varied slightly during the major and minor seasons: 30.2% of processors/traders reported purchasing saiko fish during the major season, compared to 39.6% during the minor season. Most respondents (93.6%) cited a lack of fresh fish on the market (i.e., fish landed by artisanal fishers) as the main reason for purchasing saiko fish, which is consistent with higher purchases reported during the minor season for artisanal fishing.

Figure 29: Fisher perceived impacts of saiko on their livelihoods

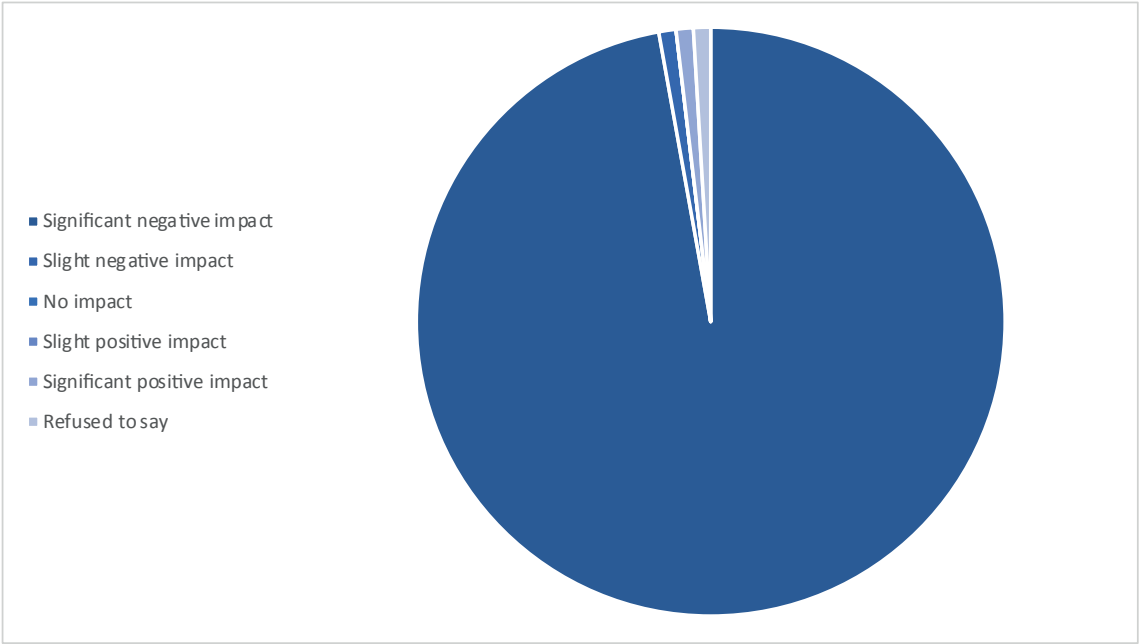
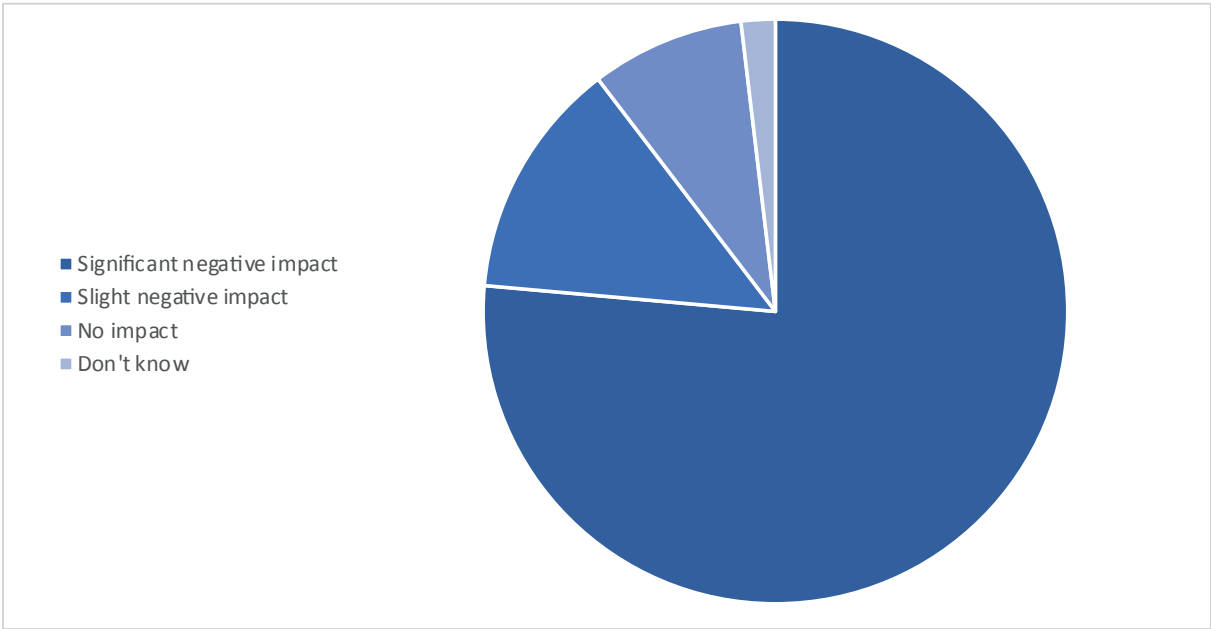


Figure 30: Fish processor/trader perceived impacts of saiko on their livelihoods



Alternative livelihoods and livelihood support

While fish populations and incomes are in steep decline, access to supplementary livelihoods or livelihood support is limited in fishing communities. Of respondents surveyed, 93.5% of fishers and 93.4% of fish processors and traders obtained at least 90% of their livelihood from fishing, processing or trading activities. 18.6% of fishers and 34.9% of processors and traders reported they had no access to employment for three or more months of the year.

Just 12.1% of fishers and 27.4% of processors and traders were engaged in one or more income generating activities outside of the fisheries sector (**Figures 31 and 32**). For fishers, activities included farming (crop, vegetable and livestock), trading, masonry, driving, real estate and carpentry. For processors and traders, the main activity was petty trading (retail).

Participation in fishing cooperatives or trade associations was limited. Of fishers surveyed, 7.5% reported participating in fishing cooperatives or trade associations for the protection of their interests. Although 35.8% of processors and traders reported joining a trade association, no respondents reported joining a cooperative to improve income/marketing of their produce.



A woman selling salt at a market in Ghana.

Figure 31: Engagement of fishers in one or more additional economic (income generating) activities

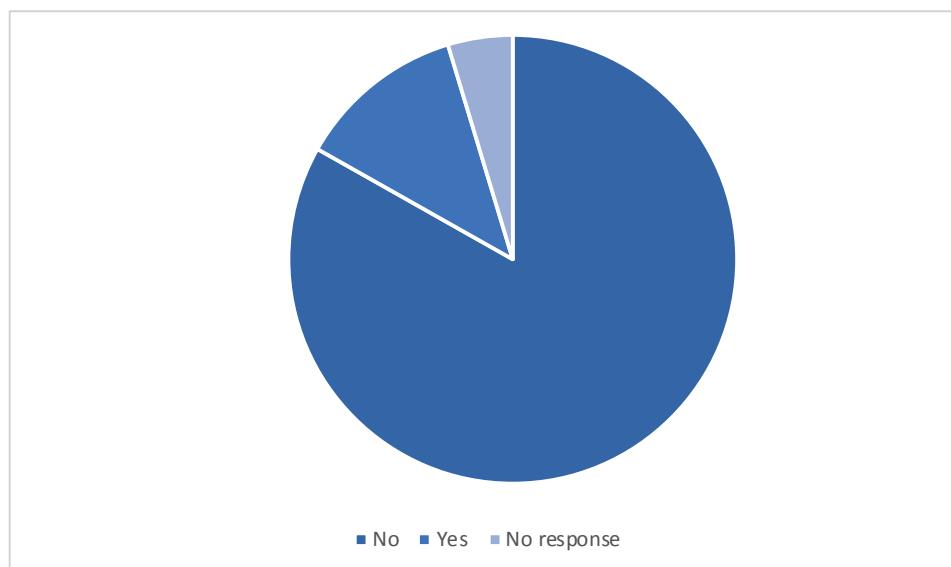
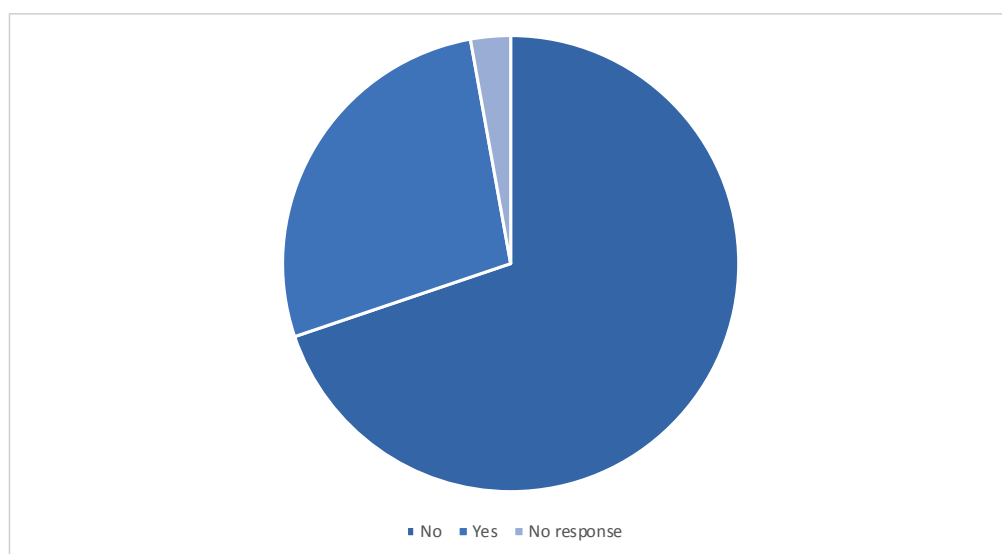


Figure 32: Engagement of fish processors/traders in one or more additional economic (income generating) activities



Fishers have received some support to diversify and improve their livelihoods, although this has been limited to date. Of the fishers surveyed, just 6.5% had been provided with skills upgrading or training to help transition into additional income generating activities, with a similar proportion receiving support to organise into cooperatives or trade associations. According to fishers, training and support was provided by a combination of government (central authorities and local/municipal assemblies), NGOs and private organisations.

An even smaller percentage of processors and traders –just 3% –had received skills upgrading or training to help transition into additional income generating activities, mainly from NGOs. A greater proportion (34.0%) had received support to organise into trade associations, although the opportunity to join cooperatives had not been made available to processors and traders at the time of survey. Support to join a trade association was mainly provided by NGOs and the government.

Social security and access to financial services

In terms of a social or financial safety net, just 3.7% of fishers and 1.9% of processors and traders surveyed were participating in a social security scheme. Of fishers and processors/traders requiring access to formal financial services during the preceding 12-month period, 88.9% and 98.2%, respectively, were able to access such services from a non-bank financial institution, community, rural or national bank or microfinance company. However, 34% of fishers and 20.8% of processors/traders cited high interest rates as prohibitive, among other factors.

Around one third (33.6%) of fishers and half (53.8%) of processors/traders made regular contributions to a local savings or loans association (Susu group or Village Savings and Loans Association, VSLA), with pay-outs ranging from GHS 30 to 30,000 during the preceding 12-month period.

Fishers cited heavy reliance on public subsidies from central government in the form of subsidised fuel and outboard motors (**Figure 33**): 80.4% of fishers who responded to the question reported receiving premix fuel and 12.6% of fishers who responded reported receiving outboard motors. However, 47.6% of fishers reported that they are not always able to access this support when needed.

Far fewer processors and traders –just 9.4% –received government support for their fisheries-related activities. Support was mainly in the form of fishing and processing equipment. Processors and traders cited a number of obstacles to accessing government support for their businesses: support was unavailable in certain communities or when needed, was insufficient, or was associated with lengthy or complicated application processes. Around 10% of processors and traders reported being refused support or that they did not qualify for support.

Figure 33: Importance of government support (premix fuel, outboard motors) in sustaining fishing activities

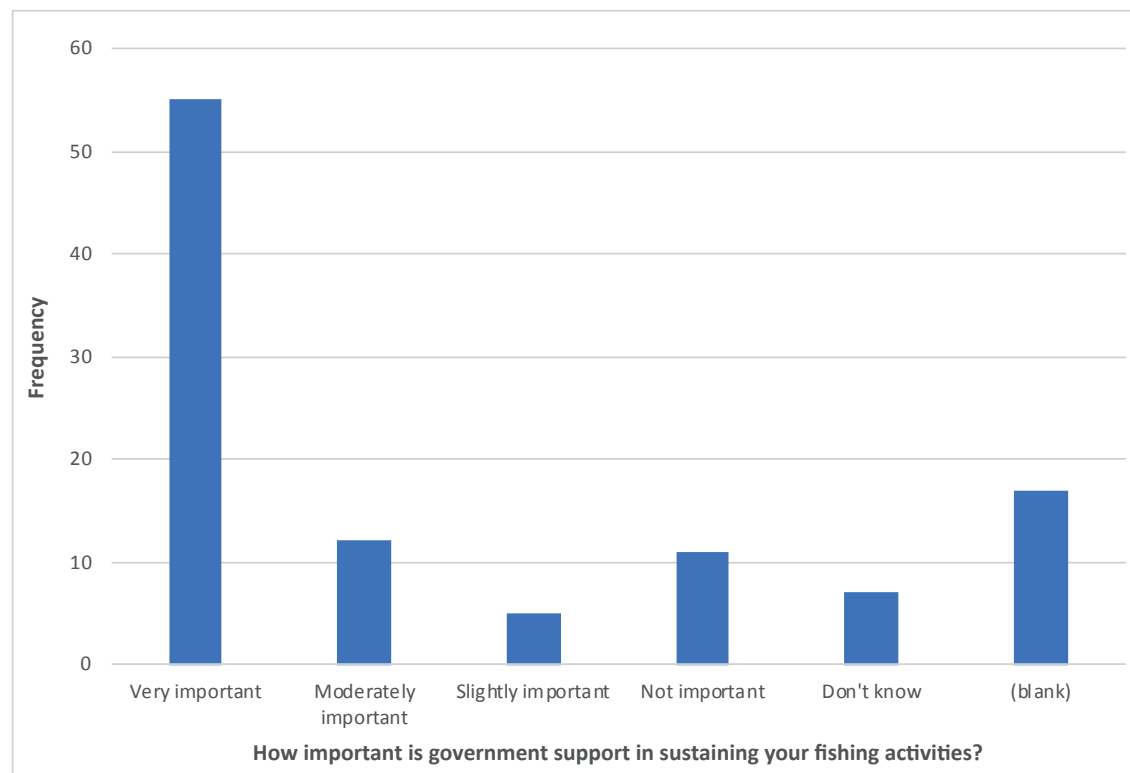


Table 7: Assessment of findings against indicators of fulfilment of the right to work, to free choice of employment, and to just and favourable conditions of work

Indicator (outcome)	Assessment
1. Access to decent and productive work; access to a decent living, just and favourable remuneration	
a) Proportion of fisherfolks with no employment for 3 or more months/year	<ul style="list-style-type: none"> 18.6% of fishers who responded had no access to employment for 3 or more months of the year. 34.9% of processors and traders who responded had no access to employment for 3 or more months of the year.
b) Proportion of fishers reporting an improvement in effective income over the past 5 years	<p><u>During the major season:</u></p> <ul style="list-style-type: none"> 13.1% of fishers reported an improvement in effective income compared to 5 years ago. 9.4% of processors and traders reported an improvement in effective income compared to 5 years ago. <p><u>During the minor season:</u></p> <ul style="list-style-type: none"> 4.7% of fishers reported an improvement in effective income compared to 5 years ago. 4.7% of processors and traders reported an improvement in effective income compared to 5 years ago.
c) Ratio of monthly expenditure for fishing trips to monthly income	<p><u>During the major season:</u></p> <ul style="list-style-type: none"> Fishers: 1.98 to 1.00 ratio expenditure to income Processors and traders: 10.20 to 1.00 ratio expenditure to income <p><u>During the minor season:</u></p> <ul style="list-style-type: none"> Fishers: 9.50 to 1.00 ratio expenditure to income Processors and traders: 6.69 to 1.00 ratio expenditure to income
d) Proportion of household budget spent on housing	Inconsistencies in data on income and expenditure precluded estimate.
e) Proportion of household budget spent on water supply, sanitation, electricity, waste disposal	Inconsistencies in data on income and expenditure precluded estimate.
f) Proportion of families fisherfolks able to access and receiving public support (in the form of subsidies, grants, other)	<ul style="list-style-type: none"> 65.4% of fishers reported receiving premix fuel and 10.3% of fishers reported receiving outboard motors. 47.6% of fishers reported they are not always able to access support when needed. 9.4% of processors and traders received government support, mainly in the form of fishing and processing equipment. Around 10% of processors and traders reported being refused support or that they did not qualify.
g) Ratio of income to working hours (hourly income)	Hourly income for fishers varied widely from GHS 1.2 to GHS 4000 per hour
h) Annual trend in CPUE	Landings per canoe declined by 22.6% between 2009 and 2018
i) Annual trend in artisanal landings	Total landings declined by 13.5% in 2018 compared to the 5-year average
j) Growth in revenue generation by SSF	Profit in the artisanal sector declined by 46.6% in 2019 compared to the preceding five-year average (from US\$ 191.6 million to US\$ 102.4 million)
2. Access to diversified livelihoods/alternative income generating opportunities	
a) Proportion of fisherfolks reporting at least 90% of livelihood obtained from fishing	93.5% of fishers and 93.4% of processors/traders obtained at least 90% of their livelihood from fishing.
b) Proportion of fisherfolks engaged in 1 or more income generating activities, in addition to fishing	12.1% of fishers and 27.4% of processors/traders were engaged in 1 or more income generating activity, in addition to fishing.
c) Proportion of fisherfolks engaged in alternative income generating activities after skill upgrading/training	6.5% of fishers and 2.8% of processors/traders were engaged in alternative income generating activities after skill upgrading/training
3. Access to financial services, credit and loans	
a) Proportion of fisherfolks accessing financial services, credit, loans during past 12 months	88.9% of fishers and 98.2% of processors/traders were able to access formal financial services, credit or loans when needed during the past 12 months
4. Formation of organisations, trade unions, cooperatives; support for development of organisational capacities to enhance income and livelihood	
a) Proportion of fisherfolks that have joined an organisation, cooperative or other association for the protection of their interests	<ul style="list-style-type: none"> 7.5% of fishers had joined an organisation, cooperative or other association for the protection of their fishing business interests. 35.8% of processors/traders had joined a trade association for the protection of their business interests; however, no respondents reported joining a cooperative to improve income/marketing of their produce.
b) Proportion of target population that has received support to organise into cooperatives, marketing mechanisms, etc	<ul style="list-style-type: none"> 6.5% of fishers had received support to organise into cooperatives, marketing mechanisms, etc. 34.0% of processors/traders had received support to join a trade association.

5. Access to social security protection	
a) Proportion of fishers and fish workers participating in social security schemes	3.7% of fishers and 1.9% of processors/traders were participating in a social security scheme.
6. Conservation and sustainable use of fisheries resources; access to sustainably use and manage natural resources	
a) Number of zero catch days reported by fishers per year	Fishers reported, on average, 11.7 zero catch days during the major fishing season (equating to 12.7% of fishing days) ⁹⁰ , and 17.4 zero catch days during the minor fishing season (equating to 19.3% of fishing days) ⁹¹ .
b) Proportion of fisherfolk reporting an improvement in catches/landings over the past 5 years	<p>During the major season:</p> <ul style="list-style-type: none"> 94.4% of fishers reported a decline in landings during the major season compared to 5 years ago. 98.1% of processors and traders reported a decline in availability of catches to purchase compared to 5 years ago. <p>During the minor season:</p> <ul style="list-style-type: none"> 88.8% of fishers reported a decline in landings during the minor season compared to 5 years ago. 93.4% of processors and traders reported a decline in availability of catches to purchase compared to 5 years ago.
c) Perceived state of fisheries resources compared to 5 years ago	<ul style="list-style-type: none"> 86.0% of fishers perceived the state of the fisheries as much worse (68.2%) or slightly worse (17.8%) than 5 years ago. 91.5% of processors and traders perceived the state of the fisheries as much worse (72.6%) or slightly worse (18.9%) than 5 years ago.
d) Proportion of fisherfolks reporting an improvement in the availability of fish for consumption by their household compared to 5 years ago	<ul style="list-style-type: none"> 84.1% of fishers reported a decline in the availability of fish for consumption by their household compared to 5 years ago. 98.1% of processors and traders reported a decline in the availability of fish for consumption by their household compared to 5 years ago.
e) <i>Improvement in the status of target fish populations for the SSF sector</i>	<i>Landings of small pelagics, the key target catch of the canoe fleet, have declined to around 14% of their recorded maximum⁹².</i>
7. Preferential access to SSF; creation and enforcement of exclusive zones for SSF	
a) Proportion of fishers reporting a negative impact of industrial trawlers on their livelihood	98.1% of fishers and 88.7% of processors and traders reported that industrial trawlers have had a significant negative impact on their livelihood.
b) Proportion of fishers regularly encountering industrial trawlers in their fishing grounds	92.5% of fishers had encountered industrial trawlers in their fishing grounds during the past year. 81.3% of fishers reported many or several encounters with industrial trawlers in their fishing grounds during the past year.
c) <i>Proportion of trawlers observed carrying out incursions into the IEZ</i>	<i>27 incursions detected via AIS and community surveillance reports from 2017 to date (May 2021), involving 17 individual vessels, equating to 22.7% of licensed trawlers at the end of 2019.</i>
d) Proportion of fishers sighting industrial trawlers engaging in illegal fishing (e.g., saiko, dumping, catching small pelagics, entering prohibited zones)	92.5% of fishers had sighted industrial vessels engaging in illegal fishing during the past year. 79.4% of fishers reported many or several sightings of illegal fishing by industrial trawlers during the past year.
e) Proportion of fishers reporting an increase in encounters with industrial trawlers at sea compared to 5 years ago	73.8% of fishers reported encountering trawlers more frequently at sea compared to 5 years ago
f) Proportion of fisherfolk that have experienced damage to their fishing gear by industrial trawlers over the past year	70.1% of fishers reported experiencing damage to their fishing gear by industrial trawlers over the past year
g) Proportion of fisherfolk that have received compensation for damaged fishing gear	11.2% of fishers have been able to receive compensation for damaged fishing gear.
h) Proportion of fishers reporting a negative impact of saiko activities on their livelihood	96.3% of fishers and 76.4% of processors and traders reported that saiko activities have had a significant negative impact on their livelihood.
i) Proportion of fishers reporting negative encounters or conflicts with saiko operators	67.3% of fishers reported experiencing negative encounters or conflicts with saiko operators
j) <i>Proportion of fishers fishing outside of SSF exclusive zones</i>	<i>35.5% of fishers reported fishing at or beyond the 30-metre depth limit reserved for SSF fishers. 81.5% of fishing effort by canoes monitored through EJJ's vessel tracking programme during the period October 2019 to December 2020 was outside of the IEZ (Figure 3).</i>
k) <i>Improvement in ratio of SSF landings to industrial landings</i>	<i>Ratio of SSF landings to industrial trawl landings declined from 10.9:1 in 2009 to 4.7:1 in 2018 (Figure 6).</i>
l) <i>Ratio of saiko landings to SSF landings</i>	<i>In 2017, saiko landings equated to 56.7% of reported SSF catches. The ratio of reported SSF catches to industrial trawl landings (reported + saiko) was 1.2:1 in 2017 (Box 3).</i>

Note: Indicators in italics are assessed based on desk rather than field research (e.g., calculations based on government statistics).

3.3. Right to an adequate standard of living, to the continuous improvement of living conditions, and to development

The right to an adequate standard of living and the right to development was broken down into the following key attributes:

1. Adequate and continuous improvement of living conditions
2. Access to essential services (health, education, literacy, adequate housing, basic sanitation, safe drinking-water, sources of energy)
3. Access to medical care/health services

An overview of the assessment of key indicators under these attributes, based on the survey findings, is set out in the following sections and summarised in **Table 8**.

Overall standard of living

Both fishers and processors/traders generally reported a worsening of their living conditions (overall standard of living) in recent years. Just 22.4% of fishers rated their living conditions as the same or better than 12 months prior to the survey (**Figure 34a**), while a slightly higher proportion (27.1%) of fishers rated their living conditions as the same or having improved over the preceding five-year period (**Figure 34b**). Similar figures were reported by processors and traders: 25.5% of processors/traders rated their living conditions as the same or better than 12 months prior to the survey (**Figure 35a**), with just 18.9% of processors/traders rating their living conditions as the same or having improved over the preceding five-year period (**Figure 35b**).



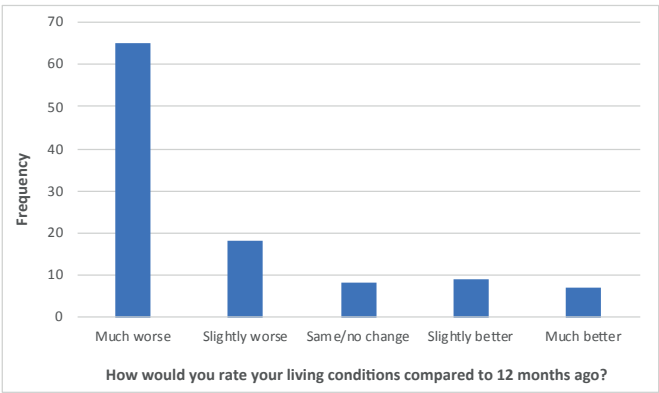
A fishing community at Cape Coast in the Central Region of Ghana.

Around one quarter (27.1%) of fishers rated their current living conditions as satisfactory in the survey, including 14.0% of fishers who rated their living conditions as good or very good (**Figure 36**). Around one third (34.0%) of processors and traders rated their current living conditions as satisfactory in the survey, including 15.1% of processors and traders who rated their living conditions as good or very good (**Figure 37**).

For the majority of fishers, processors and traders (>65%), current living conditions were “much worse” than 5 years prior to the survey (**Figures 34 and 35**). Where respondents reported a change in their living conditions, the main contributing factor was a change in income/economic situation, cited by 96.3% of fishers and 98.1% of processors and traders.

Figure 34: Assessment of current living conditions by fishers in the survey compared to: (a) 12 months; and (b) 5 years prior to the survey

(a) 12 months prior to the survey



(b) 5 years prior to the survey

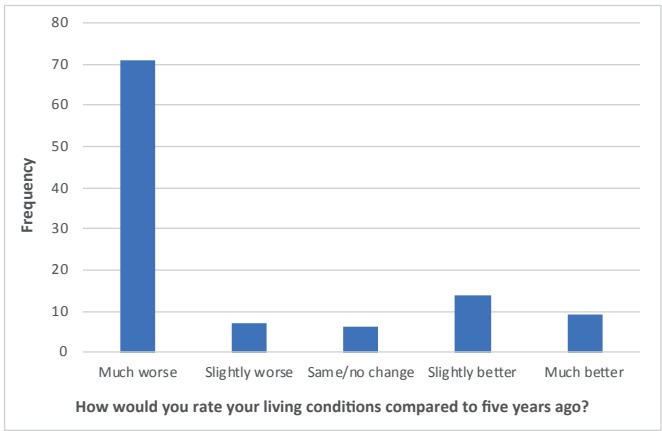
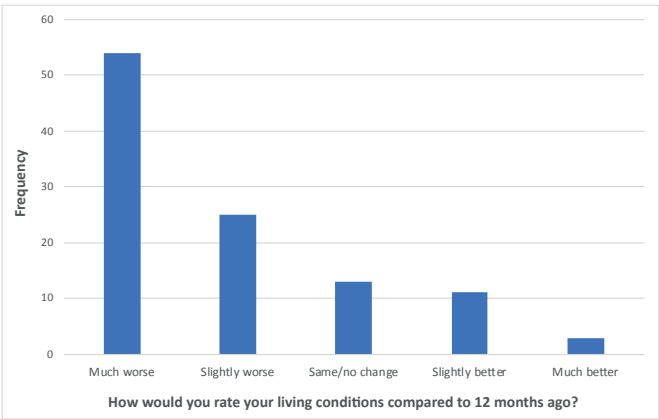


Figure 35: Assessment of current living conditions by fish processors and traders in the survey compared to: (a) 12 months; and (b) 5 years prior to the survey

(a) 12 months prior to the survey



(b) 5 years prior to the survey

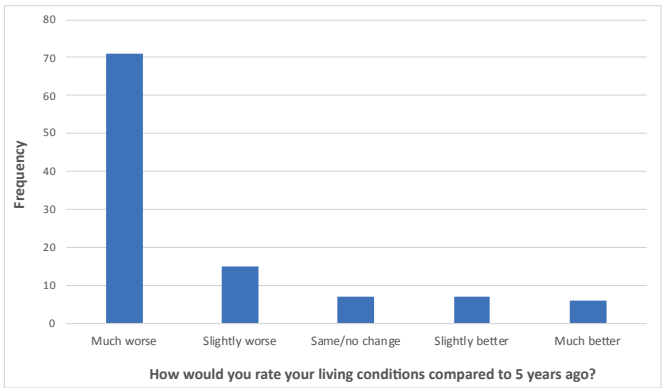


Figure 36: Assessment of current living conditions by fishers in the survey

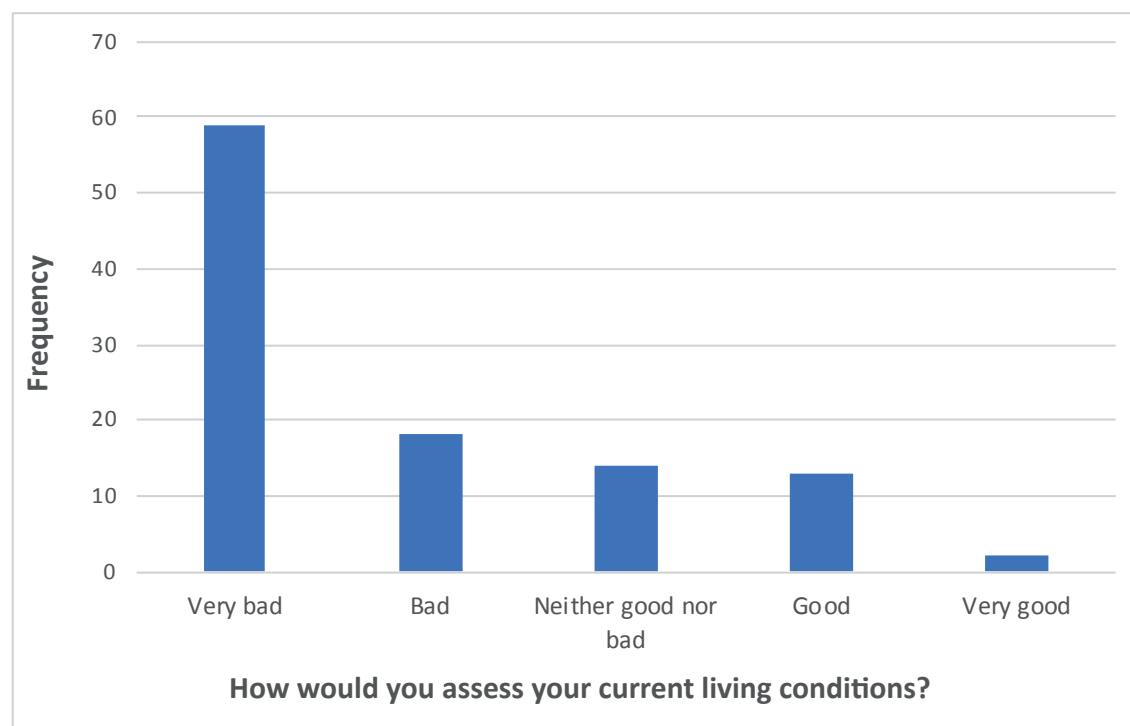
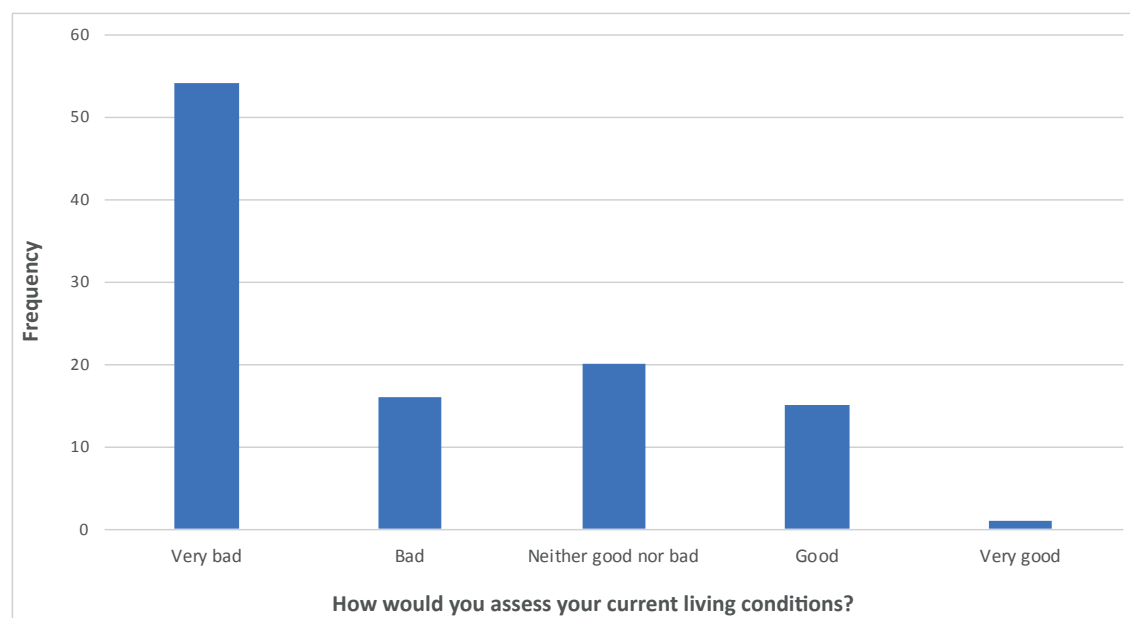


Figure 37: Assessment of current living conditions by fish processors and traders in the survey



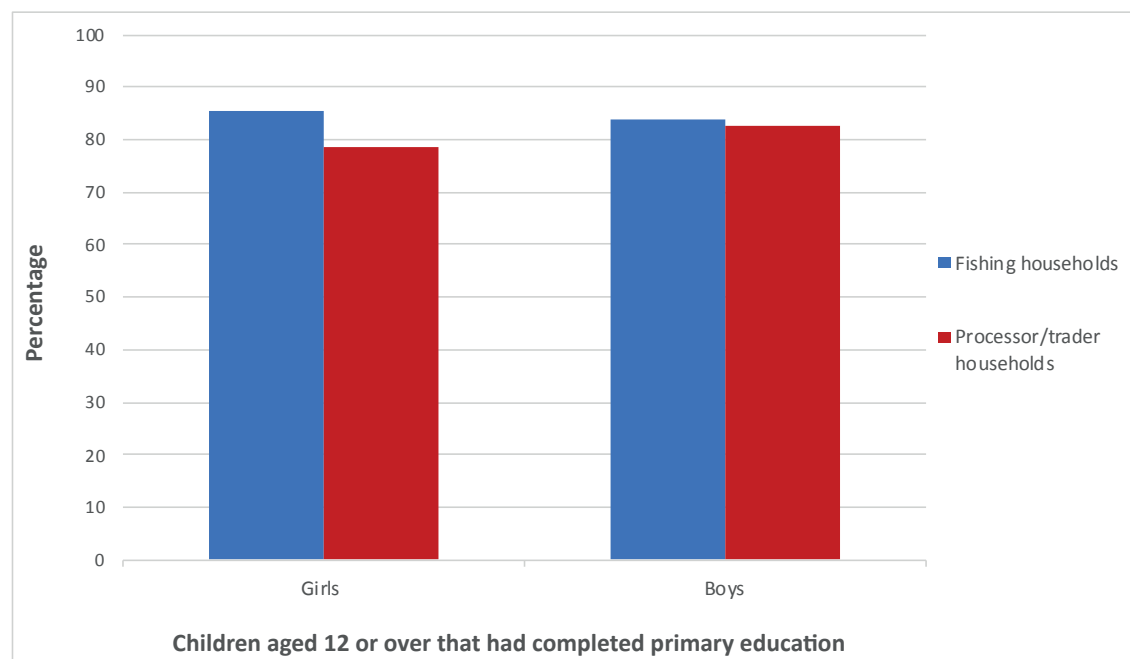
Education

The study considered school attendance and completion rates as an indicator of living conditions. According to MPI values, fishing households are associated with poorer school attainment and attendance compared to non-fishing households in the same district, with a greater incidence of children who are two or more years behind in school (school lag) (**Box 2**)⁹³.

Of the primary school age children recorded in the survey, 4.1% (seven children) were found not to be attending primary school, of which three were boys and four were girls. In two of these cases, fisherfolks cited cost as the primary factor preventing them from sending their children to school. The net primary school attendance rate in the surveyed population exceeded rates in the general population, which stood at 72.0% for boys and 74.3% for girls in 2016/17⁹⁴.

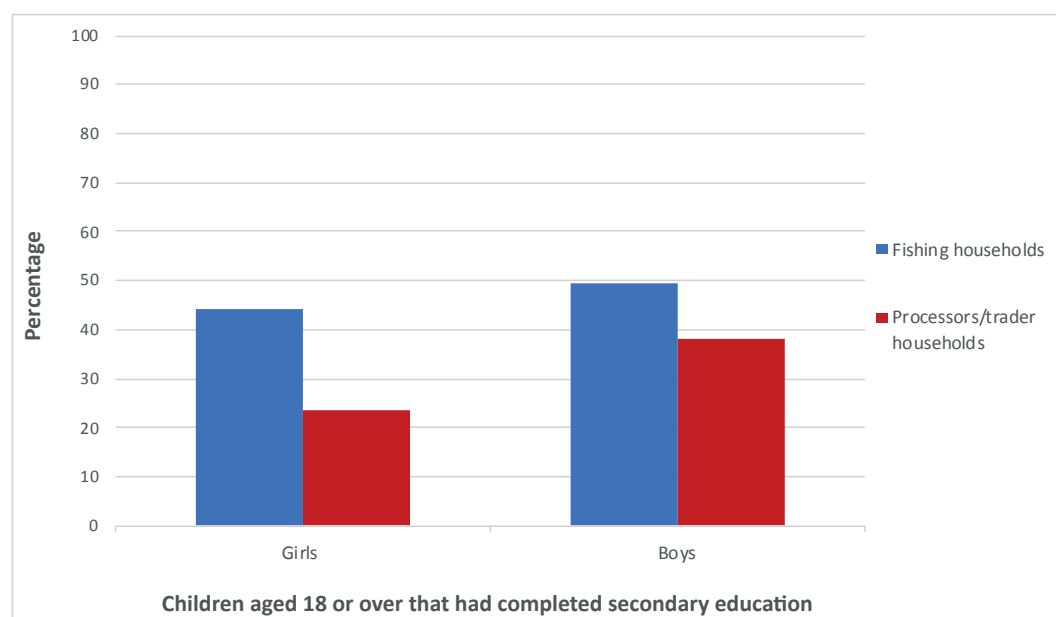
Primary school completion rates appeared broadly similar for girls and boys (**Figure 38**). In fishing households, 85.5% of girls and 83.8% of boys aged 12 and over had completed primary education. Figures were slightly lower for children of processors and traders: 78.4% of girls and 82.5% of boys aged 12 and over had completed primary education.

Figure 38: Completion of primary education by children aged 12 or over



Completion rates for secondary education were much lower than for primary education, but higher for the households of fishers than for processors and traders (**Figure 39**). In both cases, completion rates were higher for boys than for girls. In fishing households, 44.0% of girls and 49.4% of boys aged 18 or over had completed secondary education, including both junior and secondary high school. In processor/trader households, 23.7% of girls and 38.2% of boys aged 18 or over had completed secondary education, including both junior and secondary high school.

Figure 39: Completion of secondary education by children aged 18 or over



Cost/expense was the most frequently cited factor preventing fisherfolks from sending their children to school. This was cited by 26.1% of fishers and 35.7% of processors/traders as the main reason why school age children were not attending school at the time of the survey.

Housing

According to MPI values, fishing households experience higher levels of deprivation in terms of housing (use of inadequate materials in flooring or walls) and overcrowding (considered deprived if a household has more than three people per sleeping room, on average) compared to non-fishing households in the same district (**Box 2**)⁹⁵.

All fishers and processors/traders surveyed reported living in permanent structures, the majority (~90%) living in housing made of concrete blocks. In around 70% of cases, housing was either owned by the fisher or processor/trader, or a member of the family, with the remaining respondents living in rented accommodation. Rental costs commonly ranged between GHS 20 and 60 per month.

Just over half (54.9%) of households lived in one or two room accommodation. The ratio of household size to the number of rooms in living accommodation varied widely, from 0.2 to 18.0 persons per room. The average number of persons per room among target households was 3.6 for both fishers and processors/traders.

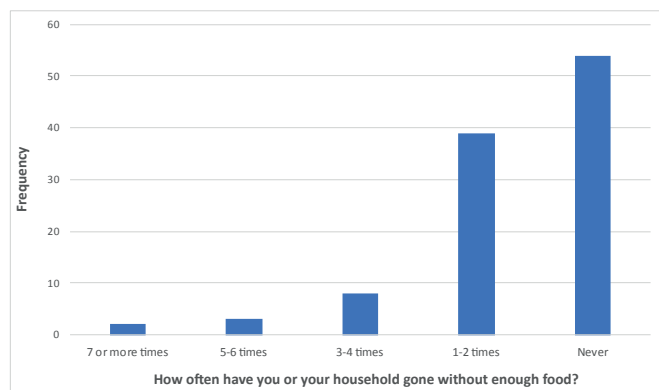
Food

Fisheries declines have had implications for food security in fishing communities. 84.1% of fishers, and 98.1% of processors and traders reported a decline in the availability of fish for consumption by their household during the preceding five-year period.

Over half of fishers (51.4%) and an even greater proportion of processors and traders (58.5%) reported going without access to sufficient food over the preceding year, with 29.0% of fishers and 28.3% of processors/traders reporting that this occurred several or many times during this period (**Figures 40 and 41**). This is broadly in line with responses for the preceding week: 48.6% of fishers and 50.0% of processors/traders reported going without access to sufficient food, with 12.1% of fishers and 16.0% of processors/traders reporting this occurring at least three times during the preceding one-week period.

Figure 40: Responses from fishers on access to and availability of food during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey

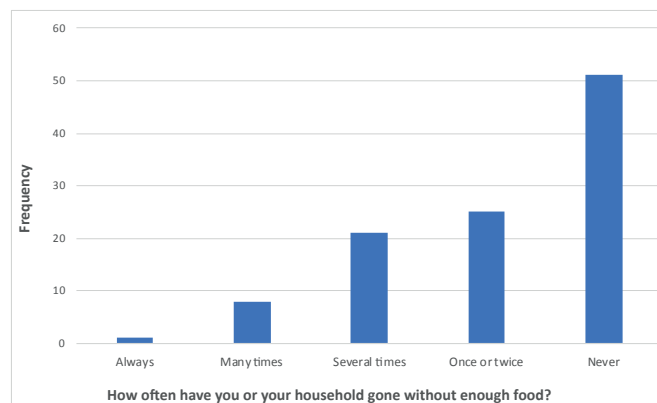
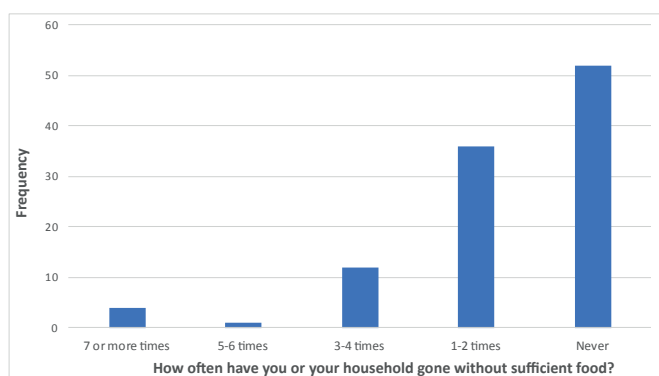
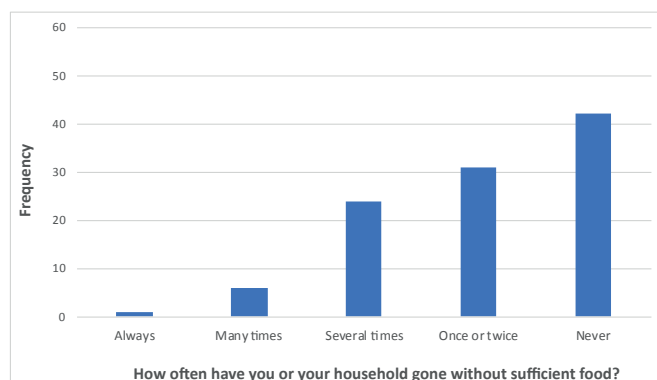


Figure 41: Responses from processors and traders on access to and availability of food during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey



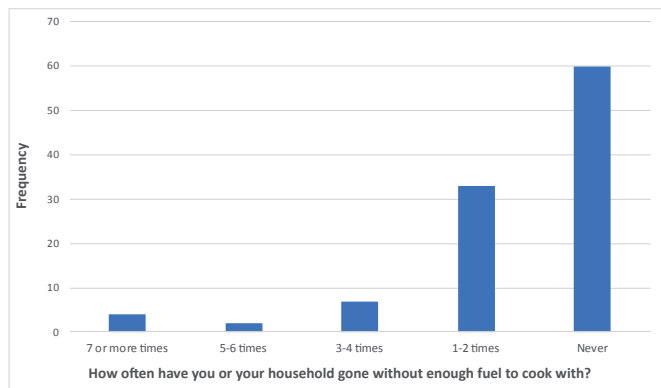
Cooking fuel

The national MPI for Ghana considers households as deprived if they use solid fuels and cooking is not done outside the house or in the open, or if cooking is undertaken in enclosed spaces. MPI values show over 85% of fishing households are deprived in relation to this indicator, compared to 58.3% for non-fishing households in the same district (**Box 2**)⁹⁶.

Around half of fishing households (49.5%) and a lower proportion of processor/trader households (38.7%) reported going without sufficient fuel to cook with over the preceding year, with 29.0% of fishers and 23.6% of processors/traders reporting that this occurred several or many times during this period. A slightly lower percentage of fishers (43.0%) and processors/traders (37.7%) had experienced fuel shortages during the preceding week, with 12.1% of fishers and 11.3% of processors/traders reporting this occurring at least three times during this period.

Figure 42: Responses from fishers on access to and availability of fuel for cooking during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey

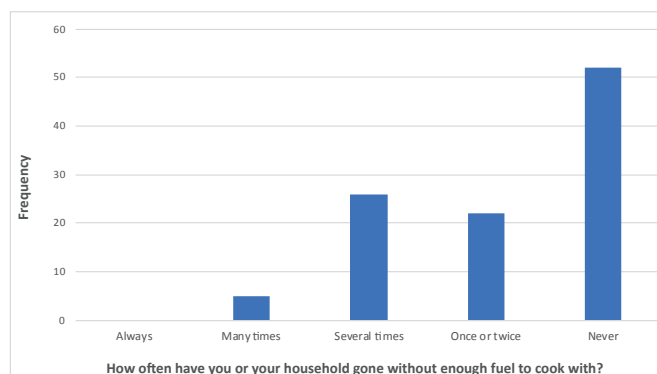
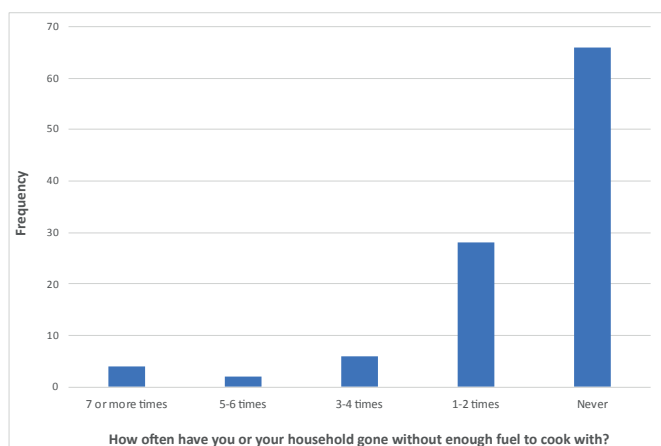
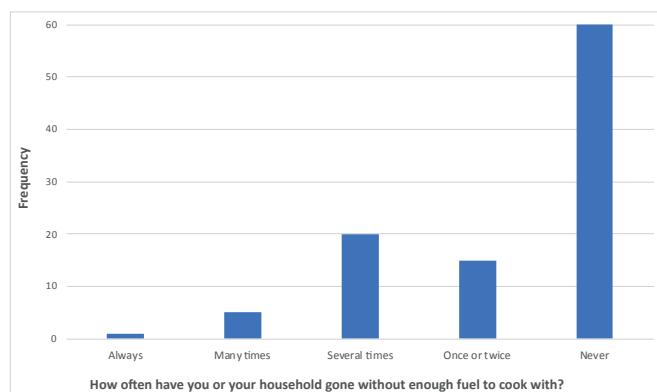


Figure 43: Responses from processors and traders on access to and availability of fuel for cooking during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey



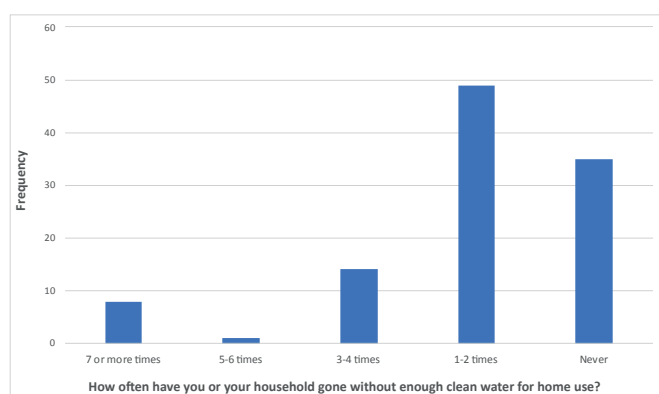
Clean water

Almost all respondents (98.1% of both fishers and processors/traders) reported having access to an improved drinking water source (inside pipe, public standpipe, private supply or borehole). 43.9% of fishers and 37.7% of processors/traders had access to an inside pipe within their own property, which is above average for the general population⁹⁷. On average, fishers reported walking 230 metres and fish processors/traders reported walking 162 metres to collect water, when this was not available within their own or a neighbour's property. Monthly costs of drinking water ranged widely, but averaged GHS 96.2 per household per month.

However, availability/regularity of supply appeared to be an issue. 63.7% of fishers and 39.6% of processors/traders reported that they had gone without access to sufficient clean water for home use over the preceding week, with 21.5% of fishers and 12.3% of processors/traders reporting this occurring at least three times during this period. Similarly, 68.2% of fishers and 43.3% of processors/traders reported going without access to sufficient clean water for home use over the preceding year, with 38.3% of fishers and 34.0% of processors/traders reporting this occurring on several or multiple occasions (**Figures 44 and 45**).

Figure 44: Responses from fishers on access to and availability of clean water for home use during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey

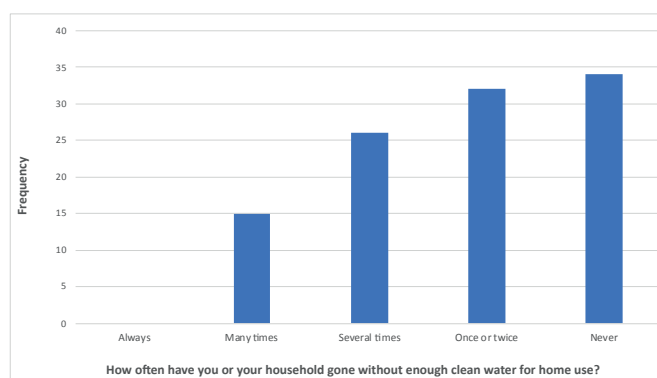
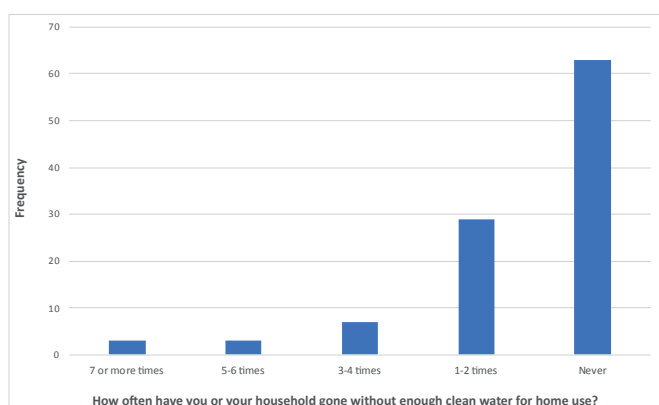
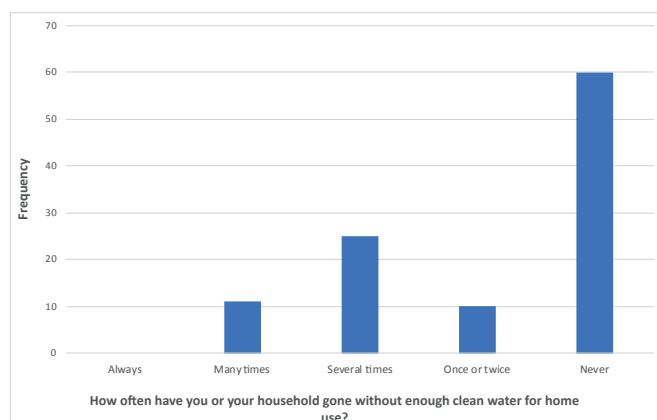


Figure 45: Responses from processors and traders on access to and availability of clean water for home use during the: (a) week; and (b) year prior to the survey

(a) During the week prior to the survey



(b) During the year prior to the survey



Sanitation

According to the national MPI for Ghana, households are considered deprived if they have no toilet facilities or use a bucket/pan, public toilet, or shared toilet outside the house⁹⁸. Deprivation is high for this indicator in both fishing and non-fishing households in fishing districts, although slightly higher for fishing households at 88.6% (**Box 2**).

The findings of the survey found that 81.3% of fishers and 86.8% of processors/traders had access to toilet facilities, in the form of a flush toilet, pit latrine, Kumasi Ventilated Improved Pit Latrine (KVIP) or public facility. However, only 33.6% of fishers and 18.9% of processors/traders had access to an improved toilet facility (flush toilet or KVIP), below average for the general population in the Central Region (68.0% of households in 2016/17)⁹⁹. In addition, 17.8% of fishers and 14.2% of processors/traders reported using the beach as their main toilet facility. Average monthly sanitation costs were GHS 31.7 per household per month.

Electricity

The vast majority of fishers (94.4%) and processors/traders (93.4%) had access to electricity from the main grid, with 73.8% of fishers and 75.5% of processors/traders reporting that electricity was available from the connection all or most of the time. This exceeds the average for the general population in the Central Region of Ghana (85.0% of households with access to electricity in 2016/17)¹⁰⁰. Average monthly electricity costs were GHS 53.4 per household per month, although exceeded GHS 100 per month in around 17% of cases.

Access to medical care/health services

According to respondents, in 87.9% of fishing households and 94.3% of processor/trader households, at least some members were covered by National Health Insurance (NHI). Overall, 30.8% fishers and 61.3% of processors/traders reported that all members of their household were covered by NHI¹⁰¹. The findings are in line with MPI values which show 68.9% of fishing households to be deprived under this indicator (a household is considered deprived if any member is not covered by the NHI scheme), slightly higher than deprivation for non-fishing households at 63.9% (**Box 2**).

Over half of both fishers (54.2%) and processors/traders (54.7%) reported that a member of their household had suffered from illness or injury in the past month. Of those household members, 89.7% of individuals from fishing households and 86.2% of individuals from processor/trader households who reported ill consulted a medical practitioner (doctor, nurse, midwife or medical assistant) for remedy.

Looking back to the previous year, 63.6% of fishers and 62.3% of processors/traders reported that a member of their household had suffered from illness or injury and required medical treatment. Of those individuals, 38.2% from fishing households and 42.4% from processor/trader households went without medical treatment, marginally lower than figures in the general population (46.7% of ill or injured individuals did not consult a health practitioner in 2016/17)¹⁰². Cost was the most frequently cited reason for failing to seek medical treatment: 17.6% of fishers and 37.9% of processors/traders reported that household members requiring medical treatment went without due to economic reasons.

Table 8: Assessment of findings against indicators of fulfilment of the right to an adequate standard of living, to continuous improvement of living conditions and the right to development

Indicator (outcome)	Assessment
1. Adequate and continuous improvement of living conditions	
a) Proportion of fisherfolks that would rate living conditions as satisfactory	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 27.1% of fishers rated their living conditions as satisfactory. 14.0% of fishers rated their living conditions as good or very good. <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 34.0% of processors and traders rated their living conditions as satisfactory. 15.1% of processors and traders rated their living conditions as good or very good.
b) Proportion of fisherfolks that would rate their living conditions as the same or better than: (i) 12 months ago; (ii) 5 years ago	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 22.4% of fishers would rate their living conditions as the same or better than 12 months ago. 27.1% of fishers would rate their living conditions as the same or better than 5 years ago. <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 25.5% of processors and traders would rate their living conditions as the same or better than 12 months ago. 18.9% of processors and traders would rate their living conditions as the same or better than 5 years ago.
c) Proportion of school age children not attending primary school	4.1% of school age children were not attending primary school in the survey. Of these, around half were boys and half were girls.
d) Proportion of households citing cost as primary factor preventing them from sending children to school	Cost was cited by 26.1% of fishers and 35.7% of processors/traders as the main reason why school age children were not attending school at the time of the survey.
e) Proportion of children aged 12 or over having completed primary school: (i) girls; (ii) boys	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 85.5% of girls aged 12 or over having completed primary education 83.8% of boys aged 12 or over having completed primary education <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 78.4% of girls aged 12 or over having completed primary education 82.5% of boys aged 12 or over having completed primary education
f) Proportion of children aged 18 or over having completed secondary education: (i) girls; (ii) boys	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 44.0% of girls aged 18 or over having completed secondary education 49.4% of boys aged 18 or over having completed secondary education <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 23.7% of girls aged 18 or over having completed secondary education 38.2% of boys aged 18 or over having completed secondary education
2. Access to essential services (health, education, literacy, adequate housing, basic sanitation, safe drinking water, sources of energy)	
a) Proportion of fisherfolks that have gone without access to sufficient food in the past: (i) week; (ii) year	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 48.6% of fishers reported that they had gone without access to sufficient food over the preceding week. 12.1% of fishers reported that this occurred at least 3 times during the preceding week. 51.4% of fishers reported that they had gone without access to sufficient food over the preceding year. 29.0% of fishers reported that this occurred on several/multiple occasions. <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 50.0% of processors and traders reported that they had gone without access to sufficient food over the preceding week. 16.0% of fishers reported that this occurred at least 3 times during the preceding week. 58.5% of processors and traders reported that they had gone without access to sufficient food over the preceding year. 28.3% of processors and traders reported that this occurred on several/multiple occasions.
b) Proportion of fisherfolks reporting a decline in the availability of fish for consumption in the past 5 years	84.1% of fishers, and 98.1% of processors and traders reported a decline in the availability of fish for consumption by their household during the preceding five-year period.
c) Proportion of fisherfolks that have gone without access to fuel for cooking in the past: (i) week; (ii) year	<p><u>Fishers:</u></p> <ul style="list-style-type: none"> 43.0% of fishers reported that they had gone without access to sufficient fuel to cook with over the preceding week. 12.1% of fishers reported that this occurred at least 3 times during the preceding week. 49.5% of fishers reported that they had gone without access to sufficient fuel to cook with over the preceding year. 29.0% of fishers reported that this occurred on several/multiple occasions. <p><u>Processors and traders:</u></p> <ul style="list-style-type: none"> 37.7% of processors and traders reported that they had gone without access to sufficient fuel to cook with over the preceding week. 11.3% of processors and traders reported that this occurred at least 3 times during the preceding week. 38.7% of fishers reported that they had gone without access to sufficient fuel to cook with over the preceding year. 23.6% of fishers reported that this occurred on several/multiple occasions.

d) Average number of persons per room among target households	Ratio of household size (persons eating from the same pot) to number of rooms in living accommodation ranged between 0.2 and 18.0, with an average of 3.6 persons per room for both fishers and processors/traders.
e) Proportion of households living in a permanent structure	100% of fisherfolks were living in a permanent structure. Around 90% of fisherfolks were living in structures made of concrete blocks.
f) Proportion of households with access to an improved drinking water source	<u>Fishers:</u> <ul style="list-style-type: none"> 98.1% of fishers had access to an improved drinking water source. 43.9% of fishers had access to an inside pipe within their own property. <u>Processors and traders:</u> <ul style="list-style-type: none"> 98.1% of processors and traders had access to an improved drinking water source. 37.7% of processors/traders had access to an inside pipe within their own property.
g) Proportion of fisherfolks with access to sanitation facilities (toilet, water closet or latrine)	<ul style="list-style-type: none"> 81.3% of fishers and 86.8% of processors and traders had access to sanitation facilities. 33.6% of fishers and 18.9% of processors and traders had access to an improved toilet facility (flush toilet or KVIP)
h) Proportion of fisherfolks that have gone without access to clean water in the past: (i) week; (ii) year	<u>Fishers:</u> <ul style="list-style-type: none"> 67.3% of fishers reported that they had gone without access to sufficient clean water for home use over the preceding week. 21.5% of fishers reported that this occurred at least 3 times during the preceding week. 68.2% of fishers reported that they had gone without access to sufficient clean water for home use over the preceding year. 38.3% of fishers reported that this occurred on several/multiple occasions. <u>Processors and traders:</u> <ul style="list-style-type: none"> 39.6% of processors and traders reported that they had gone without access to sufficient clean water for home use over the preceding week. 12.3% of processors and traders reported that this occurred at least 3 times during the preceding week. 43.3% of processors and traders reported that they had gone without access to sufficient clean water for home use over the preceding year. 34.0% of processors and traders reported that this occurred on several/multiple occasions.
i) Proportion of households with access to electricity	<u>Fishers:</u> <ul style="list-style-type: none"> 94.4% of fishers had access to electricity from the main grid. 73.8% of fishers reported that electricity is available from this connection all or most of the time. <u>Processors and traders:</u> <ul style="list-style-type: none"> 93.4% of processors and traders had access to electricity from the main grid. 75.5% of processors and traders reported that electricity is available from this connection all or most of the time.
3. Access to medical care/health services	
a) Proportion of households covered by National Health Insurance	<u>Fishers:</u> <ul style="list-style-type: none"> 87.9% of households had at least some members covered by National Health Insurance (NHI). 30.8% of fishers reported all members of their household were covered by NHI. <u>Processors and traders:</u> <ul style="list-style-type: none"> 94.3% of households had at least some members covered by National Health Insurance (NHI). 61.3% of processors and traders reported all members of their household were covered by NHI.
b) Proportion of household members that have gone without health-care services during past 12 months for economic reasons	<u>Fishers:</u> <ul style="list-style-type: none"> 17.6% of household members that required medical treatment during the preceding 12 months but went without due to economic reasons <u>Processors and traders:</u> <ul style="list-style-type: none"> 37.9% of household members that required medical treatment during the preceding 12 months but went without due to economic reasons
c) Proportion of household members who reported ill during previous month and consulted a medical practitioner for remedy	<u>Fishers:</u> <ul style="list-style-type: none"> 89.7% of household members who reported ill during the previous month consulted a medical practitioner (doctor, nurse, midwife or medical assistant) for remedy <u>Processors and traders:</u> <ul style="list-style-type: none"> 86.2% of household members who reported ill during the previous month consulted a medical practitioner (doctor, nurse, midwife or medical assistant) for remedy

4. Discussion

The following section assesses the status of fulfilment of key economic and social rights for small-scale fishing communities in Ghana with reference to the findings of the community surveys and desk-based research. The analysis considers the right to work and the right to an adequate standard of living, with a focus on the main concerns arising out of the findings in the preceding section. The assessment examines core obligations on states to respect, protect and fulfil key economic and social rights, and identifies minimum standards in the context of small-scale fishing communities, considering guidance in instruments such as the SSF Guidelines. Concerns are analysed against these minimum standards, with a view to identifying gaps and making recommendations to address shortcomings or failures identified. The assessment does not attempt to review all possible human rights issues and potential violations, but to highlight certain key issues for further examination and action.

4.1. General obligations on states

As duty bearers under international human rights law, states are under a legal obligation to ensure everyone in the country can enjoy social and economic rights, and to provide remedies in the event these rights are violated¹⁰³. This obligation encompasses the following aspects¹⁰⁴:

- (i) Respect: to refrain from interfering with the enjoyment of those rights
- (ii) Protect: to prevent others from interfering with the enjoyment of rights
- (iii) Fulfil: to adopt appropriate measures towards the full realisation of rights

The ICESCR requires states to take steps to the maximum of their available resources to achieve progressively the full realisation of economic, social and cultural rights (Art. 2(1)). Progressive realisation is a core principle of the ICESCR and recognises the role of resource availability in the realisation of certain rights¹⁰⁵. It allows for consideration of a state's financial, technical and other resources in assessing compliance with the obligation to take appropriate measures.



Artisanal canoes and semi-industrial vessels at Elmina fishing harbour in the Central Region of Ghana.

This does not, however, absolve states of responsibility to take steps towards the realisation of economic, social and cultural rights until they have sufficient resources¹⁰⁶. Rather, it imposes an immediate obligation on states to take appropriate steps towards the realisation of these rights, which should be deliberate, concrete and targeted as clearly as possible¹⁰⁷. States are also under an obligation not to allow existing protection of economic, social and cultural rights to deteriorate (e.g., through retrogressive measures)¹⁰⁸. States must also take immediate action, irrespective of available resources, to ensure that economic, social and cultural rights are enjoyed without discrimination¹⁰⁹.

A number of economic, social and cultural rights are not subject to the principle of progressive realisation and require immediate protection. The Committee on Economic, Social and Cultural Rights has highlighted minimum core obligations on states in the following areas¹¹⁰:

- Ensuring right of access to employment, especially for disadvantaged and marginalised individuals and groups, enabling them to live a life with dignity
- Ensuring access to minimum essential food
- Ensuring access to sanitation and an adequate supply of safe drinking water
- Ensuring free and compulsory primary education for all
- Ensuring access to a social security scheme that provides a minimum essential level of benefits that cover at least essential health care, basic shelter and housing, water and sanitation, food stuffs and basic forms of education.

The immediate and core obligations on states will be highlighted with reference to specific rights in the sections below.

4.2. Right to work, to free choice of employment, and to just and favourable conditions of work

4.2.1. Obligations and minimum standards

(i) **Right to work**

The right to work is a fundamental human right, enshrined in several international human rights instruments. It is considered essential for realising other human rights, and forms an inseparable and inherent part of human dignity¹¹¹. A core aspect of the right to work is the right of individuals to choose and freely accept work. This implies not only a right of access to a system of protection to guarantee workers access to employment, but the right not to be deprived of work unfairly¹¹².

The ICESCR specifies that work must be decent, in that it respects the fundamental human rights of the person, as well as workers' rights in terms of working conditions and remuneration (Art. 6 ICESCR)¹¹³. It should provide a level of income that allows workers to support themselves and their families (Art. 7 ICESCR)¹¹⁴.

Although the right to work is subject to the principle of progressive realisation, states are required to take steps towards the full realisation of this right and, in principle, should ensure that measures taken are not retrogressive¹¹⁵. The Committee has also confirmed certain core obligations on states to ensure the satisfaction of minimum essential levels of the rights set out in the ICESCR¹¹⁶. This includes the obligation to ensure, as a minimum, the right of access to employment, especially for disadvantaged and marginalised individuals and groups, enabling them to live a life with dignity¹¹⁷.

Violations of the right to work can result from acts of commission or omission¹¹⁸. Acts of commission include denial of access to work to particular individuals or groups or the adoption of legislation or policies which are manifestly incompatible with international obligations in relation to the right to work¹¹⁹. Acts of omission may include the failure to regulate the activities of individuals, groups or corporations, so as to prevent them from impeding the rights of work of others (violation of the right to protect)¹²⁰, or the failure to take all necessary steps to ensure the realisation of the right to work (violation of the obligation to fulfil human rights)¹²¹.

(ii) Right to just and favourable conditions of work

The right to just and favourable conditions of work is closely linked to, and considered a prerequisite for, the realisation of other rights protected by the ICESCR, including an adequate standard of living through decent remuneration¹²². Minimum criteria for remuneration are a fair wage, equal remuneration for work of equal value and a decent living for workers and their families, as determined by reference to the cost of living and other external factors (Art. 7)¹²³. Remuneration should allow for workers and their families to enjoy other rights under the ICESCR, including social security, health care, education and an adequate standard of living, including food, water and sanitation, and housing¹²⁴. States are required to take steps towards the progressive realisation of the right to just and favourable conditions of work, and should avoid taking any deliberately retrogressive measure, without careful consideration and justification¹²⁵. This should include, as a priority, the adoption of a minimum wage, indexed at least to the cost of living¹²⁶.

Certain categories of workers, such as workers in the informal economy, are particularly vulnerable to income insecurity and are often excluded from legal protection, support and safeguards, exacerbating vulnerability¹²⁷. Steps that can be taken by states include explicitly extending laws and policies to protect these groups and establishing non-contributory social security programmes for such workers, to provide benefits and protection against accidents and illness at work¹²⁸.

(iii) Right to social security

As for the other rights outlined above, the right to social security plays a key role in the realisation of other rights in the ICESCR¹²⁹. It is of critical importance in guaranteeing human dignity where circumstances deprive a person of their capacity to fully realise their rights under the covenant¹³⁰. The right to social security encompasses the right to access and maintain benefits, whether in cash or in kind, without discrimination in order to secure protection from, among others, lack of work-related income caused by sickness, disability, maternity, employment injury, unemployment, old age or death of a family member, unaffordable access to health care, and insufficient family support, particularly for children and adult dependents¹³¹.

States are required to take effective measures, within their maximum available resources, to fully realise the right of all persons to social security, including social insurance¹³². In addition to promoting full, productive and freely chosen employment (see (i) and (ii) above), states must endeavour to provide benefits when unemployed, to cover loss or lack of income due to the inability to obtain or maintain suitable employment¹³³.

As a minimum, states are required to take immediate steps towards the full realisation of this right, and to remove discrimination (whether in law or in fact, whether direct or indirect) which prevents groups of individuals from accessing adequate social security¹³⁴. States have a core obligation to ensure access to a social security scheme that provides a minimum essential level of benefits to all individuals and families to enable them to acquire at least essential health care, basic shelter and housing, water and sanitation, food stuffs and basic forms of education¹³⁵. Violations can occur when a state fails to take sufficient and appropriate action towards the full realisation of the right of all persons to social security¹³⁶.

While the right to social security is universal and applicable to all, states should give special attention to individuals and groups who face difficulties in exercising this right, including women, the unemployed and persons working in the informal economy¹³⁷. Specific measures for workers in the informal economy may include¹³⁸:

- Removing obstacles that prevent such persons from accessing informal social security schemes, such as community-based insurance
- Ensuring a minimum level of coverage of risks and contingencies with progressive expansion over time
- Supporting social security schemes developed within the informal economy, such as microinsurance and other microcredit related schemes.

4.2.2. The right to work in small-scale fisheries

The SSF guidelines include provisions on employment and decent work in small-scale fisheries, grounded in a human-rights based approach. Although voluntary, they have contextualised human rights to the small-scale fisheries sector and therefore provide essential guidance on the application of these fundamental human rights in this context.

According to the SSF guidelines, states should:

- Promote decent work for all small-scale fishers¹³⁹, including both formal and informal sectors.
- Promote social security protection for small-scale fishers¹⁴⁰, and the development of, and access to, other services appropriate for SSF communities, for example savings, credit and insurance schemes¹⁴¹.
- Pursue inclusive, non-discriminatory and sound economic policies for the use of marine areas, in order to permit small-scale fishing communities, particularly women, to earn a fair return from their labour, capital and management, and encourage conservation and sustainable management of natural resources¹⁴².
- Along with other stakeholders, support already existing or the development of complementary and alternative income generating opportunities, as required and in support of sustainable resource utilisation and livelihood diversification¹⁴³.
- Recognise traditional forms of associations of fishers and fish workers and promote their adequate organisational and capacity development in all stages of the value chain in order to enhance their income and livelihood security¹⁴⁴.
- Support the setting up and development of cooperatives, professional organisations of small-scale fishers and other organisational structures, as well as marketing mechanisms, as appropriate¹⁴⁵.

The realisation of the right to just and favourable conditions of work, including the right to decent remuneration, is tied closely to the availability of fisheries resources and the preservation of access for small-scale fishers to those resources. The SSF guidelines encourage states and those engaged in fisheries management to adopt measures for the long-term conservation and sustainable use of fisheries resources and to secure the ecological foundation for food production¹⁴⁶. States should safeguard publicly owned resources¹⁴⁷ and secure rights to resources that form the basis of social and cultural well-being, livelihood and sustainable development¹⁴⁸.

The Code of Conduct for Responsible Fisheries (CCRF) similarly provides that states should protect the rights of small-scale fishers to a secure and just livelihood¹⁴⁹. This is elaborated in the SSF guidelines to include the granting of preferential access, where appropriate, for small-scale fishers to fish in waters under national jurisdiction¹⁵⁰. According to the SSF guidelines, states should consider measures such as:

- The creation and enforcement of exclusive zones of small-scale fishers.¹⁵¹
- Giving small-scale fishers due consideration before agreements on resource access are entered into with third countries and third parties.¹⁵²
- Adopting measures to facilitate equitable access to fishery resources for small-scale fishing communities including, as appropriate, redistributive reform¹⁵³.
- Ensuring that small-scale fishers are not arbitrarily evicted and that their legitimate tenure rights are not otherwise extinguished¹⁵⁴.



4.2.3. Assessment of findings

Issue 1: Decline in effective income for small-scale fishers and fish workers in Ghana due to IUU fishing and overfishing

Human rights implications:

- Potential violation of the right to just and favourable conditions of work, particularly the obligation to ensure a decent level of income that allows workers to support themselves and their families (Art. 7 ICESCR)
- Potential violation of the right to work (Art. 7 ICESCR), particularly the obligation to ensure, as a minimum, the right of access to employment, especially for disadvantaged and marginalised groups, permitting them to live a life with dignity (Para. 31, General Comment No. 18 on the Right to Work)
- Potential violation of the right of people working in rural areas to the conservation and protection of the environment and productive capacity of the resources they use and manage (Art. 18 UNDROP)

The findings are indicative of a decline in effective income for small-scale fishers and fish workers in recent years, in line with national level data on declines in profit generated by the artisanal sector (**Figure 4**). Around 80-90% of fishers and processors/traders surveyed reported declines in income over the past five years, a situation exacerbated by the COVID-19 pandemic which, according to the majority of respondents, has had a negative impact on incomes. This has left many fishers, processors and traders unable to cover basic costs and needs, with average monthly expenditures exceeding income during both major and minor fishing seasons.



Around **80-90%** of fishers and processors/traders surveyed reported **declines in income** over the past five years.

Income declines are linked closely to the worsening state of fisheries resources. Almost 95% of fishers reported a decline in landings during the major fishing season, while over 90% of processors and traders reported a decline in the availability of catches to purchase over the preceding five-year period. Around 70% of respondents perceived the state of the fisheries as “much worse” compared to five years prior to the survey. Fishing expeditions often result in zero catches and processors and traders face difficulties obtaining sufficient fish to process. Fishers are also travelling further out to sea in search of fish, with implications for worker health and safety. Fisher-reported declines in catch levels are consistent with official reported data on landings and CPUE over the past two decades (**Figures 1-2 and 5**).

The findings suggest that Ghana’s small-scale fisheries sector is failing to provide many workers with a level of income that allows them to support themselves and their families, as required under Article 7 of the ICSECR. Work in the small-scale fisheries sector no longer provides many fishers and fish workers with decent remuneration, in accordance with the right to just and favourable conditions of work, rather workers have experienced a deterioration in their financial situation and working conditions over time. This is impeding realisation and enjoyment by fishers and their families of the right to an adequate standard of living and to the continuous improvement of living conditions (discussed in **Section 4.3** below). It furthermore undermines progress towards key targets of the 2030 Agenda, including Target 2.3 on doubling the incomes of small-scale food producers, Target 8.5 on achieving decent work for all and Target 10.1 on sustaining income growth of the bottom 40% of the population.

The government of Ghana has an obligation to take steps towards the full realisation of the right to work and to ensure that measures taken are not regressive. This implies a duty to sustainably manage Ghana’s fisheries through science-based conservation and management measures to protect the livelihoods of vulnerable and marginalised workers that rely on small-scale fisheries for their livelihoods. This is also linked to the right of fishing communities to the productive capacity of the resources that they use and manage, set out in Article 18 of UNDROP.

The Committee on Economic, Social and Cultural Rights has previously addressed the need to secure the livelihoods of small-scale fishers in the face of fisheries declines due to encroachment by commercial vessels in recommendations to the Philippines in 2016¹⁵⁵, and to Djibouti in 2013¹⁵⁶. In the context of Ghana, this suggests a need to regulate the operations of industrial vessels and to address over-capacity and illegal fishing in the industrial trawl sector, which are driving declines in fish populations, particularly the small pelagics. Such actions would be in line with Targets 14.2 of the 2030 Agenda on sustainable fisheries management, Target 14.4 on ending IUU fishing and Target 14.b on providing access for small-scale fishers to marine resources and markets (**Box 1**). This is discussed further in the sections below.

Issue 2: Increasing competition with large-scale, industrial trawl vessels for access to resources

Human rights implications:

- Potential violation of the right to work (Art. 6 ICESCR) including the right not to be deprived of work unfairly (Para. 4, General Comment No. 18 on the Right to Work)
- Potential violation of the right to equal access to use of and management of natural resources (Art. 4(2)(h) UNDROP)
- Potential violation of the right for women to access and have control over productive resources required for sustainable development (Art. XIX Protocol to the ACHPR on the Rights of Women in Africa)

Fishers cite increasing competition with industrial trawl vessels, including incursions into zones reserved for small-scale fishers and the illegal practice of saiko, which is having a significant negative impact on the livelihoods of both fishers and processors/ traders. Almost 75% of fishers reported that they encounter industrial trawlers more frequently during their fishing expeditions compared to five years ago, while over 90% of fishers had observed trawlers in their fishing grounds during the preceding 12-month period. Around 70% of fishers had also reported damage to their fishing gear caused by industrial trawl vessels. The findings are consistent with satellite monitoring and other data on incursions into the IEZ by industrial trawlers (**Appendix 3**); data on fishing expeditions of small-scale canoe fishers beyond the IEZ (**Figure 3**); records of large-scale landings by the industrial trawl fleet through saiko (**Box 3**) and recent research on conflicts between trawlers and small-scale fishers¹⁵⁷.



Almost **75%** of fishers reported that they encounter **industrial trawlers more frequently** during their fishing expeditions compared to five years ago.



Around **70%** of fishers had suffered **damage to their fishing gear** by industrial trawlers.

The findings call into question whether the government is taking adequate steps to respect, protect and fulfil the rights of small-scale fishers and fish workers to work and to just and favourable conditions of work. The continued scale of commercial trawl fishing in Ghana (see **Section 1.3**), during a period of severe declines in artisanal catches, is arguably incompatible with Ghana's obligations in relation to the right to work, including the right of small-scale fishers and fish workers not to be deprived of work unfairly (Art. 6 ICESCR).

There is a need to protect the rights of small-scale fishing communities to a secure and just livelihood through granting preferential and secure access to fisheries resources, in accordance with paragraph 5.7 of the SSF Guidelines, as well as Target 14.b of the 2030 Agenda on small-scale fisher access to resources and markets, and Target 5.a on women's access to ownership and control over natural resources, among others. This may include: (i) the regulation of industrial fishing to protect the access rights of fishing communities; (ii) expanding and enforcing exclusion zones for industrial fishing; and (iii) giving due consideration to small-scale fishers and fish workers (e.g., through mandatory consultation of representative associations) in the allocation of industrial licenses¹⁵⁸. The need to ensure small-scale fishing communities participate in decisions relating to fishing access agreements, as well as benefit from those agreements, has previously been emphasised by the Committee on Economic, Social and Cultural Rights in its recommendations to countries¹⁵⁹.

Ensuring the participation of small-scale fishing communities in non-discriminatory, transparent and accountable decision-making processes, which places an emphasis on the needs of vulnerable and marginalised groups, is central to a human-rights based approach to implementation of the SSF Guidelines¹⁶⁰. At present, the licensing of industrial vessels is not subject to stakeholder consultation, or to parliamentary scrutiny as required by Ghana's Constitution¹⁶¹. Tuna pole and line vessels have been licensed to fish for bait within the IEZ without the consultation of small-scale fishers or a clear legal basis¹⁶². Improving realisation of socio-economic rights of fishing communities depends on addressing their social and political marginalisation, which has resulted in the under-representation of small-scale fishers in decision-making and policy processes affecting their livelihoods.

Issue 3: Government failure to eliminate the illegal practice of saiko and address other forms of illegal and unsustainable fishing by industrial trawl vessels

Human rights implications:

- Potential violation of the right to work (Art. 6 ICESCR), particularly the failure to regulate the activities of individuals, groups and corporations to prevent them from violating the rights of work of others (Para. 32, General Comment No. 18 on the Right to Work)
- Potential violation of the right to work (Art. 7 ICESCR), particularly the obligation to ensure, as a minimum, the right of access to employment, especially for disadvantaged and marginalised groups, permitting them to live a life with dignity (Para. 31, General Comment No. 18 on the Right to Work)

Most of the fishers, processors and traders surveyed complained that the activities of industrial trawlers and saiko operators are having a significant negative impact on their livelihoods. While these reports are anecdotal, they align with evidence and observations of deliberate targeting of small pelagic fish for the saiko trade¹⁶³ (**Box 3**), widespread discarding of juvenile fish¹⁶⁴, incursions of industrial vessels into the IEZ reserved for small-scale fishers (**Appendix 3**), and saiko landings, which equated to around 57% of artisanal landings in 2017¹⁶⁵.

Indeed, NGOs and small-scale fisher associations have called on government to eliminate the illegal practice of saiko, which continues openly at ports such as Elmina, and to address other forms of illegal and unsustainable fishing by industrial trawl vessels in Ghana's EEZ¹⁶⁶. Saiko has operated with the tacit support of government, with waybills issued by the Ghana Industrial Trawlers Association (GITA) and signed by government appointed fisheries observers purporting to legitimise the trade¹⁶⁷.

Such acts may constitute a failure by the government to regulate the activities of individuals, groups and corporations and prevent them from violating the right to work of small-scale fishers. Small-scale fishers and fish workers have arguably seen their work-related rights deteriorate in recent years, contrary to state obligations to ensure measures are not retrogressive under international law. It is unclear whether the government is discharging its minimum core obligation to protect the rights of small-scale fisherfolks, as a disadvantaged and marginalised group, to access employment that enables them to live a life of dignity (per Art. 6 of the ICESCR). This is an area warranting further attention and investigation by the Government of Ghana and the Commission on Human Rights and Administrative Justice (CHRAJ) to determine whether this constitutes a violation of the right to work.

Issue 4: High levels of income insecurity and a lack of social security for small-scale fishers and fish workers

Human rights implications:

- Potential violation of the right to social security including social insurance (Art. 22 UDHR, Art. 9 ICESCR, Art. 11(1)(e) CEDAW, Art. 22 UNDROP)
- Potential violation of the right of women working in rural areas to benefit directly from social security programmes (Art. 4(2)(c) UNDROP)
- Potential violation of the requirement that states should give special attention to those individuals and groups who traditionally face difficulties in exercising the right to social security, in particular women, workers inadequately protected by social security and persons working in the informal economy (Para. 31, General Comment No. 19 on the Right to Social Security)

In addition to declining incomes, small-scale fishers and fish workers in Ghana, as in other parts of the world, are characterised by high levels of income insecurity. Fishing is a seasonal activity, with reported incomes of fishers, fish processors and traders varying considerably throughout the year, and falling



Over **93%** of respondents obtained at least **90%** of their livelihood from fishing, fish processing or trading activities.

to zero in some months according to the findings of this study. Fishers are highly vulnerable to unemployment or temporary loss of income, due not only to poor catches, but to damage to fishing gear and declines in the price of fish, among other factors. Over 80% of fishers reported damage to their fishing gear during the preceding 12-month period

yet were rarely able to obtain compensation for losses incurred (due to use of prohibited fishing gears that are ineligible for compensation and the inability to provide evidence of conflicts at sea, among others¹⁶⁸). As workers in the informal economy, small-scale fishers and fish workers are more likely to face difficulties in exercising the right to social security, yet are particularly vulnerable to loss of work-related income, due to sickness, unemployment, maternity or old age. It is furthermore unclear whether, as informal workers, they are able to claim rights under the 2003 Labour Act (Act 651)¹⁶⁹.



Less than 4% of fishers and 2% of processors/traders surveyed were participating in a social security scheme.

Over 93% of respondents obtained at least 90% of their livelihood from fishing, fish processing or trading activities, with just 6.5% of fishers and 3% of processors and traders receiving skills upgrading or training to help transition into additional income generating activities. As most small-scale fishers and fish workers depend solely on fisheries for their livelihoods, they have limited means to cope with periods of low or no income from fishing. This is compounded by a lack of access to social security support, with less than 4% of fishers and 2% of processors and traders surveyed participating in a social security scheme.

Although government support is available in the form of subsidised fuel and outboard engines, around half of fishers reported they were unable to access this support when needed. Indeed, previous studies have identified constraints on access to and irregularity of fuel supplies, indicative of poor management and distribution of fuel and potential diversion from its intended use¹⁷⁰. Fishers' concerns regarding availability and access to fuel raise doubts as to whether the programme is helping fishers to attain a better standard of living and if it can be effective in fulfilling human rights. This study found government support for women working in fish processing and trading activities to be even more limited.

In addition to availability and accessibility concerns, the provision of fuel and engine subsidies to small-scale fishers in Ghana has been criticised as promoting increased fishing effort, overexploitation and lowering fishing productivity¹⁷¹, to the detriment of incomes in the longer term. The government of Ghana spends around US\$44 million on the premix fuel subsidy each year¹⁷², or nearly four times the Ministry's entire annual budget, indicating a disproportionate investment in fishery inputs over sustainable fisheries management¹⁷³.

The scale of Ghana's premix fuel subsidy is arguably inconsistent with paragraph 5.10 of the SSF Guidelines that requires states to avoid policies and financial measures that contribute to fishing overcapacity and overexploitation¹⁷⁴. In fuelling over-capacity and unsustainable levels of fishing it may also, perversely, have the effect of infringing the rights of fishing communities to a healthy environment and to the conservation and protection of the environment, as set out in the ACHPR and UNDROP, among others.

A range of policy options have been proposed for the reform of the fuel subsidy towards more environmentally and socially beneficial programmes¹⁷⁵. These include the elimination or phasing out of the fuel and engine subsidy, combined with some/all of the following:

- Compensation payments/cash transfers to fishers during closed seasons
- Payment or contribution to premiums for life, permanent and temporary insurance for fishers
- Payment or contribution to premiums for national health insurance for fishers
- Cash pay-outs/transfers as compensation for removal of the subsidy
- Implementation of a pension scheme for fishers
- Investment in alternative livelihood schemes
- Measures to reduce fishing pressure, e.g., increase in weekly fishing holidays, reduction in fleet size and implementation of protected areas.

It is, however, recognised that the complete elimination of the fuel subsidy would have a severe impact on fishers in the short term. A well-informed, gradual approach to reforming the subsidy, taking into account vulnerable and marginalised groups, is therefore critical to ensure the human rights of fishers are protected.

Further action is required to ensure small-scale fishers and fish workers can access social security, as a fundamental right under the UDHR, ICESCR, CEDAW and UNDROP. This is particularly critical in view of the seasonality of small-scale fishing, low availability of alternative livelihood opportunities in fishing communities, and vulnerability to external shocks arising, for example, from damage to fishing gear and fish price volatility. The lack of social security coverage – and particularly support for women – seriously impedes the ability of small-scale fishing communities to realise the full suite of economic, social and cultural rights enshrined in international law. It undermines progress towards Target 1.3 of the 2030 Agenda on implementing a nationally appropriate social protection system for all, Target 1.5 on improving resilience of the poor and vulnerable to economic, social and environmental shocks, Target 5.a on reforms to give women equal rights to economic resources, and Target 10.4 on achieving greater equality through fiscal, wage and social protection policies.

Targeted interventions are needed to bring small-scale fishers and fish workers into the social security framework and explicitly extend labour protections, for example through schemes developed within the informal economy such as community-based insurance and micro-credit. This is particularly critical in the context of collapsing fishery resources and implementation of measures to stem fisheries declines. In 2021, a fishing closed season is due to take place during the peak fishing season for small-scale fishers (1-31 July), yet there are limited plans to compensate fishers, fish processors or traders for loss of income during this period. Although the closed season is aimed at the conservation of fisheries resources and preservation of rights of small-scale fishers and fish workers in the longer-term, the government should consider the immediate impacts on income, and options to mitigate short-term adverse impacts. This could include cash transfers to fishers and fish workers as a form of unemployment compensation¹⁷⁶.

4.3. Right to an adequate standard of living, to the continuous improvement of living conditions and to development

4.3.1. Obligations and minimum standards

The right of all persons to an adequate standard of living is enshrined in Article 25(1) of UDHR and Article 11 of the ICESCR. This provides that every individual has the right to a standard of living that is adequate for their health and well-being, which includes the right to food, clothing, housing, medical care and social services, and the right to social security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood. The right to social security was elaborated in the context of the right to work in **Section 4.2** above.



An artisanal fisher mending his net.

The realisation of an adequate standard of living is closely linked to the realisation of the right to just and favourable conditions of work. For example, the right to adequate food is realised when individuals have physical and economic access at all times to adequate food or the means for its procurement¹⁷⁷. As outlined above, remuneration should provide a decent living for workers and their families, which is determined by reference to external factors, such as the cost of living and other prevailing economic and social conditions¹⁷⁸.

While the obligation on states to ensure the right to an adequate standard of living is one of progressive realisation, states are nevertheless required, as a minimum, to ensure access to:

- Minimum essential food
- Sanitation and an adequate supply of safe drinking water
- Free and compulsory primary education for all
- A social security scheme that provides a minimum essential level of benefits to all individuals and families to enable them to acquire at least essential health care, basic shelter and housing, water and sanitation, food stuffs and basic forms of education¹⁷⁹.

A distinction is made between primary and secondary education. While states are obliged to make free and compulsory primary education available to all¹⁸⁰, states are only required to encourage the development of secondary education and to make it available and accessible to every child¹⁸¹.

These obligations are elaborated in relation to specific groups in other instruments. For example, the UN Convention on the Rights of the Child obliges states to take appropriate measures to ensure the provision of adequate nutrition and safe drinking water for all children, and to strive to ensure no child is deprived of their right of access to health care services. The Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa considers these obligations specifically in relation to women's rights, requiring states to take appropriate measures to:

- Provide adequate, affordable and accessible health services to women, especially those in rural areas¹⁸².
- Provide women with access to clean drinking water, sources of domestic fuel, land and the means of producing nutritious food¹⁸³.
- Promote women's access to and control over productive resources that are required for sustainable development¹⁸⁴.

The Protocol further reiterates the right of women to equal access to housing and to acceptable living conditions in a healthy environment¹⁸⁵.

States have a responsibility to ensure that facilities, goods and services required for the enjoyment of economic, social and cultural rights are available at affordable prices¹⁸⁶. The Committee on Economic, Social and Cultural Rights has elaborated four criteria to judge whether facilities, goods and services are in line with a state's human rights obligations. These are¹⁸⁷:

1. Availability: Facilities, goods and services must be available in sufficient quantities and in continuous supply.
2. Accessibility: Facilities, goods and services must be accessible to everyone without discrimination. Accessibility criteria can include physical access, affordability, access to information and non-discrimination.
3. Acceptability: Consumer acceptability, cultural acceptability and sensitivity to marginalised groups.
4. Quality: Facilities, goods and services must be safe and of an adequate standard.

Violations of the state's obligations to take appropriate measures towards the full realisation of the right to an adequate standard of living may arise, for example, from the failure to ensure a minimum wage sufficient for a decent living, or the failure to prevent starvation within a particular area or community¹⁸⁸.

4.3.2. The right to an adequate standard of living in small-scale fisheries

A key objective of the SSF Guidelines is to “contribute to the equitable development of SSF communities and poverty eradication and to improve the socio-economic situation of fishers and fish workers within the context of sustainable fisheries management”¹⁸⁹. The Guidelines recognise the role of small-scale fisheries in realising economic, social and cultural rights and human development in coastal communities, and the need to consider small-scale fisher livelihoods in fisheries management and policy processes.

According to the Guidelines, attention to the social and economic development of small-scale fishing communities is a prerequisite for empowerment of communities and the enjoyment of their human rights¹⁹⁰. The Guidelines contextualise the progressive realisation of the right to an adequate standard of living to the small-scale fisheries sector, which should include:

- Creating an enabling environment for sustainable development in small-scale fishing communities¹⁹¹.
- Promoting investment in human resource development such as health, education, literacy, digital inclusion and other skills¹⁹².
- Taking steps with a view to progressively ensuring that small-scale fishing communities have affordable access to essential services, including adequate housing, basic sanitation that is safe and hygienic, safe drinking water for personal and domestic uses, and sources of energy¹⁹³.
- Promoting social security protection for small-scale fishers and fish workers and access to financial services such as savings, credit and insurance schemes¹⁹⁴.
- Providing and enabling access to schools and education facilities¹⁹⁵.

The Guidelines further emphasise the importance of ensuring access for small-scale fishing communities to the resources they depend on for their livelihoods. States should abstain from taking measures that reduce access for small-scale fishers, guaranteeing that small-scale fishing communities are not arbitrarily evicted¹⁹⁶. States should also take steps to improve access to natural resources, including by creating and enforcing exclusive zones for small-scale fishers¹⁹⁷.

4.3.3. Assessment of findings

Issue 5: Living conditions in SSF communities have worsened in recent years due to declining incomes

Human rights implications:

- Potential violation of the right to the continuous improvement of living conditions (Art. 25 UDHR, Art. 11 ICESCR, Art. 8 DRD) and to economic, social and cultural development (Art. 22 ACHPR)
- Potential violation of the right of women to fully enjoy their right to sustainable development (Art. XIX Protocol to the ACHPR on the Rights of Women in Africa)

The findings are indicative of a worsening of living conditions in fishing communities in recent years, with around 75% of fishers and 65% of processors and traders rating their current living conditions as unsatisfactory. For the majority of fishers, processors and traders, living conditions were much worse than five years prior to the survey. The main reason cited was a decline in incomes in fishing communities, which appears to be linked to the deterioration of (and loss of access to) fisheries resources in the Ghanaian EEZ (discussed under **Section 4.2** above).

Indeed, for many fishers, processors and traders, expenditures are exceeding income from fishing expeditions and processing/trading activities. Fishing expeditions often result in zero catch, while processors/traders face difficulties obtaining enough fish for their businesses.



Over **75%** of fishers and **70%** of fish processors/traders reported a **worsening of their living conditions** over the past five years.

Remuneration appears insufficient in many cases to provide a decent living for workers and their families and to secure an improvement in living conditions over time. This points to a potential failure by government to take appropriate measures towards realising the right to an adequate standard of living, including ensuring an adequate minimum wage in the small-scale fisheries sector, undermining the achievement of SDG Target 8.5 on decent work for all.

The findings suggest that overfishing by industrial trawlers in Ghana is depriving small-scale fishers and fish workers of their means of subsistence and potentially infringing their rights under Article 11 of the ICESCR¹⁹⁸, warranting further attention from the Ghanaian government and CHRAJ. The continued licensing of large-scale trawling and support for the saiko trade with its documented impacts on small-scale fishers, could be considered as retrogressive measures, contrary to Ghana's core obligations under the ICESCR. These measures reduce access of small-scale fishers to the resources they depend on for their livelihoods and displace them from their fishing grounds, with fishers now travelling further out to sea in search of fish and experiencing damage to their fishing gear caused by industrial vessels. They undermine the conservation and sustainable management of fisheries resources and run contrary to SDG Target 14.b to ensure access of small-scale fishers to marine resources and markets and Target 14.4 on ending overfishing and IUU fishing. The Committee on Economic, Social and Cultural Rights has previously expressed concern about the role of overfishing by foreign companies in depriving small-scale fishers of their means of subsistence (in the context of Senegal), emphasising the importance of meaningful and effective participation of small-scale fishing communities in the negotiation of fishing agreements to address the issue¹⁹⁹.

Issue 6: Incidences of non-attendance or non-completion of primary education, in some cases due to cost

Human rights implications:

- *Potential violation of the right of everyone to education (Art. 26 UDHR, Art. 13 ICESCR, Art. 17 ACHPR) including the obligation to ensure access to free and compulsory primary education for all (Art. 26 UDHR, Art. 13 ICESCR)*

While primary school should be freely available and compulsory for all, the study recorded instances of non-attendance of school-age children for reasons relating to cost. Around 15-20% of school children in the survey had left school prior to completing primary education with primary school completion rates lower for children from processor/trader households compared to fishing households. Both attendance and completion rates were lower for fishing households than non-fishing households in the same districts, according to MPI values.

The data indicate the need for additional measures to realise the right to free and compulsory primary education for children in fishing communities. This is a minimum core obligation on states under the ICESCR, implying the need for immediate action to address shortcomings identified.

Secondary school completion rates were lower than for primary education, and lower still for children from processor/trader households, particularly for girls, than from fishing households. Cost was the most frequently cited factor preventing small-scale fishers and fish workers from sending their children to school.

Although an obligation of progressive realisation, the findings are indicative of a need for targeted interventions to develop and improve accessibility of secondary education for every child, directed especially at households of fish processors and traders. This would need to address the causes of marginalisation/inequality that result in lower attendance or completion rates for girls, in line with Ghana's obligations under CEDAW to ensure women have equal rights to men in the field of education²⁰⁰. Critically, improving secondary school attainment would help reduce pressure on fisheries resources through opening-up alternative income generating opportunities for young people in fishing communities, improving incomes for small-scale fishing households in the longer-term.



Around **15-20%** of school children in the survey **had left school** prior to completing primary education.

Issue 7: Food insecurity/lack of access to sufficient food for small-scale fishers, fish workers and their families

Human rights implications:

- Potential violation of the right to an adequate standard of living and to development, including the right to food (Art. 11 ICESCR, Art. 25 UDHR, Art. 8 DRD)
- Potential violation of the minimum core obligation to ensure access to the minimum essential food which is nutritionally adequate and safe, to ensure freedom from hunger to everyone (Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health)

Fisheries and related income declines appear to have had an impact on food availability in fishing communities. Fish constitutes a key source of protein for all Ghanaians, including people living in fishing communities, yet almost 80% of fishers and 98% of processors and traders reported declines in the availability of fish for consumption over the preceding five-year period. Over 50% of fishers and almost 60% of processors/traders reported going without access to sufficient food over the preceding 12-month period, a potentially serious human rights issue in relation to food security.



Over **50%** of fishers and almost **60%** of processors/traders reported going **without access to sufficient food** over the preceding 12-month period.

Ensuring access to minimum essential food is a core obligation of the right to an adequate standard of living. The survey findings suggest that immediate, additional measures are required by the government to discharge this obligation as required under the ICESCR. Food security in fishing communities is linked closely to the condition and availability of fisheries resources which provide communities with a basis for food production and a decent living to cover basic needs. The government of Ghana is required to ensure enterprises or individuals do not deprive small-scale fishers of their access to adequate food through, for example, protecting the access rights of fishing communities from industrial fishing²⁰¹. Measures should focus on improving sustainable fisheries management and securing access for fisherfolks to fisheries resources and markets, in line with the SSF Guidelines and Target 14.b. of the 2030 Agenda, as well as Target 2.1 of the 2030 Agenda on ending hunger, and Target 2.3 on doubling the agricultural productivity and income of small-scale food producers.

Issue 8: Irregular supply of clean drinking water and low rates of access to improved toilet facilities

Human rights implications:

- Potential violation of the right to an adequate standard of living and to development (Art. 11 ICESCR, Art. 25 UDHR, Art. 8 DRD)
- Potential violation of the obligation to take appropriate measures to provide women with access to clean drinking water (Art. XV Protocol to the ACHPR on the Rights of Women in Africa).
- Potential violation of the minimum core obligation to ensure access to basic sanitation and an adequate supply of safe and potable water (Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health)

Serious human rights issues were identified in relation to access to clean water and adequate sanitation. While nearly all respondents reported having access to an improved drinking water supply, availability of water was erratic. Almost 70% of fishers and over 40% of processors and traders reported going without access to sufficient clean water for home use during the preceding 12-month period.



Almost **70%** of fishers and over **40%** of processors/traders had gone **without access to sufficient clean water** during the preceding 12-month period.

As regards sanitation, the survey findings are consistent with MPI values which showed high levels of deprivation under this indicator for both fishing and non-fishing households in fishing districts. Just one third of fishing households, and less than 20% of processors/trader households, reported having access to an improved toilet facility (flush toilet or KVIP). A small but not insignificant proportion of respondents – 18% of fishers and 14% of processors/traders –

reported lacking access to sanitation facilities altogether, using the beach as their main toilet facility. Deprivation appeared higher for processor/trader households, indicative of possible marginalisation/inequality as regards access to adequate sanitation facilities for these households.



Just **one third** of fisher households and **less than 20%** of processor/trader households had access to an improved toilet facility.

The findings suggest a failure on the part of the government to ensure adequate access to safe drinking water and sanitation in fishing communities. As a minimum core aspect of the right to an adequate standard of living, further attention is warranted to ensure government water and sanitation programmes are effectively reaching fishing communities and to address issues related to marginalisation that may be preventing fishing households from accessing these rights.

Issue 9: Incomplete coverage of fishing communities by the National Health Insurance scheme; instances of individuals from fishing households going without medical treatment due to cost

Human rights implications:

- Potential violation of the right to an adequate standard of living (Art. 11 ICESCR) including the right to medical care (Art. 25 UDHR)
- Potential violation of the requirement on states to undertake, at the national level, all necessary measures for the realisation of the right to development and to ensure, inter alia, equality of opportunity for all in their access to health services (Art. 8 DRD)
- Potential violation of the right of every individual to enjoy the best attainable state of physical and mental health and the obligation on state parties to take the necessary measures to protect the health of their people and to ensure that they receive medical attention when they are sick (Art. 16 ACHPR)
- Potential violation of the obligation on state parties to take appropriate measures to provide adequate, affordable and accessible health services to women in Africa, especially those in rural areas (Art. XIV(2), Protocol to the ACPHR on the Rights of Women in Africa)
- Potential violation of the minimum core obligation on states to ensure the right of access to health facilities, goods and services on a non-discriminatory basis, especially for vulnerable or marginalised groups (Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health)

The study identified human rights issues in relation to a lack of access to essential health services for households of fishers, processors and traders in coastal communities. Just over 30% of fishers and 60% of processors/traders reported complete coverage of their households under the National Health Insurance (NHI) scheme, with multiple reported instances of individuals going without medical treatment during the preceding 12-month period, most commonly due to economic reasons (cost of treatment). The findings are consistent with MPI values, which showed relatively high levels of deprivation for this indicator, which were marginally higher for fishing households compared to non-fishing households in the same districts (**Box 2**).



Just over **30%** of fishers and **60%** of processors/traders reported complete coverage of their households under the **National Health Insurance (NHI) scheme**.

The findings suggest the need to address barriers to accessing essential health care by fishing communities, in line with Ghana's obligations under the ICESCR and ACPHR, and the obligation to provide adequate, affordable and accessible health services to women in rural areas under the Protocol to the ACHPR, among others. Given the specific circumstances of fishing communities, often associated with high levels of vulnerability and marginalisation, it may be necessary to adjust existing or develop context-appropriate health insurance schemes that provide at least essential health care for small-scale fishers, fish workers and their families.

5. Conclusions and recommendations

This study has identified potentially serious human rights issues which are indicative of inadequate measures on the part of the government of Ghana to protect, respect and fulfil the human rights of fishing communities in the country, as required under international law. As duty bearer, Ghana is under a legal obligation to ensure fishing communities enjoy social and economic rights, and to provide remedies in the event these rights are violated.

The study revealed declining incomes and living conditions for small-scale fishers and fish workers, high levels of employment and income insecurity, a lack of access to social security, adequate sanitation and clean water, as well as food insecurity and poor school completion rates, among others. This is supported by Multidimensional Poverty Indicator (MPI) values for fishing households as compared to non-fishing households within the same districts, as well as government data on declines in catch per unit effort and profitability of Ghana's small-scale fisheries sector over the past two decades. For small-scale fishers and fish workers in Ghana, having no access to employment for three or months of the year is a relatively common occurrence, with few alternative income generating opportunities available in the communities. As a result of fish population declines, fishers are now travelling further out to sea in search of catches, with implications for their basic safety and well-being. Migration between communities, as commonly observed in this study, may further exacerbate their vulnerability.

A number of the issues identified in this study relate to Ghana's minimum core obligations under international law, particularly to guarantee the right to social security, to minimum essential food, to free and compulsory primary education for every child, and access to an adequate clean water supply, sanitation and medical services. Declining fish populations and incomes of fishers, processors and traders point to a failure to protect and fulfil the rights of small-scale fishers and fish workers to work, and to just and favourable conditions of work, including the right to a level of income that allows workers to support themselves and their families. This is impeding realisation and enjoyment by small-scale fishers, fish workers and their families of the right to an adequate standard of living and to the continuous improvement of living conditions.



Artisanal canoes at Winneba landing beach in Ghana's Central Region.

The findings indicate that small-scale fishers and fish workers are a vulnerable and marginalised group, calling for special measures to ensure their human rights are respected, protected and fulfilled. Based on the findings, small-scale fishers and fish workers are a group of rights holders that the government of Ghana should be highly concerned about and should prioritise in policymaking.

Although multiple factors have precipitated declines in Ghana's fisheries resources, perhaps most critical in terms of securing the human rights of vulnerable small-scale fishing communities is the failure to control overfishing and illegal fishing by industrial trawl vessels in the country. In recent years, the government has failed to address illegal "saiko" fishing, while authorising intensive trawling activity, despite severe declines in artisanal fish landings. The lack of action to prevent trawling companies from violating the right to work of small-scale fishers and fish workers could be construed as retrogressive under international law, resulting in the deterioration of key human rights of fishing communities. In neglecting to regulate these activities, it is unclear whether Ghana is discharging its minimum core obligation to protect the rights of small-scale fishers and fish workers, as a disadvantaged and marginalised group, to access employment that enables them to live a life of dignity. There is a need for further attention and investigation by the government of Ghana and Commission on Human Rights and Administrative Justice (CHRAJ) in several critical areas to determine whether government acts of omission or commission in relation to the management of the fisheries sector constitute a violation of fundamental human rights.

Ghana's small pelagic fishery is in a perilous state with severe implications for the economic and social rights of small-scale fishing communities. In addition to regulating industrial trawling activity, improving social and economic safeguards for these workers is particularly crucial in the context of collapsing fishery resources and implementation of measures, such as fishing closed seasons, to stem fisheries declines. There is a need to reform the current programme of subsidies to ensure these are effective in supporting fishers to improve their standard of living and in fulfilling human rights. Reducing fleet capacity is necessary in both the artisanal and industrial sectors but must begin with the industrial fleet and be accompanied by the development of realistic, large-scale alternative income generating opportunities for fishing communities.

Improving governance of the sector through enhanced transparency and involvement of small-scale fishing communities in decision-making, particularly in the authorisation of industrial fishing activity, is also key to securing the rights of fishers and fish workers to their livelihoods, food security and sustainable development. This should be complemented by specific measures to secure small-scale fisher rights of access to fisheries resources, including through extension of the IEZ boundary to reflect current patterns of canoe fishing effort, and ensuring the IEZ boundary is clearly defined and can be enforced. The Committee on Economic, Social and Cultural Rights has previously emphasised the need for small-scale fishing communities to participate in decisions relating to fishing access agreements and to derive tangible benefits from such agreements²⁰², recommendations which can be applied equally in the context of Ghana.

A further area warranting attention relates to the right to non-discrimination and equality of small-scale fishers, in light of apparent inequalities in fulfilment of key socio-economic rights for men (fishers) compared to women (processors and traders) in the study. Women reported lower levels of access/attainment in a number of areas, including: (i) participation in social security schemes; (ii) availability of government support in the form of subsidies; (iii) provision of skills upgrading or training to assist in the transition to additional income generating activities; (iv) support to form or join cooperatives to improve income/marketing of produce; (v) completion rates for primary and secondary education; (vi) access to sufficient food; and (vii) access to improved toilet facilities. The CHRAJ is recommended to investigate these issues to understand, in detail, the specific vulnerabilities and areas of discrimination of women in the small-scale fisheries sector, and small-scale fishers as a group, and to inform recommendations for measures to improve their enjoyment of fundamental socio-economic rights.

The information in this report is intended to provide a basis for small-scale fishers, fish workers and their communities, as rights holders, to claim their social and economic rights and to hold the government, as duty bearer, to account for infringements of their rights. There is a role for civil society organisations and the CHRAJ to build capacity and support small-scale fishing communities to claim access to marine resources and secure their livelihoods through the use of human rights standards and monitoring mechanisms²⁰³. As recommended by the Special Rapporteur in a thematic report on the right to food in fisheries, the courts in Ghana should be empowered to adjudicate claims from small-scale fishers whose livelihoods are threatened by measures that infringe on their ability to fish so as to provide sufficient income to ensure an adequate standard of living²⁰⁴.

The findings of this study also provide a basis for Ghana's National Human Rights Institution, the CHRAJ, to work with the Fisheries Commission and Ministry for Fisheries and Aquaculture Development to develop and implement a rights-based approach to fisheries management, which prioritises the needs of vulnerable small-scale fishing communities who make up the majority of fish workers in the country yet are often marginalised in decisions concerning their livelihoods. Indeed, the legal basis for protecting and promoting small-scale fisheries is enshrined in Ghana's 2002 Fisheries Act (Act 625), including the basis to afford priority to artisanal and semi-industrial fishing in the allocation of fishing licences or quotas²⁰⁵.

Shortcomings in the realisation of fundamental economic, social and cultural rights in small-scale fishing communities is furthermore impeding progress towards the achievement of SDG targets, which is a key policy priority of the government of Ghana. Actions to address human rights shortcomings in these communities can contribute to the fulfilment of SDGs across a range of target areas.

A number of recommendations are provided to the government of Ghana, as duty bearer, to address key human rights concerns identified in this report, and enhance progress towards the achievement of the 2030 Agenda. These recommendations are summarised in **Table 9**, alongside the human rights issues identified in the preceding sections and key provisions of relevant human rights instruments. They cover aspects such as improving access to resources for small-scale fishers; addressing overfishing and ensuring the effective regulation of industrial fishing; improving fisheries governance, with a focus on enhancing transparency and accountability; securing meaningful and effective participation of small-scale fishing communities in management and decision-making; providing support for alternative income generating activities, cooperatives and trade associations, and ensuring access to social security protection and essential services.

In addition to the findings of the present study, the recommendations draw on existing literature on implementation of the SSF Guidelines including, among others, the FAO guide on legislating for sustainable small-scale fisheries²⁰⁶, and findings of a previous assessment of Ghana's fisheries law framework against the provisions of the SSF Guidelines and Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT)²⁰⁷. The latter assessment identified gaps in Ghana's national law framework to fully realise the rights set out in the SSF guidelines, which have their basis in fundamental human rights enshrined in international law²⁰⁸. The planned reform of Ghana's fisheries law framework provides an opportunity to establish a clear and unequivocal legal basis to respect, protect and fulfil the human rights of small-scale fishing communities, enshrining into law the recommendations set out in this study.

The findings indicate that small-scale fishers and fish workers are a vulnerable and marginalised group, calling for special measures to ensure their human rights are respected, protected and fulfilled. Based on the findings, small-scale fishers and fish workers are a group of rights holders that the government of Ghana should be highly concerned about and should prioritise in policymaking.



Artisanal canoes at Gomoa Fetteh landing site in Ghana's Central Region.

Table 9: Recommendations to the government of Ghana to address human rights issues identified in this study, with a focus on decent work and an adequate standard of living

(a) Right to work, to free choice of employment and to just and favourable conditions of work

Issues identified	Relevant human rights obligations	Recommendations to the government of Ghana
Issue 1: Decline in effective income for small-scale fishers and fish workers in Ghana due to IUU fishing and overfishing		
<ul style="list-style-type: none"> Almost 95% of fishers reported a decline in landings during the major fishing season. Around 70% of respondents perceived the state of the fisheries as “much worse” compared to five years prior to the survey. Fisheries declines have resulted in declining incomes which have fallen in many cases below the level of decent remuneration. Around 80-90% of fishers and processors/traders surveyed reported declines in income over the past five years. Vulnerability has been increased by the COVID-19 pandemic, which has resulted in income losses. Fishing expeditions resulting in zero catches are now relatively common. Processors and traders report facing difficulties obtaining sufficient fish to process. Average monthly expenditures exceeded income in many cases, resulting in fishers and fish-workers being unable to cover basic needs. 	<p><u>Human rights instruments:</u> Art. 7 ICESCR Art. 18 UNDROF</p> <p><u>Minimum core obligations:</u> Para. 31 General Comment No. 18 on the Right to Work</p> <p><u>Key SDG Targets</u> Target 2.3 Target 8.5 Target 10.1 Target 12.2 Target 14.2 Target 14.4 Target 14.b Target 14.c</p>	<ol style="list-style-type: none"> Take all appropriate measures to secure and prioritise access of small-scale fishers to fisheries resources in the Ghanaian EEZ. Prioritise implementation of strict controls on the industrial trawl sector and elimination of harmful practices such as saiko. Take immediate and robust enforcement action to end illegal saiko fishing by industrial trawl vessels and ensure trawlers use compliant gear. Reduce capacity and fishing effort within the industrial trawl fleet, taking into account both legal and illegal catches including by-catch. Adopt and implement a management plan based on best available scientific evidence, in accordance with the precautionary principle and ecosystem-approach to fisheries, to address over-capacity across all fleets, leading with the industrial trawl sector. Ensure all offences by industrial trawl vessels are investigated and sanctions applied in accordance with minimum requirements in the law to ensure they have a deterrent effect. During the reform of the 2002 Fisheries Act, ensuring regulations are in place to prohibit the activities of industrial vessels that undermine the sustainable management of fisheries, e.g., saiko. Address illegal and destructive fishing practices by the artisanal fleet.
Issue 2: Increasing competition with large-scale, industrial trawl vessels for access to resources		
<ul style="list-style-type: none"> Competition between small-scale fishers and commercial trawl operators has increased in recent years. Almost 75% of fishers reported that they encounter industrial trawlers more frequently during their fishing expeditions compared to five years ago. Activities of trawlers and saiko operators are having a significant negative impact on small-scale fisher/fish worker livelihoods and their access to fisheries resources. The ratio of small-scale compared to industrial trawl catches has declined to almost equal magnitudes when illegal and unreported (saiko) catches are taken into account. Fishers are now fishing increasingly beyond the IEZ reserved for small-scale vessels as fish stocks decline, resulting in increased interactions with industrial vessels and presenting risks to health and safety. Fishers regularly encounter trawlers in their fishing grounds and suffer damage to their fishing gear. Over 90% of fishers had observed trawlers in their fishing grounds during the preceding 12-month period. Around 70% of fishers had suffered damage to their fishing gear by industrial trawlers. In less than 15% of cases were fishers able to obtain compensation for damage caused. 	<p><u>Human rights instruments:</u> Art. 6 ICESCR Art. 4(2)(h) UNDROF Art. XIX Protocol to ACHPR on the Rights of Women in Africa</p> <p><u>Minimum core obligations:</u> Para. 4 General Comment No. 18 on the Right to Work</p> <p><u>Key relevant SDG targets</u> Target 1.4 Target 5.a Target 10.2 Target 14.b Target 16.6 Target 16.7 Target 16.10</p>	<ol style="list-style-type: none"> Adopt measures to facilitate equitable access and the granting of preferential access to fishery resources for small-scale fishing communities. Extend the IEZ reserved for small-scale fishers to reflect the current fishing patterns of the small-scale fleet²⁰⁹. Ensure the IEZ boundary is clearly defined and can be enforced. Strictly enforce the IEZ reserved for small-scale fishers and ensure all detected incursions by industrial vessels are investigated and sanctioned in accordance with the law. Improve transparency and community participation in decision-making, particularly concerning the allocation of licences to industrial or foreign vessels. Establish a mechanism for the provision of inputs from stakeholders and for such inputs to be taken into consideration in deciding whether or not to grant licences to industrial or foreign vessels. Require all industrial licences to be subjected to parliamentary approval as required for exploitation of any natural resource by the 1992 Constitution²¹⁰. Enshrine in law and fully implement the National Fisheries Co-Management Policy as a basis for meaningful and effective participation of small-scale fishing communities in fisheries management and decision-making and advancing their human rights. Set out mandatory requirements for publication of licence lists, access agreements, vessel details including beneficial ownership and sanctions for IUU fishing to improve transparency and accountability in the sector.

Issue 3: Government failure to eliminate the illegal practice of saiko and address other forms of illegal and unsustainable fishing by industrial trawl vessels

<ul style="list-style-type: none"> • Illegal activities of industrial trawlers and saiko operators are having a significant negative impact on the livelihoods of small-scale fishers and fish workers. • Saiko continues openly at ports such as Elmina. • Fishers report illegal incursions into the IEZ by industrial trawlers and sightings of illegal activities. • Fishers report threats and abuse when trying to approach trawlers fishing illegally within the IEZ. 	<p><u>Human rights instruments:</u> Arts. 6 and 7 ICESCR</p> <p><u>Minimum core obligations</u> Paras. 31 and 32 General Comment No. 18 on the Right to Work</p> <p><u>Key relevant SDG targets</u> Target 14.2 Target 14.4 Target 14.b Target 14.c</p>	<ol style="list-style-type: none"> 1. Ensure all offences by industrial trawl vessels are investigated and sanctions applied in accordance with minimum requirements in the law to ensure they have a deterrent effect. 2. Take immediate and robust enforcement action to end illegal saiko fishing by industrial trawl vessels and ensure trawlers use compliant fishing gear. 3. During the reform of the 2002 Fisheries Act, ensure regulations are in place to prohibit the activities of industrial vessels that undermine the sustainable management of fisheries, e.g., saiko.
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Issue 4: High levels of income insecurity and a lack of social security for small-scale fishers and fish workers

<ul style="list-style-type: none"> • Small-scale fishers and fish workers are highly vulnerable to unemployment and temporary loss of work-related income (due to poor catches, damage to fishing gear, falling prices, closed seasons, etc.). Income insecurity is high. • Reported incomes of fishers and fish workers fall to zero in some of months of the year. • Over 80% of fishers experienced damage to their fishing gear during the preceding 12-month period yet were rarely able to obtain compensation for losses incurred. • Over 93% of respondents obtained at least 90% of their livelihood from fishing, fish processing or trading activities. • Just 6.5% of fishers and 3% of processors and traders had received skills upgrading or training to help transition into additional income generating activities. • Less than 4% of fishers and 2% of processors and traders surveyed were participating in a social security scheme. • Government support in the form of fuel and engine subsidies are not accessible to all fishers when needed. • Very limited government support is available to women working in fish processing and trading activities. 	<p><u>Human rights instruments:</u> Art. 22 UDHR Art. 9 ICESCR Art. 11(1)(e) CEDAW Art. 4(2)(c) and 22 UNDROP</p> <p><u>Minimum core obligations</u> Para. 31, General Comment No. 19 on the Right to Social Security</p> <p><u>Key SDG Targets</u> Target 1.3 Target 1.4 Target 1.5 Target 5.a Target 8.3 Target 10.4</p>	<ol style="list-style-type: none"> 1. Identify and address barriers to accessing social security schemes by small-scale fishing communities. 2. Progressively extend labour protections and social safeguards to small-scale fishers and fish workers in the informal economy, including the national minimum wage, social security, compensation for workplace accidents and mortalities, and retirement benefits. Amend the Labour Act 2003 to include provisions on small-scale fishers and fish workers. 3. Establish non-contributory social security programmes, and/or subsidised pension, life and/or health insurance in fishing communities to provide protection in the event of accident or illness. 4. Support the development of informal social security schemes, such as community-based insurance (e.g., to cover damage to fishing gear). 5. Support development of and access to appropriate financial services at community level, including savings, credit and insurance schemes. 6. Provide support to the development of supplementary or alternative income generating opportunities in fishing communities, including through relevant education and vocational training programmes and financial assistance. 7. Provide support to fishers and fish workers to organise into cooperatives and trade associations at all stages of the value chain to enhance livelihood security, while strengthening existing cooperatives and trade associations. 8. Ensure measures aimed at reducing fishing effort, including closed seasons and capacity reduction, are accompanied by support to small-scale fishers and fish workers in the form of cash transfers or other compensation. 9. Reform the current programme of fisheries subsidies to ensure these are effective in supporting fishers to improve their standard of living and in fulfilling human rights.
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(b) **Right to an adequate standard of living, to the continuous improvement of living conditions and to development**

Issues identified	Relevant human rights obligations	Policy recommendations to the government of Ghana
Issue 5: Living conditions in small-scale fishing communities have worsened in recent years due to declining incomes		
<ul style="list-style-type: none"> • Around 75% of fishers and 65% of processors and traders rated their current living conditions as unsatisfactory. • Over 75% of fishers and 70% of fish processors and traders reported a worsening of their living conditions over the past five years. • Fisheries declines have resulted in incomes falling below the level necessary to provide a decent living, resulting in fishers and fish workers unable to cover basic needs. 	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. 22 ACHPR Art. XIX Protocol to the ACHPR on Rights of Women in Africa</p> <p><u>Key SDG Targets</u> Target 2.3 Target 8.3 Target 8.5 Target 10.1 Target 14.2 Target 14.4 Target 14.b</p>	<ol style="list-style-type: none"> 1. Take all appropriate measures to secure access of small-scale fishing communities to fisheries resources in the Ghanaian EEZ as a basis for food production and a decent living. 2. Implement strict controls on fishing activities and capacity reduction within the industrial trawl sector. 3. Eliminate harmful and destructive fishing practices such as saiko. 4. Ensure the meaningful and effective participation of small-scale fishing communities in the negotiation of industrial fishing licences and foreign access agreements. 5. Promote decent work in small-scale fishing communities to ensure remuneration is sufficient to cover basic needs. 6. Develop, adjust or extend social security systems to small-scale fishing communities, ensuring programmes are accessible, context-appropriate (e.g., informal, community-based or non-contributory schemes) and cover at least essential needs. 7. For further Recommendations, see under Issue 1 and Issue 4 above on access to decent and productive work and a decent living.
Issue 6: Incidences of non-attendance or non-completion of primary education, in some cases due to cost		
<ul style="list-style-type: none"> • A minority of fishing households were unable to send their children to primary school due to costs. • Around 15-20% of school children in the survey had left school prior to completing primary education. • Primary school completion rates were lower for children from processor/trader households compared to fishing households. • Secondary school completion rate was less than 50% for both boys and girls, and around 5% lower for girls. Cost was the main factor preventing fishers from sending children to school. • Secondary school completion rates were lower for children from processor/trader households compared to fishing households. 	<p><u>Human rights instruments:</u> Art. 26 UDHR Art. 13 ICESCR Art. 17 ACHPR</p> <p><u>Key SDG Targets</u> Target 4.1 Target 4.5 Target 4.6</p>	<ol style="list-style-type: none"> 1. Develop targeted programmes and policies to address barriers to access to primary education in small-scale fishing communities. 2. Implement targeted programmes and policies to develop and improve accessibility of secondary education for every child, directed especially at households of fish processors and traders. 3. Provide support to the development of secondary and higher-level education and vocational training programmes in small-scale fishing communities and ensure financial assistance is available for households in need. 4. Conduct further research into the causes of marginalisation/inequality that result in lower attendance or completion rates for girls to inform further interventions.
Issue 7: Food insecurity/lack of access to sufficient food for small-scale fishers, fish workers and their families		
<ul style="list-style-type: none"> • Fisheries and related income declines have had an impact on food availability in fishing communities. • Almost 80% of fishers and 98% of processors and traders reported declines in the availability of fish for consumption over the preceding five-year period. • Over 50% of fishers and almost 60% of processors/traders reported going without access to sufficient food over the preceding 12-month period. 	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD</p> <p><u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health</p> <p><u>Key SDG Targets</u> Target 2.1 Target 2.4 Target 4.1 Target 4.5 Target 4.6 Target 14.b</p>	<ol style="list-style-type: none"> 1. Prioritise implementation of measures to improve sustainable fisheries management and secure access for small-scale fishers and fish workers to fisheries resources and markets. See further the Recommendations under Issue 1 and Issue 2 above. 2. Consider policy options such as food ration support in times of difficulty, e.g., during closed seasons. 3. Develop, adjust or extend social security systems to small-scale fishing communities, ensuring programmes are accessible, context-appropriate (e.g., informal, community-based or non-contributory schemes) and cover at least essential needs. See further Recommendations under Issue 4 above.

Issue 8: Irregular supply of clean drinking water and low rates of access to improved toilet facilities		
<ul style="list-style-type: none"> Drinking water supplies are irregular, resulting in fishing households regularly going without access to sufficient clean water. Almost 70% of fishers and over 40% of processors and traders had gone without access to sufficient clean water during the preceding 12-month period. High levels of deprivation were reported in relation to sanitation facilities. Just one third of fishing households and less than 20% of processor/trader households had access to an improved toilet facility (flush toilet or Kumasi Ventilated Improved Pit, KVIP, latrine). 18% of fishers and 14% of processors/traders reported lacking access to sanitation facilities altogether, using the beach as their main toilet facility. 	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. XV Protocol to the ACHPR on the Rights of Women in Africa</p> <p><u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health</p> <p><u>Key SDG Targets</u> Target 6.1 Target 6.2</p>	<ol style="list-style-type: none"> Ensure clean water and sanitation programmes are effectively reaching small-scale fishing communities and address issues related to marginalisation that may be preventing fishing households from accessing these rights.
Issue 9: Incomplete coverage of fishing communities by the National Health Insurance scheme; instances of individuals from fishing households going without medical treatment due to cost		
<ul style="list-style-type: none"> Incomplete coverage of SSF households by the National Health Insurance (NHI) scheme. Just over 30% of fishers and 60% of processors/traders reported complete coverage of their households under the scheme. Multiple reported instances of individuals going without medical treatment when needed during the preceding 12-month period. Inability to access treatment is most commonly due to cost. 	<p><u>Human rights instruments:</u> Art. 25 UDHR Art. 11 ICESCR Art. 8 DRD Art. 16 ACHPR Art. XIV(2) Protocol to the ACHPR on the Rights of Women in Africa</p> <p><u>Minimum core obligations</u> Para. 43, General Comment No. 14 on the Right to the Highest Attainable Standard of Health</p> <p><u>Key SDG Targets</u> Target 3.8</p>	<ol style="list-style-type: none"> Identify and address barriers to accessing essential health care for small-scale fishing communities Adjust existing or develop context-appropriate health insurance schemes that provide at least essential health care for small-scale fishers, fish workers and their families.

Abbreviations: ACHPR – African Charter on Human and Peoples' Rights; CEDAW – Convention on the Elimination of all Forms of Discrimination Against Women; DRD – Declaration on the Right to Development; ICESCR – International Covenant on Economic, Social and Cultural Rights; UDHR – Universal Declaration of Human Rights; UNDROP – United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas.

Appendix 1: Survey instrument – questionnaire for fishers

Assessing the socio-economic human rights impacts of fish population declines on small-scale fishing communities in Ghana

Questionnaire for fishers

My name is [insert name] and I am a [insert role] with the Environmental Justice Foundation (EJF). EJF is a UK-registered non-profit organization working internationally to protect natural environments and the human rights of people who depend on them.

We are interested in talking to small-scale fishers, traders and processors in Ghana to understand the socio-economic impacts of fish population declines from the perspective of key human rights, such as the right to an adequate standard of living and the right to work. We are aiming to raise awareness of these impacts in order to influence improvements in how Ghana's fisheries are managed. Our main focus is on advocating for stricter regulation of the industrial fishing sector and the protection of rights of access for small-scale fishers to landing and processing sites and fishing grounds.

We will keep any personal information you share with us strictly confidential. We will not share the original data containing your personal information with any external parties. The final published report will not contain any information that would allow for the identification of individual responses.

We are very grateful that you have agreed to answer some questions to assist us in our research. If you are happy, we can begin with the questionnaire. It should take around 45 minutes to complete. For all questions, please be aware that there is an option "Refused to say" if you do not wish to provide this information.

1. General information

1.1. Phone number		
1.2. Role	<input type="checkbox"/> Crew member <input type="checkbox"/> Boatswain	<input type="checkbox"/> Boat owner <input type="checkbox"/> Captain
1.3. Community		
1.4. GPS location		
1.5. Date		
1.6. Time		

2. Fishing activity

2.1. Landing site		
2.2. Canoe length (meters)		
2.3. Types of fishing gear used	<input type="checkbox"/> Drifting gillnet (nifa nifa) <input type="checkbox"/> Bottom set gillnet (tenga) <input type="checkbox"/> Surface gillnet (ali) <input type="checkbox"/> Purse seine (poli, watsa)	<input type="checkbox"/> Purse seine (encircling) <input type="checkbox"/> Hook and line <input type="checkbox"/> Beach seine <input type="checkbox"/> Other (please specify)
2.4. Number of crew		

2.5. Fishing area (maximum nautical miles from shore/metres depth)		
2.6. Length of fishing trip (average)		
2.7. Earnings per fishing trip (average)		
2.8. Expenditure per fishing trip (average)		
2.9. Do you own a canoe and/or fishing gear?	<input type="checkbox"/> Canoe only <input type="checkbox"/> Fishing gear only	<input type="checkbox"/> Both canoe and fishing gear <input type="checkbox"/> Neither
2.10. If you own fishing gear, what is the replacement cost?	GHS	

3. Demographics and household characteristics

3.1. Age	
3.2. Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female	
3.3. Marital status	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Divorced <input type="checkbox"/> Separated	<input type="checkbox"/> Co-habiting <input type="checkbox"/> Widowed <input type="checkbox"/> Other (please specify)
3.4. Polygamous relationship	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.5. Own property or land	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.6. Migrant (i.e. temporary resident in community)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.7. Do you intend to migrate?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.8. Religion	Christian <input type="checkbox"/> Muslim <input type="checkbox"/> Traditional <input type="checkbox"/> Other (please specify)	
3.9. Education level	<input type="checkbox"/> None <input type="checkbox"/> Primary (partial) <input type="checkbox"/> Primary (complete) <input type="checkbox"/> JSS/JHS (partial)	<input type="checkbox"/> JSS/JHS (complete) <input type="checkbox"/> Secondary/SSS/SHS (partial) <input type="checkbox"/> Secondary/SSS/SHS (complete) <input type="checkbox"/> Refused to say
3.10. Age of leaving school (if applicable) <input type="checkbox"/> Refused to say	
3.11. Years fishing <input type="checkbox"/> Refused to say	
3.12. Number of dependents <input type="checkbox"/> Refused to say	
3.13. Size of household (eating from the same pot) <input type="checkbox"/> Refused to say	
3.14. Who is the main provider for the household?	<input type="checkbox"/> Yourself <input type="checkbox"/> Your spouse <input type="checkbox"/> Both provide equally <input type="checkbox"/> Someone else	
3.15. Number of children <input type="checkbox"/> Refused to say	
3.16. Educational status (children) <input type="checkbox"/> Refused to say	

<p>Child 1</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school:</p> <p><input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school:</p> <p><input type="checkbox"/> Below school age</p> <p><input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment:</p> <p><input type="checkbox"/> Primary completed</p> <p><input type="checkbox"/> JSS/JHS completed</p> <p><input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason?</p> <p><input type="checkbox"/> Lack of availability of school places</p> <p><input type="checkbox"/> Distance to nearest school</p> <p><input type="checkbox"/> Cost/too expensive</p> <p><input type="checkbox"/> Child's help required around the house</p> <p><input type="checkbox"/> Child's help required in the fishing or processing business</p> <p><input type="checkbox"/> Child has a disability</p> <p><input type="checkbox"/> Sickness or health of the child</p> <p><input type="checkbox"/> Other (please specify)</p>
<p>Child 2</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school:</p> <p><input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school:</p> <p><input type="checkbox"/> Below school age</p> <p><input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment:</p> <p><input type="checkbox"/> Primary completed</p> <p><input type="checkbox"/> JSS/JHS completed</p> <p><input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason?</p> <p><input type="checkbox"/> Lack of availability of school places</p> <p><input type="checkbox"/> Distance to nearest school</p> <p><input type="checkbox"/> Cost/too expensive</p> <p><input type="checkbox"/> Child's help required around the house</p> <p><input type="checkbox"/> Child's help required in the fishing or processing business</p> <p><input type="checkbox"/> Child has a disability</p> <p><input type="checkbox"/> Sickness or health of the child</p> <p><input type="checkbox"/> Other (please specify)</p>

<p>Child 3</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school:</p> <p><input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school:</p> <p><input type="checkbox"/> Below school age</p> <p><input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment:</p> <p><input type="checkbox"/> Primary completed</p> <p><input type="checkbox"/> JSS/JHS completed</p> <p><input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason?</p> <p><input type="checkbox"/> Lack of availability of school places</p> <p><input type="checkbox"/> Distance to nearest school</p> <p><input type="checkbox"/> Cost/too expensive</p> <p><input type="checkbox"/> Child's help required around the house</p> <p><input type="checkbox"/> Child's help required in the fishing or processing business</p> <p><input type="checkbox"/> Child has a disability</p> <p><input type="checkbox"/> Sickness or health of the child</p> <p><input type="checkbox"/> Other (please specify)</p>
<p>Child 4</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school:</p> <p><input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school:</p> <p><input type="checkbox"/> Below school age</p> <p><input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment:</p> <p><input type="checkbox"/> Primary completed</p> <p><input type="checkbox"/> JSS/JHS completed</p> <p><input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason?</p> <p><input type="checkbox"/> Lack of availability of school places</p> <p><input type="checkbox"/> Distance to nearest school</p> <p><input type="checkbox"/> Cost/too expensive</p> <p><input type="checkbox"/> Child's help required around the house</p> <p><input type="checkbox"/> Child's help required in the fishing or processing business</p> <p><input type="checkbox"/> Child has a disability</p> <p><input type="checkbox"/> Sickness or health of the child</p> <p><input type="checkbox"/> Other (please specify)</p>

<p>Child 5</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>
<p>Child 6</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>

4. Living conditions

4.1. How would you assess your current living conditions (overall standard of living)?						
<input type="checkbox"/> Very bad	<input type="checkbox"/> Bad	<input type="checkbox"/> Neither good nor bad	<input type="checkbox"/> Good	<input type="checkbox"/> Very good	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.2. How would you rate your living conditions (overall standard of living) compared to 12 months ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.3. How would you rate your living conditions (overall standard of living) compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.4. If there has been a change in your living conditions (overall standard of living), what is the main contributing factor?						
<input type="checkbox"/> Change in income/economic situation <input type="checkbox"/> Death of a family member <input type="checkbox"/> Sickness/ill health of you or a family member			<input type="checkbox"/> Other (please specify)..... <input type="checkbox"/> Don't know			
4.5. What type of building material is your living accommodation mainly made of?						
<input type="checkbox"/> Concrete blocks <input type="checkbox"/> Bricks <input type="checkbox"/> Mud <input type="checkbox"/> Wood/timber <input type="checkbox"/> Corrugated iron			<input type="checkbox"/> Tarpaulin/plastic sheeting <input type="checkbox"/> Other (please specify)..... <input type="checkbox"/> Don't know <input type="checkbox"/> Refused			
4.6. How many rooms in your accommodation?						
Please specify:						
4.7. Do you/your family own or rent your living accommodation?						
<input type="checkbox"/> I rent the property <input type="checkbox"/> I own the property <input type="checkbox"/> A family member rents the property <input type="checkbox"/> A family member owns the property			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused			
4.8. If you rent your living accommodation, do you pay rent?						
<input type="checkbox"/> Yes <input type="checkbox"/> No						
4.9. If you pay rent, how much do you pay per month?						
GHS/month:						
4.10. If you do not pay rent, how much would you have paid per month under ordinary circumstances?						
GHS/month:						

4.11. Over the past year, how often, if ever, have you or your household gone without enough food?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.12. Over the past week, how often have you or your household gone without enough food?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.13. Over the past year, how often, if ever, have you or your household gone without enough fuel to cook with?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.14. Over the past week, how often have you or your household gone without enough fuel to cook with?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.15. What is the main source of drinking water for your household?						
<input type="checkbox"/> Inside pipe <input type="checkbox"/> Water vendor (tank or truck) <input type="checkbox"/> Neighbour/private <input type="checkbox"/> Public standpipe <input type="checkbox"/> Sachet or bottled water			<input type="checkbox"/> Borehole <input type="checkbox"/> Well <input type="checkbox"/> Natural sources <input type="checkbox"/> Other, please specify:			
4.16. Over the past year, how often, if ever, have you or your household gone without enough clean water for home use?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.17. Over the past week, how often have you or your household gone without enough clean water for home use?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.18. How much in Ghanaian cedi do you spend each month on drinking water for your household?						
GHS/month:						
4.19. If you have to travel to collect water, how far do you have to travel?						
.....metres						
4.20. What toilet facilities are available for use by your household?						
<input type="checkbox"/> Flush toilet <input type="checkbox"/> Pit latrine <input type="checkbox"/> Pan/bucket			<input type="checkbox"/> KVIP <input type="checkbox"/> Public <input type="checkbox"/> Beach <input type="checkbox"/> Other - please specify:			
4.21. How much in Ghanaian cedi do you spend each month on sanitation facilities (e.g. garbage collection, toilet fee) for the household?						
GHS/month:						

4.22. What is the source of light for your household (mains grid, generator, etc.)?						
<input type="checkbox"/> Main grid <input type="checkbox"/> Generator <input type="checkbox"/> Solar				<input type="checkbox"/> No access <input type="checkbox"/> Other please specify:		
4.23. If your source of light is from the main grid, how often is light actually available from this connection?						
<input type="checkbox"/> Never	<input type="checkbox"/> Occasionally	<input type="checkbox"/> About half of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Don't know
4.24. Approximately how much do you spend each month on light (power) for the household (in GHS)?						
GHS/month:						

5. Access to health care and medical services

5.1. Are you and your household covered by National Health Insurance?						
<input type="checkbox"/> Only me <input type="checkbox"/> Some members of my household <input type="checkbox"/> All of my household				<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):		
5.2. Have you or a member of your household suffered from illness or injury in the past month?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
5.3. If yes, did you or they consult any of the following?						
<input type="checkbox"/> Doctor <input type="checkbox"/> Nurse/midwife <input type="checkbox"/> Medical assistant <input type="checkbox"/> Pharmacist <input type="checkbox"/> Herbalist <input type="checkbox"/> Faith healer (pastor, spiritualist)				<input type="checkbox"/> Other (please specify): <input type="checkbox"/> Did not consult <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
5.4. Over the past year, have you or anyone in your household suffered from illness or injury and required medical treatment?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
5.5. In such cases, how often, if ever, did the person(s) concerned go without medicines or medical treatment?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
5.6. If you or your family member went without medicines or medical treatment, what was the main reason?						
<input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Unable to obtain appointment <input type="checkbox"/> Medicines not available locally <input type="checkbox"/> Health centre/facility not accessible (e.g. distance)				<input type="checkbox"/> Prefer to self-medicate <input type="checkbox"/> Preferred to visit herbalist or faith healer <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):		

6. Working conditions and livelihood issues

6.1. How do you receive your earnings from fishing?						
<input type="checkbox"/> In cash <input type="checkbox"/> In shares of catch <input type="checkbox"/> In cash and in shares of catch			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
6.2(a). How much, on average, do you earn from fishing per month during the major season (GHS)?						
GHS/month:						
6.2(b). How much, on average, do you earn from fishing per month during the minor season (GHS)?						
GHS/month:						
6.3(a). How much, on average, do you spend on inputs to your fishing business during the major season (GHS)?						
GHS/month:						
6.3(b). How much, on average, do you spend on inputs to your fishing business during the minor season (GHS)?						
GHS/month:						
6.4. How much do you contribute per month to the household income (i.e., upkeep of the house) (GHS)?						
GHS/month:						
6.5. If there are other breadwinners, how much do they contribute per month to the household income (i.e., upkeep of the house) (GHS)?						
GHS/month:						
6.6. How would you assess your income during the major season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.7. How would you assess your income during the minor season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.8. Do you feel that the COVID-19 pandemic has had an impact on your work and income, including catch?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Moderate negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Moderate positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.9. Do you receive government support (e.g., premix, outboard motor) in addition to your income?						
<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused			
6.10. If so, what type of government support do you receive?						
<input type="checkbox"/> Premix fuel <input type="checkbox"/> Outboard motor <input type="checkbox"/> None			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			

6.11. How important is this government support in sustaining your fishing activities?						
<input type="checkbox"/> Very important	<input type="checkbox"/> Moderately important	<input type="checkbox"/> Slightly important	<input type="checkbox"/> Not important	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused	
6.12. Have you encountered any issues when trying to access premix fuel and/or outboard motors?						
<input type="checkbox"/> The processes are too complicated <input type="checkbox"/> The processes are too lengthy <input type="checkbox"/> The support offered is insufficient <input type="checkbox"/> Support is not always available when I need it <input type="checkbox"/> I was refused support <input type="checkbox"/> I do not qualify for support			<input type="checkbox"/> Support is only available to some fishers and not others <input type="checkbox"/> Support isn't available in my community <input type="checkbox"/> I was unable to provide necessary documentation <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
6.13. How many fishing trips do you undertake per month during the major season?						
.....						
6.14. How many fishing trips do you undertake per month during the minor season?						
.....						
6.15. Please specify which months you are <u>not</u> active fishing						
<input type="checkbox"/> January <input type="checkbox"/> February <input type="checkbox"/> March	<input type="checkbox"/> April <input type="checkbox"/> May <input type="checkbox"/> June	<input type="checkbox"/> July <input type="checkbox"/> August <input type="checkbox"/> September	<input type="checkbox"/> October <input type="checkbox"/> November <input type="checkbox"/> December			
6.16. During the last major season, how many days did your canoe record no catch?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Every trip	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.17. During the last minor season, how many days did your canoe record no catch?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Every trip	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.18(a). During the last major season, how often, per month, did you experience difficulties covering the costs of your fishing expedition?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Every trip	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.18(b). When you experienced difficulties covering the costs of your fishing expedition, what was the main reason for this?						
<input type="checkbox"/> Poor catches	<input type="checkbox"/> Bad weather	<input type="checkbox"/> Destroyed fishing gear	<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused to say	
6.19(a). During the last minor season, how often, per month, did you experience difficulties covering the costs of your fishing expedition?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Every trip	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

6.19(b). When you experienced difficulties covering the costs of your fishing expedition, what was the main reason for this?						
<input type="checkbox"/> Poor catches	<input type="checkbox"/> Bad weather	<input type="checkbox"/> Destroyed fishing gear	<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused to say	
6.20. How would you assess your landings during the major season compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.21. How would you assess your landings during the minor season compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.22. How would you assess the state of the fisheries resources compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.23. How would you assess the availability of fish for consumption by your household compared to 5 years ago?						
<input type="checkbox"/> Much less available	<input type="checkbox"/> Less available	<input type="checkbox"/> Same	<input type="checkbox"/> More available	<input type="checkbox"/> Much more available	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.24. How would you assess the prevalence of social vices in your community compared to 5 years ago?						
<input type="checkbox"/> Much more prevalent	<input type="checkbox"/> Slightly more prevalent	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly less prevalent	<input type="checkbox"/> Much less prevalent	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.25. What impact have the activities of industrial (foreign) trawlers had on your livelihood?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Slight negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Slight positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.26. What do you consider to be the impact of saiko activities on your livelihood?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Slight negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Slight positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.27. Have you experienced any negative encounters or conflicts with saiko operators/fishers?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
6.28. How would you assess the relationship between artisanal fishers and saiko operators/fishers?						
<input type="checkbox"/> Very bad	<input type="checkbox"/> Bad	<input type="checkbox"/> Neither good nor bad	<input type="checkbox"/> Good	<input type="checkbox"/> Very good	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

6.29. Are you engaged in any economic (income generating) activity apart from fishing?		
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
6.30. If yes, what other economic activities are you engaged in?		
<input type="checkbox"/> Crop or vegetable farming <input type="checkbox"/> Livestock rearing <input type="checkbox"/> Aquaculture <input type="checkbox"/> Petty trading <input type="checkbox"/> Masonry	<input type="checkbox"/> Carpentry <input type="checkbox"/> Driving (taxi) <input type="checkbox"/> Real estate	<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):
6.31. If you are engaged in an alternative economic activity, how long have you been engaged in this activity?		
..... years		
6.32. If you are engaged in an alternative economic activity, did you receive skill upgrading/training to prepare you for this activity?		
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
6.33. If yes, who provided this training?		
<input type="checkbox"/> Government <input type="checkbox"/> Local/municipal assembly <input type="checkbox"/> NGO/CSO	<input type="checkbox"/> Private company/organization (e.g. Master craftsman) <input type="checkbox"/> School/university <input type="checkbox"/> Other (please specify):	
6.34. How much net income per month do you obtain from activities other than fishing?		
GHS/month:		
6.35. Have you required access to formal financial services, credit or loans over the past 12 months?		
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
6.36. If yes, were you able to access financial services, credit or loans?		
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
6.37. If yes, what type of formal financial service did you use?		
<input type="checkbox"/> National bank <input type="checkbox"/> Community or rural bank <input type="checkbox"/> Non-bank financial institution	<input type="checkbox"/> Microfinance company/institution <input type="checkbox"/> Other (please specify):	
6.38. If no, why were you unable to access these services?		
<input type="checkbox"/> Interest rates too high <input type="checkbox"/> Application rejected by financial institution <input type="checkbox"/> Lack of knowledge of how to access <input type="checkbox"/> No services available within community	<input type="checkbox"/> Lacked necessary supporting documentation <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):	
6.39. Are you a member of, or have you ever used the services of, an informal lender, saving or loan association?		
<input type="checkbox"/> Susu group <input type="checkbox"/> Village Savings and Loan Association (VSLA) <input type="checkbox"/> Community money lender	<input type="checkbox"/> None <input type="checkbox"/> Other (please specify):	

6.40. Do you make regular contributions to a local savings or loan association (Susu group, VSLA, etc.)?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.41. If yes, how much are your contributions per month?	
GHS.....	
6.42. If you have made contributions, how much has been paid to you from the association over the past 12 months?	
GHS.....	
6.43. Have you joined an organisation, cooperative or other association for the protection of your fishing business interests and/or to facilitate marketing of your produce?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.44. If yes, what type of organisation, cooperative or other association did you join?	
<input type="checkbox"/> Fishing cooperative <input type="checkbox"/> Trade association <input type="checkbox"/> Trade union	<input type="checkbox"/> None <input type="checkbox"/> Refused to say <input type="checkbox"/> Other (please specify)
6.45. If so, did you receive support to organise into a cooperative or other trade association for your fishing business?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.46. If yes, who provided this support?	
<input type="checkbox"/> Government <input type="checkbox"/> Local/municipal assembly <input type="checkbox"/> NGO/CSO	<input type="checkbox"/> Private company/organization <input type="checkbox"/> School/university <input type="checkbox"/> Other (please specify):
6.47. Are you currently participating in a social security scheme?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	

7. **Tenure rights**

7.1. Over the past year, how often have you experienced damage to your canoe or fishing gear at sea?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input checked="" type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
7.2. What has been the cause of the damage to your canoe or fishing gear at sea?						
<input type="checkbox"/> Industrial trawler <input type="checkbox"/> Tuna fishing vessel <input type="checkbox"/> Semi-industrial (inshore) fishing vessel <input type="checkbox"/> Oil tanker			<input type="checkbox"/> Cargo/container ship <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			

7.3. How often have you been able to receive compensation for damaged fishing gear?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
7.4. If yes, did the compensation cover all or part of the cost of the damaged fishing gear?						
<input type="checkbox"/> All <input type="checkbox"/> Part			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused			
7.5. If relevant, why were you unable to receive compensation?						
<input type="checkbox"/> Lack of knowledge of process for dispute resolution <input type="checkbox"/> Wasn't aware of who to report to/how to report <input type="checkbox"/> Unable to provide evidence in support of claim <input type="checkbox"/> Non-compliant fishing gear (e.g. monofilament net)			<input type="checkbox"/> Offending vessel refused to pay <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
7.6. Over the past year, how often have you encountered industrial trawlers in your fishing grounds?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
7.7. Over the past year, how often have you sighted industrial trawlers engaging in illegal fishing?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
7.8. Over the past year, what illegal fishing practices have you observed industrial trawlers engaging in?						
<input type="checkbox"/> Saiko (trans-shipment) <input type="checkbox"/> Dumping/discarding <input type="checkbox"/> Catching small pelagics <input type="checkbox"/> Entering prohibited zone			<input type="checkbox"/> None <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
7.9. Compared to 5 years ago, do you encounter industrial trawlers more or less frequently at sea?						
<input type="checkbox"/> Much less frequently	<input type="checkbox"/> Slightly less frequently	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly more frequently	<input type="checkbox"/> More frequently	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

Thank you for your participation

Appendix 2: Survey instrument – questionnaire for fish processors and traders

Assessing the socio-economic human rights impacts of fish population declines on small-scale fishing communities in Ghana

Questionnaire for fish processors and traders

My name is [insert name] and I am a [insert role] with the Environmental Justice Foundation (EJF). EJF is a UK-registered non-profit organization working internationally to protect natural environments and the human rights of people who depend on them.

We are interested in talking to small-scale fishers, traders and processors in Ghana to understand the socio-economic impacts of fish population declines from the perspective of key human rights, such as the right to an adequate standard of living and the right to work. We are aiming to raise awareness of these impacts in order to influence improvements in how Ghana's fisheries are managed. Our main focus is on advocating for stricter regulation of the industrial fishing sector and the protection of rights of access for small-scale fishers to landing and processing sites and fishing grounds.

We will keep any personal information you share with us strictly confidential. We will not share the original data containing your personal information with any external parties. The final published report will not contain any information that would allow for the identification of individual responses.

We are very grateful that you have agreed to answer some questions to assist us in our research. If you are happy, we can begin with the questionnaire. It should take around 45 minutes to complete. For all questions, please be aware that there is an option "Refused to say" if you do not wish to provide this information.

1. General information

1.1. Phone number	
1.2. Community	
1.3. GPS location	
1.4. Date	
1.5. Time	

2. Fish processing activities

2.1. Have you ever financed a fishing expedition?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.1(a) If yes, how much within the last major season?		
GHS		
2.1(b) If yes, how much within the last minor season?		
GHS		
2.2. Do you own a canoe and/or fishing gear?	<input type="checkbox"/> Canoe only <input type="checkbox"/> Fishing gear only	<input type="checkbox"/> Both canoe and fishing gear <input type="checkbox"/> Neither

2.3. If you own fishing gear, what type is it?	<input type="checkbox"/> Drifting gillnet (nifa nifa) <input type="checkbox"/> Bottom set gillnet (tenga) <input type="checkbox"/> Surface gillnet (ali) <input type="checkbox"/> Purse seine (poli, watsa)	<input type="checkbox"/> Purse seine (encircling) <input type="checkbox"/> Hook and line <input type="checkbox"/> Beach seine <input type="checkbox"/> Other (please specify)
2.4. If you own fishing gear, what is the replacement cost?	GHS	
2.5. Do you sell fresh fish or do you process it?	<input type="checkbox"/> Sell fresh fish <input type="checkbox"/> Sell processed	<input type="checkbox"/> Both <input type="checkbox"/> Other (please specify)
2.6. If processed, what type of processing do you mainly engage in?	<input type="checkbox"/> Smoking <input type="checkbox"/> Drying <input type="checkbox"/> Salting <input type="checkbox"/> Frying	<input type="checkbox"/> Shito production <input type="checkbox"/> Other (please specify)
2.7. If you smoke fish, what type of oven do you mainly use?	<input type="checkbox"/> Chorkor <input type="checkbox"/> Ahotor <input type="checkbox"/> Other (please specify)	
2.8. Do you own any of the following processing equipment/facilities?	<input type="checkbox"/> Oven <input type="checkbox"/> Drying rack <input type="checkbox"/> Ice box	<input type="checkbox"/> Freezer <input type="checkbox"/> Other (please specify)

3. Demographics and household characteristics

3.1. Age	
3.2. Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female	
3.3. Marital status	<input type="checkbox"/> Single <input type="checkbox"/> Married <input type="checkbox"/> Divorced <input type="checkbox"/> Separated	<input type="checkbox"/> Co-habiting <input type="checkbox"/> Widowed <input type="checkbox"/> Other (please specify)
3.4. Polygamous relationship	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.5. Do you own property or land?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.6. Migrant (i.e., temporary resident in community)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.7. Do you intend to migrate?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused to say	
3.8. What is your religion?	<input type="checkbox"/> Christian <input type="checkbox"/> Muslim <input type="checkbox"/> Traditional <input type="checkbox"/> Other (please specify)	
3.9. What is your level of education?	<input type="checkbox"/> None <input type="checkbox"/> Primary (partial) <input type="checkbox"/> Primary (complete) <input type="checkbox"/> JSS/JHS (partial)	<input type="checkbox"/> JSS/JHS (complete) <input type="checkbox"/> Secondary/SSS/SHS (partial) <input type="checkbox"/> Secondary/SSS/SHS (complete)
3.10. How old were you when you left school?	

3.11. For how many years have you been involved in fish processing/trading?
3.12. How many dependents do you have?
3.13. What is the size of your household (persons eating from the same pot)?
3.14. Who is the main provider for the household?	<input type="checkbox"/> Yourself <input type="checkbox"/> Your spouse <input type="checkbox"/> Both provide equally <input type="checkbox"/> Someone else
3.15. How many children do you have?
3.16. Educational status (children)	
<div>Child 1</div>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attended school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>

<p>Child 2</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>
<p>Child 3</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>

<p>Child 4</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>
<p>Child 5</p>	<p>Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS</p> <p>Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left</p> <p>If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed</p> <p>Age of leaving school:</p> <p>If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)</p>

Child 6	Age: Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female Currently attending school: <input type="checkbox"/> Primary <input type="checkbox"/> JSS/JHS <input type="checkbox"/> Secondary/SSS/SHS Not currently attending school: <input type="checkbox"/> Below school age <input type="checkbox"/> Previously attending school but have since left If no longer attending school, please specify the level of attainment: <input type="checkbox"/> Primary completed <input type="checkbox"/> JSS/JHS completed <input type="checkbox"/> Secondary/SSS/SHS completed Age of leaving school: If the child is of school age and has never or is no longer attending school, what is the main reason? <input type="checkbox"/> Lack of availability of school places <input type="checkbox"/> Distance to nearest school <input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Child's help required around the house <input type="checkbox"/> Child's help required in the fishing or processing business <input type="checkbox"/> Child has a disability <input type="checkbox"/> Sickness or health of the child <input type="checkbox"/> Other (please specify)

4. Living conditions

4.1. How would you assess your current living conditions (overall standard of living)?						
<input type="checkbox"/> Very bad	<input type="checkbox"/> Bad	<input type="checkbox"/> Neither good nor bad	<input type="checkbox"/> Good	<input type="checkbox"/> Very good	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.2. How would you rate your living conditions (overall standard of living) compared to 12 months ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.3. How would you rate your living conditions (overall standard of living) compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.4. If there has been a change in your living conditions (overall standard of living), what is the main contributing factor?						
<input type="checkbox"/> Change in income/economic situation <input type="checkbox"/> Death of a family member <input type="checkbox"/> Sickness/ill health of you or a family member				<input type="checkbox"/> Other (please specify)..... <input type="checkbox"/> Don't know		

4.5. What type of building material is your living accommodation made of?						
<input type="checkbox"/> Concrete blocks <input type="checkbox"/> Bricks <input type="checkbox"/> Mud <input type="checkbox"/> Wood/timber <input type="checkbox"/> Corrugated iron				<input type="checkbox"/> Tarpaulin/plastic sheeting <input type="checkbox"/> Other (please specify)..... <input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
4.6. How many rooms are in your accommodation?						
Please specify:						
4.7. Do you/your family own or rent your living accommodation?						
<input type="checkbox"/> I rent the property <input type="checkbox"/> I own the property <input type="checkbox"/> A family member rents the property <input type="checkbox"/> A family member owns the property				<input type="checkbox"/> Don't know <input type="checkbox"/> Refused		
4.8. If you rent your living accommodation, do you pay rent?						
<input type="checkbox"/> Yes <input type="checkbox"/> No						
4.9. If you pay rent, how much do you pay per month?						
GHS/month:						
4.10. If you do not pay rent, how much would you have paid under ordinary circumstances?						
GHS/month:						
4.11. Over the past year, how often, if ever, have you or your household gone without enough food?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.12. Over the past week, how often have you or your household gone without enough food?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.13. Over the past year, how often, if ever, have you or your household gone without enough fuel to cook with?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.14. Over the past week, how often have you or your household gone without enough fuel to cook with?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.15. What is the main source of drinking water for your household?						
<input type="checkbox"/> Inside pipe <input type="checkbox"/> Water vendor (tank or truck) <input type="checkbox"/> Neighbour/private <input type="checkbox"/> Public standpipe <input type="checkbox"/> Sachet or bottled water				<input type="checkbox"/> Borehole <input type="checkbox"/> Well <input type="checkbox"/> Natural sources <input type="checkbox"/> Other, please specify:		
4.16. Over the past year, how often, if ever, have you or your household gone without enough clean water for home use?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

4.17. Over the past week, how often have you or your household gone without enough clean water for home use?						
<input type="checkbox"/> Never	<input type="checkbox"/> 1-2 times	<input type="checkbox"/> 3-4 times	<input type="checkbox"/> 5-6 times	<input type="checkbox"/> 7 or more times	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
4.18. How much in Ghanaian cedi do you spend each month on drinking water for your household?						
GHS/month:						
4.19. If you have to travel to collect water, how far do you have to travel?						
.....metres						
4.20. What toilet facilities are available for use by your household?						
<input type="checkbox"/> Flush toilet <input type="checkbox"/> Pit latrine <input type="checkbox"/> Pan/bucket			<input type="checkbox"/> KVIP <input type="checkbox"/> Public <input type="checkbox"/> Beach <input type="checkbox"/> Other - please specify:			
4.21. How much in Ghanaian cedi do you spend each month on sanitation facilities (e.g. garbage collection, toilet fee) for the household?						
GHS/month:						
4.22. What is the source of light for your household (mains grid, generator, etc.)?						
<input type="checkbox"/> Main grid <input type="checkbox"/> Generator <input type="checkbox"/> Solar			<input type="checkbox"/> No access <input type="checkbox"/> Other please specify:			
4.23. If your source of light is from the main grid, how often is light actually available from this connection?						
<input type="checkbox"/> Never	<input type="checkbox"/> Occasionally	<input type="checkbox"/> About half of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Don't know
4.24. Approximately how much do you spend each month on light (power) for the household (in GHS)?						
GHS/month:						

5. Access to health care and medical services

5.1. Are you and your household covered by National Health Insurance?	
<input type="checkbox"/> Only me <input type="checkbox"/> Some members of my household <input type="checkbox"/> All of my household <input type="checkbox"/> Not covered	<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):
5.2. Have you or a member of your household suffered from illness or injury in the past month?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
5.3. If yes, did you or they consult any of the following?	
<input type="checkbox"/> Doctor <input type="checkbox"/> Nurse/midwife <input type="checkbox"/> Medical assistant <input type="checkbox"/> Pharmacist <input type="checkbox"/> Herbalist <input type="checkbox"/> Faith healer (pastor, spiritualist)	<input type="checkbox"/> Other (please specify): <input type="checkbox"/> Did not consult <input type="checkbox"/> Don't know <input type="checkbox"/> Refused

5.4. Over the past year, have you or anyone in your household suffered from illness or injury and required medical treatment?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
5.5. In such cases, how often, if ever, did the person(s) concerned go without medicines or medical treatment?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice	<input type="checkbox"/> Several times	<input type="checkbox"/> Many times	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
5.6. If you or your family member went without medicines or medical treatment, what was the main reason?						
<input type="checkbox"/> Cost/too expensive <input type="checkbox"/> Unable to obtain appointment <input type="checkbox"/> Medicines not available locally <input type="checkbox"/> Health centre/facility not accessible (e.g. distance)			<input type="checkbox"/> Preferred to self-medicate <input type="checkbox"/> Preferred to visit herbalist or faith healer <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			

6. Working conditions and livelihood issues

6.1(a). During the major season, how much, on average, do you earn from the sale of your fish produce per month (GHS)?						
GHS/month:						
6.1(b). During the minor season, how much, on average, do you earn from the sale of your fish produce per month (GHS)?						
GHS/month:						
6.2(a). During the major season, how much, on average, do you spend on inputs to your fish processing/trading business per month (GHS)?						
GHS/month:						
6.2(b). During the minor season, how much, on average, do you spend on inputs to your fish processing/trading business per month (GHS)?						
GHS/month:						
6.3. How much do you contribute per month to the household income (i.e., upkeep of the house)?						
GHS/month:						
6.4. If there are other breadwinners, how much do they contribute per month to the household income (i.e., upkeep of the house)?						
GHS/month:						
6.5(a). How would you assess your income during the major season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.5(b). How would you assess your income during the minor season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.6. Do you feel that the COVID-19 pandemic has had an impact on your work and income?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Moderate negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Moderate positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

6.7. Do you receive government support in addition to your income?						
<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused			
6.8. If so, what type of government support do you receive?						
<input type="checkbox"/> Fishing equipment <input type="checkbox"/> Processing equipment <input type="checkbox"/> None			<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
6.9. If yes, how important is this government support in sustaining your processing/trading activities?						
<input type="checkbox"/> Very important	<input type="checkbox"/> Moderately important	<input type="checkbox"/> Slightly important	<input type="checkbox"/> Not important	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused	
6.10. Have you encountered any issues when trying to access government support for your business?						
<input type="checkbox"/> The processes are too complicated <input type="checkbox"/> The processes are too lengthy <input type="checkbox"/> The support offered is insufficient <input type="checkbox"/> Support is not always available when I need it <input type="checkbox"/> I was refused support <input type="checkbox"/> I do not qualify for support			<input type="checkbox"/> Support is available to some processors and not others <input type="checkbox"/> Support isn't available in my community <input type="checkbox"/> I was unable to provide necessary documentation <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):			
6.11. How many months per year do you engage in fish processing or trading?						
Months:						
6.12. Please specify which months you are <u>not</u> active in fish processing or trading?						
<input type="checkbox"/> January <input type="checkbox"/> February <input type="checkbox"/> March	<input type="checkbox"/> April <input type="checkbox"/> May <input type="checkbox"/> June	<input type="checkbox"/> July <input type="checkbox"/> August <input type="checkbox"/> September	<input type="checkbox"/> October <input type="checkbox"/> November <input type="checkbox"/> December			
6.13(a). During the major season, how often, per month, do you have difficulty obtaining enough fish to purchase/ process?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.13(b). During the minor season, how often, per month, do you have difficulty obtaining enough fish to purchase/ process?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.14(a). How would you assess the catches available for purchase during the major season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.14(b). How would you assess the catches available for purchase during the minor season compared to 5 years ago?						
<input type="checkbox"/> Much lower	<input type="checkbox"/> Slightly lower	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly higher	<input type="checkbox"/> Much higher	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.15. How would you assess the <u>state of the fisheries resources</u> compared to 5 years ago?						
<input type="checkbox"/> Much worse	<input type="checkbox"/> Slightly worse	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly better	<input type="checkbox"/> Much better	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused

6.16. How would you assess the <u>availability of fish for consumption</u> compared to 5 years ago?						
<input type="checkbox"/> Much less available	<input type="checkbox"/> Less available	<input type="checkbox"/> Same	<input type="checkbox"/> More available	<input type="checkbox"/> Much more available	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.17. How would you assess the <u>prevalence of social vices</u> in your community compared to 5 years ago?						
<input type="checkbox"/> Much more prevalent	<input type="checkbox"/> Slightly more prevalent	<input type="checkbox"/> Same/no change	<input type="checkbox"/> Slightly less prevalent	<input type="checkbox"/> Much less prevalent	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.18. What impact have the activities of industrial (foreign) trawlers had on your livelihood?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Slight negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Slight positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.19. What do you consider to be the impact of saiko activities on your livelihood?						
<input type="checkbox"/> Significant negative impact	<input type="checkbox"/> Slight negative impact	<input type="checkbox"/> No impact	<input type="checkbox"/> Slight positive impact	<input type="checkbox"/> Significant positive impact	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.20. Have you ever purchased saiko fish?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
6.21(a). If you have purchased saiko fish, how often did you purchase it during the last major season?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.21(b). If you have purchased saiko fish, how often did you purchase it during the last minor season?						
<input type="checkbox"/> Never	<input type="checkbox"/> Once or twice per month	<input type="checkbox"/> Several times per month	<input type="checkbox"/> Many times per month	<input type="checkbox"/> Always	<input type="checkbox"/> Don't know	<input type="checkbox"/> Refused
6.22. If you have purchased saiko fish, why did you purchase it?						
<input type="checkbox"/> Lack of fresh fish on the market <input type="checkbox"/> Intimidation/coercion by saiko traders <input type="checkbox"/> Cheaper than fresh fish <input type="checkbox"/> Better quality than fresh fish <input type="checkbox"/> Regularity of supply <input type="checkbox"/> Other (please specify)						
6.23. Are you engaged in any economic (income generating) activity apart from fishing?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						
6.24. If yes, what other economic activities are you engaged in?						
<input type="checkbox"/> Crop or vegetable farming <input type="checkbox"/> Livestock rearing <input type="checkbox"/> Aquaculture <input type="checkbox"/> Petty trading		<input type="checkbox"/> Real estate <input type="checkbox"/> Baking <input type="checkbox"/> Seamstress		<input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):		
6.25. If you are engaged in an alternative economic activity, how long have you been engaged in this activity?						
..... years						
6.26. If you are engaged in an alternative economic activity, did you receive skill upgrading/training to prepare you for this activity?						
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused						

6.27. If yes, who provided this training?	
<input type="checkbox"/> Government <input type="checkbox"/> Local/municipal assembly <input type="checkbox"/> NGO/CSO	<input type="checkbox"/> Private company/organization (e.g. Master craftsman) <input type="checkbox"/> School/university <input type="checkbox"/> Other (please specify):
6.28. How much net income per month do you obtain from activities other than fish processing/trading (GHS)?	
GHS/month:	
6.29. Have you required access to formal financial services, credit or loans over the past 12 months?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.30. If yes, were you able to access formal financial services, credit or loans?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.31. If yes, what type of formal financial service did you use?	
<input type="checkbox"/> National bank <input type="checkbox"/> Community or rural bank <input type="checkbox"/> Non-bank financial institution	<input type="checkbox"/> Microfinance company/institution <input type="checkbox"/> Other (please specify):
6.32. If no, why were you unable to access these services?	
<input type="checkbox"/> Interest rates too high <input type="checkbox"/> Application rejected by financial institution <input type="checkbox"/> Lack of knowledge of how to access <input type="checkbox"/> No services available within community	<input type="checkbox"/> Lacked necessary supporting documentation <input type="checkbox"/> Don't know <input type="checkbox"/> Refused <input type="checkbox"/> Other (please specify):
6.33. Are you a member of, or have you ever used the services of, an informal lender, saving or loan association?	
<input type="checkbox"/> Susu group <input type="checkbox"/> Village Savings and Loan Association (VSLA) <input type="checkbox"/> Community money lender	<input type="checkbox"/> None <input type="checkbox"/> Other (please specify):
6.34. Do you make regular contributions to a local savings or loan association (Susu group, VSLA, etc.)?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.35. If yes, how much are your contributions per month?	
GHS.....	
6.36. If you have made contributions, how much has been paid to you from the association over the past 12 months?	
GHS.....	
6.37. Have you joined an organisation, cooperative or other association for the protection of your fish trading/ processing business interests and/or to facilitate marketing of your produce?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Refused	
6.38. If yes, what type of organisation, cooperative or other association did you join?	
<input type="checkbox"/> Cooperative <input type="checkbox"/> Fish processors and traders association <input type="checkbox"/> Trade union	<input type="checkbox"/> Don't know <input type="checkbox"/> None <input type="checkbox"/> Other (please specify):
6.39. If so, did you receive support to organise into a cooperative or other marketing mechanism/association?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	
6.40. If yes, who provided this support?	
<input type="checkbox"/> Government <input type="checkbox"/> Local/municipal assembly <input type="checkbox"/> NGO/CSO	<input type="checkbox"/> Private company/organization <input type="checkbox"/> School/university <input type="checkbox"/> Other (please specify):
6.41. Are you currently participating in a social security scheme?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Refused	

Thank you for your participation!

Appendix 3: Alleged incursions by industrial trawlers into the Ghanaian IEZ (2017-2021)²¹¹

Year	Vessel	Status	Date of occurrence	Source	Outcome
2021	LONG XIANG 609	Suspected	1-2.5.21	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2021	JIN HAI 606	Suspected	6.3.21	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2021	LU RONG YUAN YU 916	Suspected	6-7.3.21	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2021	LONG XIANG 609	Suspected	24.11.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2021	LONG XIANG 602	Suspected	22-24.11.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2021	JIN HAI 605	Suspected	2-9.11.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LU RONG YUAN YU 930	Suspected	30.8.20-3.9.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LU RONG YUAN YU 917	Suspected	31.8.20-2.9.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LONG XIANG 606	Suspected	1-8.8.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LONG XIANG 606	Suspected	11-17.7.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	JIN HAI 605	Suspected	28-31.5.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	MENG XIN 14	Suspected	9-23.4.20 and 14-15.7.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LONG XIANG 606	Suspected	April-July 2020	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	LONG XIANG 606	Suspected	24-26.3.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2020	YUN HAI 607	Suspected	7.1.20	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2019	D-HANDS 2	Suspected	12.12.19	Fisher <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2019	BOHYE	Suspected	12.12.19	Fisher <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2019	TWIN PORT CITY 103	Suspected	12.12.19	Fisher <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2019	YUN HAI 607	Suspected	18-20 and 26-27.06.19	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2019	TWIN PORT CITY 103	Suspected	14.03.19	Fisher/EJF <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2019	TWIN PORT CITY 104	Suspected	14.03.19	Fisher/EJF <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2019	SOMBO	Suspected	14.03.19	Fisher/EJF <i>in situ</i> report	Reported to Fisheries Commission. Outcome not reported.
2018	LU RONG YUAN YU 920	Suspected	08.06.18	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2018	LONG XIANG 606	Suspected	14.12.18	AIS (EJF)	Reported to Fisheries Commission. Outcome not reported.
2017	LONG XIANG 606	Confirmed	11.2017	AIS (EJF)	Reported to FC. Warning issued to operator.
2017	LU RONG YUAN YU 967	Confirmed	4-6.6.17	Fisheries Commission	Fine of GH¢ 48,000 imposed. GH¢ 6,000 paid by operator.
2017	LU RONG YUAN YU 920	Confirmed	4-6.6.17	Fisheries Commission	Fine of GH¢ 48,000 imposed. GH¢ 6,000 paid by operator.

Appendix 4: Summary of findings of VGGT/SSF legal assessment

In 2019, EJF, in collaboration with lawyers from the Taylor Crabbe Initiative (TCi)²¹², undertook an assessment of Ghana's current fisheries law framework and related legislation for alignment with the principles of the VGGT and SSF Guidelines. The aim of the legal assessment was to identify the most appropriate means by which key principles of the VGGT and SSF Guidelines could be implemented in Ghana's law and policy framework, and provide concrete recommendations that may be considered in the process to amend the 2002 Fisheries Act. The assessment benchmarks the current fisheries law framework and related legislation against key elements of the VGGT and SSF Guidelines, under the following headings:

1. Recognition and respect for tenure right-holders and their rights
2. Safeguarding of legitimate tenure rights against threats and infringements
3. Sustainable development and tenure right-holders
4. Social development, employment and decent work
5. Gender equality
6. Natural disaster risks and climate change
7. Policy coherence, institutional coordination and collaboration
8. Access to justice

In March 2019, a meeting was convened involving stakeholders in the SSF sector, as well as representatives from government, academia, civil society organisations, and development partners, to review the main findings of the legal assessment and agree on the recommendations. The recommendations were then translated into amendments to the current legal framework by the lawyers at TCi, for submission to the Ministry for consideration in the drafting of the future fisheries Act and implementing Regulations.

The key recommendations arising from the legal assessment, as agreed during the consultation meeting, are set out below²¹³. The recommendations are grouped into ten broad categories for ease of reference.

1. Inshore Exclusion Zone (IEZ)

- a) Clarify and extend in law the boundary of the Inshore Exclusion Zone (IEZ) reserved for artisanal fishers to reflect the current pattern of fishing activities by the artisanal and semi-industrial fleets²¹⁴.
- b) Clarify that foreign fishing vessels and industrial fishing vessels may not be used for fishing inside the IEZ.
- c) Limit the discretion of the Fisheries Commission to authorize semi-industrial vessels to enter the IEZ and clarify the specific activities that may be authorized.
- d) Require the Commission to publish all authorisations granted to carry out fishing activities within the IEZ stating the period of the authorization and permissible activities.

2. Canoe registration/licensing

- a) Clarify the requirements/procedure for the registration and, if relevant, the licensing of artisanal canoes, including the grounds for approving or refusing registration/a licence and provision for reviewing decisions and appeals.
- b) Clarify and ensure consistency between the respective roles of the Fisheries Commission and the District Assemblies in the registration and licensing process, promoting a collaborative approach.
- c) Provide for the establishment of a publicly accessible registry of all artisanal vessels, containing the particulars of the vessel and applicant, and period of validity of registration.

3. Landing sites for artisanal fishing

- a) Develop mechanisms to facilitate the granting of preferential access for small-scale fishers to landing sites and land on which on-shore fish processing facilities are situated.
- b) Provide for District Assemblies, in conjunction with fishing communities, to designate areas as public landing sites for exclusive use by small-scale fishers, processors and traders.

4. Fisheries co-management and development of fishery plans

- a) Require the Fisheries Commission to develop a fishery plan, which specifies conservation measures to protect the resources from over-exploitation, including through measures to address over-capacity across all fishing fleets.
- b) Provide a clear procedure for the review and revision of fishery plans developed by the Commission.
- c) Provide for the mandatory consultation of potentially affected stakeholders in the development of fishery plans, including associations representing the interests of small-scale fishers, processors and traders.
- d) Require that the preparation of fishery plans be based on the guiding principles of equitable access and redistributive reform, and that fisheries are managed according to the precautionary principle, as well as ecosystem and integrated coastal zone management approaches.
- e) Provide a mandate to the Minister to make regulations for the establishment of co-management arrangements.

5. Participation and transparency

- a) Amend the composition of the Fisheries Commission board to specifically include representatives of civil society organisations working on fisheries, women's associations and small-scale fisher representatives, as nominated by those organisations.
- b) Appoint a multi-stakeholder advisory body to advise on the Commission's performance of its functions, including in respect of the development of fisheries management plans, policies and legislation, conclusion of access agreements and any other decision affecting the livelihoods of small-scale fishers.
- c) Clarify the situations in which the Commission board and multi-stakeholder advisory body must be consulted and where the advice of these bodies is binding.
- d) Specify the procedure for the development of advice by the Commission board/advisory body.
- e) Provide a legal basis for small-scale fishers to contribute to monitoring, control and surveillance (MCS), including reporting on vessels engaged in illegal fishing activities, and an obligation on small-scale fishers to provide data for MCS and catch statistics.
- f) Require the Commission to publish information on enforcement action undertaken by the Fisheries Enforcement Unit (FEU), including in response to reports submitted by the general public.

6. Regulation of industrial fishing

- a) Require the Fisheries Commission to publish or give notice of all applications for fishing licenses submitted by operators of industrial and foreign vessels, and details of all licenses issued.
- b) Establish a mechanism for the provision of inputs from stakeholders and for such inputs to be taken into consideration in deciding whether or not to grant the licence for industrial or foreign vessels.
- c) Require parliamentary approval for the allocation of licenses or fisheries rights to large industrial or foreign vessels.
- d) Ensure regulations are in place to prohibit the activities of industrial vessels that undermine the sustainable management of fisheries (e.g. saiko)



An industrial trawler carrying out a saiko trans-shipment off the coast of Elmina in Ghana's Central Region.

7. Large-scale developments, access agreements and compensation

- a) Provide for the mandatory consultation of potentially affected stakeholders prior to concluding fishing access agreements and other large-scale developments that may affect small-scale fisheries.
- b) Provide an obligation to negotiate compensation for losses of fishing opportunities for those who depend on fishing for their livelihoods, as a result of human interventions.
- c) Specify processes for small-scale fishers to obtain compensation in case activities or development decisions unnecessarily affect their livelihoods.
- d) Clarify the situations for which Fisheries Impact Assessments should be mandatory, including provisions on public hearing, access to information and stakeholder participation in the process.

8. Access to justice and the settlement of disputes

- a) Provide effective and informal dispute settlement mechanisms to ensure that all resource users, in particular small-scale fishery interests, have access to judicial and administrative bodies to resolve disputes.
- b) Establish a specialized magistrate court for fisheries and matters related to small-scale fisheries.
- c) Establish a fund to support small-scale fishers, vulnerable and marginalized people in fisheries to ensure access to justice.
- d) Provide a specific task of the Fisheries Commission to provide capacity development and support access to justice, particularly for small-scale fishers, processors and traders.

9. Gender equality

- a) Require the inclusion of a representative of women's associations (fish processors and traders) in the Fisheries Commission board.
- b) Ensure fisheries legislation is consistent with national gender policies.
- c) Specify that the Fisheries Development Fund be applied to provide technical assistance to women in fisheries, including fish processors and traders.
- d) Require the hearing and participation of women in fisheries potentially affected by development decisions and management plans.
- e) Provide for processes for women in fisheries to obtain compensation where development decisions affect their livelihoods.

10. Climate change

- a) Provide for small-scale fishery stakeholder representatives to be heard and involved in climate change matters affecting fisheries.
- b) Ensure measures related to climate change adaptation support take the needs and interests of small-scale fishers into account.

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- 208 The key findings of the assessment were validated in a meeting with representative associations of small-scale fishers, processors and traders and are summarised in Appendix 4.
- 209 The extension of the IEZ boundary from 6 to 12 nautical miles was discussed in a meeting of Fisheries Commission staff and representatives from academia and civil society organisations that took place in Accra in April 2019. A further consultation was held with the council members of the National Fisheries Association of Ghana (NAFAG) in August 2019.
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- 214 The IEZ is currently defined as the coastal waters between the coastline and the 30-metre isobath or the 6 nautical mile offshore limit, whichever is farther (Schedule referred to in Section 81(1) of the Fisheries Act 2002).



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