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Operation in the Pacific Ocean



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Abstract

Despite increasing pressure to protect the rights of the fishing crew, the ratification of the international Work in Fishing Convention remains low. In light of increasing market demand for social accountability and in the absence of formal governance, fishing companies are looking towards private sector accountability certification. However, doubts have been raised regarding the effectiveness of private certification processes for ensuring the welfare of fishing crew. This paper aims to strengthen academic consideration of social accountability certifications as a tool for improving fishing crew welfare. We have assessed the third-party audit reports of the Papua New Guinea (PNG) Fishing Industry Association (FIA) tuna sector against the Fairness, Integrity, Safety, and Health (FISH) standard. The results showed that non-conformities can be grouped into five themes, with the majority reflecting either a lack of relevant policies and procedures or the lack of communication between employer and crew. Although this paper is based on a case study, essential insights can be drawn for other fishing companies that seek to strengthen their protections for crew welfare. Overall, third-party certifications can make an important contribution to strengthening fishing crew welfare; however, they cannot replace strong governance. Ultimately, broad ratification and implementation of the international convention remain key to protecting the human rights of fishing crew.

Keywords: crew labour; human rights; sustainability; certification

1. Introduction

Fish is one of the most traded commodities globally and is essential for millions of people's food security and livelihoods (FAO, 2024). While the sustainability of fisheries resources continues to be of international concern, over the last decade, increasing attention has been paid to human rights issues within the fishing industry.

The United Nations Convention on the Law of the Sea (UNCLOS) is the main instrument governing human activities in the ocean. UNCLOS places responsibility on flag states (that is, the jurisdiction under which each vessel is registered) with respect to all administrative, technical, and social matters on board a vessel (UNCLOS, 1982, Article 94.1). In particular, flag states are required to assume jurisdiction under their internal law and to take all necessary measures "to ensure safety at sea with regard ... to ... the manning of ships, labour conditions and the training of crews (UNCLOS, 1982, Article 94.3(b)). In so doing, UNCLOS requires flag States to take "into account the applicable international instruments". While seafarers on merchant vessels are protected by the widely ratified International Labour Organisation's (ILO) Maritime Labour Convention (MLC) 2006 (ILO, 2006),¹ crew on fishing vessels are covered by the poorly ratified 2007 ILO Work in Fishing Convention — C188 (hereinafter C188) (ILO, 2007).² Despite the clarity of UNCLOS on this matter, international measures to protect fishing crew welfare are, therefore, weak. Furthermore, many national labour regulations also exclude fishers (Ridings, 2021; Haas et al., 2023).

International pressure to protect the rights of fishing crew is increasing (e.g., Armstrong, 2020). With markets demanding evidence of social accountability and the continuous lack of progress towards ratifying the C188, the fishing industry is increasingly taking matters into its own hands. In addition to the obligations owed by States under international human rights law, the United Nations Human Rights Council's *Guiding Principles on Business and Human Rights* recognise that companies have an inherent responsibility to respect the rights of their workers (Nakamura et al., 2022; Weston & Kelling, 2024). In the absence of effective international and national protections for fishing crew welfare, fishing companies are looking towards private sector social accountability certifications to bridge the gap (Swartz, 2019).

Research into the conduct of social accountability certifications in the context of fishing crew labour is relatively limited (Garcia Lozano et al., 2022). Much of the existing research on fishing crew welfare focuses on specific case studies, such as Indonesia (Irawan, 2024), Fiji (Yea & Stringer, 2023), and New Zealand (Stringer et al., 2015), and is examined primarily through the lens of existing regulations or experiences. Less attention has been given to social accountability certifications (although note the contributions of (Decker Sparks et al., 2022; Nakamura et al., 2022; Lout, 2023). This paper seeks to strengthen academic consideration of social accountability certifications as a tool for improving fishing crew welfare through analysing the findings from third-party audits of the Papua New Guinea (PNG) Fishing Industry Association (FIA) tuna sector against the social accountability certificate Fairness, Integrity, Safety, and Health (FISH) standard (FISH, 2021). More specifically, this paper aims to respond to the question of what lessons can be drawn from the results of third-party audits regarding the potential value of social accountability certification in improving the welfare of fishing crews in transnational fisheries.

¹ As of 15 November 2024, the MLC has been widely ratified with 108 ratifications (ILO, 2024a).

² As of 15 November 2024, the C188 has only 22 ratifications (ILO, 2024b).

This paper does not comment on the effectiveness of the FISH Standard, a topic already covered by scholars (e.g., Decker Sparks et al., 2022). Instead, this study focuses on a positive example of crew welfare due diligence within the fishing industry. Although this paper is based on a case study, we believe the findings will be relevant to many other fishing companies. To our knowledge, this is the first time that findings from social accountability third-party audit reports have been presented in the scholarly literature. Hence, it provides an innovative and important contribution to the ongoing work of protecting the rights of crew on board fishing vessels.

2. Background

Applying a case-study approach, this paper presents the findings of a third-party auditing process for FIA-PNG. This section will provide background information regarding FIA PNG and the audit process.

2.1. Description of FIA PNG fisheries

The Fishing Industry Association (FIA) was founded in Port Moresby, Papua New Guinea (PNG) in 1991 by companies and operators in the tuna industry (i.e., both fishing companies and shore-based processors), prawn operators, bêche-de-mer (sea cucumber) buyers and exporters, as well as associated sector stakeholders such as crew recruitment and placement agencies, fisheries consultancies services, and provincial umbrella artisanal fishing cooperatives (FIA PNG, 2022a). The 15 members³ from the tuna sector are involved in all aspects of the tuna supply chain - fishing, trading, logistics, processing, sales, and marketing. The core business of FIA PNG fishing and processing is selling whole-round frozen tuna, pre-cooked frozen tuna loins, raw packed canned tuna, and pre-cooked canned tuna. FIA PNG processors are mainly foreign investors that also have processing sites in the Philippines and Thailand, enabling them to also sell tuna glass jars and tuna pouches that are produced in the associated tuna canneries overseas.

FIA members control 47 fishing vessels, targeting tuna species (FIA PNG, 2024a), specifically skipjack tuna (*Katsuwonus pelamis*) and yellowfin tuna (*Thunnus albacares*), and using a variety of purse seines fishing strategies including unassociated (free school) sets, sets on anchored fish aggregating devices, and sets on drifting fish aggregating devices (FIA PNG, 2022c). Thirty-nine of these vessels are flagged to the Philippines, with the remaining eight flagged to Taiwan (FIA PNG, 2024a). These vessels operate on PNG's north coast, in its Exclusive Economic Zone and Archipelagic Waters. According to the 2022 FIA PNG annual report, 93% of the landed catch in 2020 was set on unassociated sets (FIA PNG, 2022c).

The FIA PNG tuna fisheries operate within an established fisheries governance framework, including regional advisory and management organisations such as the Pacific Island Forum Fisheries Agency, the Parties to the Nauru Agreement and the Western and Central Pacific Fisheries Commission.

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³ FIA PNG tuna processing and fishing companies: Frabelle PNG Ltd., Majestic Seafood Corporation Ltd, RD Fishing PNG Ltd, RD Tuna Canners Ltd, South Seas Tuna Corporation Ltd, Nambawan Seafood Corporation Ltd, International Food Corporation Ltd, Trans-Pacific Journey TPJ, TSP Marine Industry, Bluecatch fishing, Fair Well Fishery Ltd, Frabelle Fishing Corporation (FIA PNG, 2022b)

2.2. FIA PNG's Responsible Sourcing Policy (RSP)

In 2018, FIA PNG launched its Responsible Sourcing Policy (RSP), which aims, amongst other things, "to support our fishing industries' efforts to ascertain improvement in the sustainability of tuna stocks" (FIA PNG, 2024b). The RSP is implemented jointly with the PNG National Fisheries Authority. Over the years, the RSP has become more robust due to continuous monitoring, auditing, and reporting of the FIA PNG members on an annual basis. However, one of the remaining challenges is maintaining compliance and transparency in reporting. The RSP is built on four pillars: sustainability of PNG marine resources, traceability of PNG seafood, marine litter and fishing gear, and social responsibility and human rights onboard. Each pillar incorporates a variety of verification processes, designed to ensure that the RSP is practical, auditable, based on industry practice, and aligned with market requirements. FIA PNG has shared its approach, results and learning with a broad range of stakeholders, including through attendance at major global tuna events (i.e., 18th Infofish World Tuna Trade Conference and Exhibition).

The four pillars of the FIA PNG RSP will be briefly described below.

2.2.1. Pillar 1: Sustainability of PNG Marine Resources

The first pillar addresses the need to preserve marine resources and safeguard the marine ecosystem for the future (FIA PNG, 2024b). As noted above, the FIA PNG RSP has adopted a number of verification processes, mostly independent third-party certifications, to validate compliance with RSP standards. In 2020, the FIA PNG tuna purse seine fleet achieved the Marine Stewardship Council (MSC) certification for skipjack, yellowfin, and bigeye (FIA PNG, 2024b). Furthermore, the PNG National Fisheries Authority maintains 100% observer coverage onboard fishing vessels, which, alongside the integrated Fisheries Information Management System (iFIMS), ensures that tuna catches are reported almost in real-time and that catch compositions are conveyed correctly to the authorities (FIA PNG, 2022c; FIA PNG, 2024b). In the following years, other fisheries within FIA PNG have obtained or commenced the process for MSC certification. ⁴ Furthermore, pursuant to the RSP, PNG became the first country to share its vessel monitoring system (VMS) with the Global Fishing Watch (GFW) (GFW, 2024). As a result, any stakeholder can access and see where FIA PNG fishing vessels are fishing in real-time.

2.2.2. Pillar 2: Traceability of PNG Seafood

Traceability is closely linked to transparency, and as noted in the previous section, FIA PNG is committed to sharing its data (GFW, 2024). To ensure traceability of seafood, FIA PNG vessels have to comply with the PNG National Fishery Authority's requirements to track, monitor, control, and record fisheries information in the online system iFIMS (FIA PNG, 2024b). iFIMS ensures high and real-time transparency in fishing operations (FIMS, NA). As part of the FIA RSP, vessels are allocated a trip authorization code, used to track the vessel through iFIMS (FIA PNG, 2024b). Furthermore, 100% observer coverage for all purse seiners is mandatory due to the requirements under the Western and Central Pacific Fisheries Commission (WCPFC, 2023). Traceability is also important to maintain the MSC certificate, and vessels have to undergo a chain of custody certification as part of the MSC certificate (FIA PNG, 2024b; MSC 2024). Additionally, FIA PNG obtained membership in the Global Dialogue on

⁴ The FIA PNG lobster fishery obtained the MSC certificate in 2023. The FIA PNG Mud Crab fishery started the assessment end of 2023.

Seafood Traceability (GDST) in 2021 (FIA PNG, 2021). The GDST is a non-profit foundation that aims to ensure the traceability of seafood throughout the supply chain (GDST, 2024a).

2.2.3. Pillar 3: Marine litter and Fishing gear

The third pillar of the RSP aims to mitigate and minimise the negative impact of fishing gear on marine ecosystems. Fish aggregating devices are marked following the guidelines of the FAO on responsible fishing practices for sustainable fisheries and the Global Ghost Gear Initiative (FIA PNG, 2022c). The FIA PNG office auditors conduct annual second-party audits on the tuna fleets. The audits include onsite inspection, staff and crew interviews, and management system reviews (FIA PNG, 2022c; 2024b).

2.2.4. Pillar 4: Social Responsibility and Human Rights onboard

Pillar 4 on social responsibility and human rights onboard is the key pillar of the RSP for this paper. Pillar 4 aims to eliminate any sources of non-compliance against international labour and human rights standards onboard the FIA PNG tuna fleet (FIA PN, 2024c). In 2021, FIA PNG developed a Labour and Human Rights benchmark procedure and Pillar 4 audit tool, and members carried out the first internal audits. The audit tool was developed from the requirements of C-188, the FISH standard, the Responsible Fishing Vessel Scheme (RFVS; i.e., a third-party certification tool; Seafish, 2024), the Captured Fisheries Standard 2.0.0., developed by Fair Trade (Fair Trade Certified, NA), and the FAO Code of Conduct for Responsible Fisheries (FAO, 1995). During the development of the FIA PNG benchmark tool, other procedures were also considered, such as the Pacific Island Forum Fisheries Agency (FFA) crew employment conditions as part of their Minimum Terms and Conditions for access to FFA member's waters (FFA, 2019) and the Geneva Declaration on Human Rights at Sea (HRAS, 2023). The Geneva Declaration was initiated by the organisation Human Rights at Sea and is a non-binding initiative acknowledging that "human rights apply at sea as they do on land" (HRAS, 2023). An international stakeholder technical working group, including representatives from FISHWISE, the Global Tuna Alliance, Conservation International, and Human Rights at Sea, supported and reviewed the Pillar 4 audit tool.

The Pillar 4 verification process includes three steps. First, internal audits are carried out by the fishing companies. Next, the FIA PNG head office conducts second-party audits on the vessels of member companies. Third, since 2022, third-party (external) social accountability audits have been conducted to obtain certification against the FISH standard for crew. After addressing issues identified by the initial third-party audit in 2022, FIA PNG met the requirements to obtain FISH standard crew certification in 2023.

To comply with the internal RSP and the FISH standard, two second-party and one third-party audits are conducted each year (Fig. 1). Second-party audits, in this case, conducted by the FIA PNG office, are a requirement under the FISH standard (FISH, 2021), and are an important tool for internal management and control purposes. These second-party audits allow the FIA PNG office to oversee and monitor progress in the implementation of FISH standard requirements. If non-conformities (NCs) are detected by the second-party audit, internal processes allow them to be addressed in a timely and consistent manner across the fleets. In the case of FIA PNG, these second-party audits are carried out on an annual basis per tuna fleet by FIA PNG qualified auditors and provide comprehensive outcomes to the relevant FIA PNG Group manager.

The number of vessels that need to be audited under the second and third-party audits is determined according to the FISH standard risk analysis (FISH, 2022). A risk value is determined for six different risk factors, and the average value indicates whether the certification holder is at a low or high risk (FISH, 2022). These factors include, for example, ownership arrangements – single owner or multiple owners - with multiple ownership arrangements, such as FIA PNG being assessed as being of high risk. Risk factors also include the findings of internal audits, as well as known risks associated with the region of operation (FISH, 2022). According to this risk analysis framework, FIA PNG is determined to be of low risk. Under the FISH standard, a formula then determines how many vessels need to be sampled, depending upon the fleet size (FISH, 2022; Paragraph 2.3.4.). Based upon this risk assessment framework, the FISH standard would require a sample size of three vessels for both second and third-party audits. However, FIA PNG offices routinely sample six or seven vessels yearly for their second-party audit (Fig. 1), which aligns with the sample size for high-risk certification holders. This approach reflects the general aim of FIA PNG in adopting the FISH standard for crew as part of its RSP, which is to raise the bar in social accountability, crew welfare performance, and transparency in the global tuna industry (FIA PNG, 2022c).

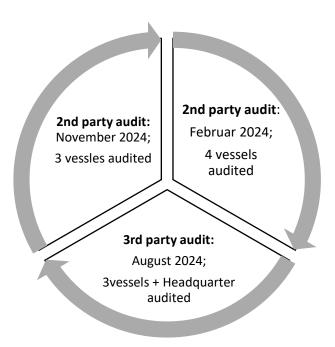


Figure 6: Auditing process within FIA PNG in the year 2024.

3. Method

In this study, we assessed the findings of third-party audits of three fleets and the FIA headquarters (HQ) against the FISH standard for crew. The initial third-party audits were conducted in April 2022 (Table 1). A follow-up audit was conducted in December 2022, assessing the responses to NCs identified in the initial audit. To gain the FISH standard certification in 2023, all NCs needed to be fully addressed.

The 3rd party audits involved a random selection of one or two vessels per fleet during each compliance period. This random approach means that to ensure compliance with the FISH standard, all vessels across the fleet need to maintain a high standard. At the next auditing event, a different vessel will be selected, and depending on their compliance status, the whole fleet might lose their FISH certification.

Table 2. Summary of the number of vessels and dates of the 3rd party audits.

	3 rd party audit			
Fleet	Nr of vessels audited in total	Month of initial audit	Month of follow-up audits	
Fleet 1	2	April 2022	June + October 2022	
Fleet 2	1	April 2022	June + October + December 2022	
Fleet 3	1	April 2022	July 2022	
HQ		April 2022	October, 2022	

The FISH standard consists of four principles - Principle 1. Emphasise Socially Responsible Labour Practices and Ethical Behaviours; Principle 2. Establish Fair Conditions of Service for All Fishers; Principle 3. Ensure the Safety and Health of All Fishers; Principle 4. Provide Decent Accommodations, Water and Food (FISH, NA). Further requirements apply to certification holders with multiple vessels (FISH, NA). Each principle contains a number of criteria that assess different requirements under the respective principle in more detail. The analysed audit reports assessed the vessels' conformity with each criterion under the four principles of the FISH standard. NCs were described and categorised as minor or major NCs.

We first analysed the NCs identified in the initial NCs. To assess which areas received the most NC, we counted each category and sub-category listed by the auditors, as some findings spanned several sub-categories and categories. However, sub-sub-categories (e.g., 2.3.3.a and 2.3.3.b) would be only counted as one. Moving forward, we then analysed the follow-up audits, which described the corrective actions implemented by the fleet owners. Occasionally, NCs identified as minor were upgraded to major in the follow-up audits. In this case, we also updated the NCs in our assessment and counted it as a major instead of a minor.

Following the general assessment of which criterion has received the most NCs, we then analysed the auditors' findings for each criterion in more detail and summarised them across all fleets, including the corrective actions.

4. Results

In total, 58 minor and 58 major NCs were found in the 3rd party audit reports across the three fleets and the HQ. Almost half (25) of the major NCs related to Principle 2 (i.e., establish socially responsible labour practices and ethical behaviours), specifically for criterion 2.1. on Fisher Work Agreement (Figure 2). Both principles 3 (i.e., ensure the safety and health of all fishers) and 4 (i.e., provide decent accommodations, water, and food) had 19 minor NCs, with principle 4 having the lowest number of major NCs (4).

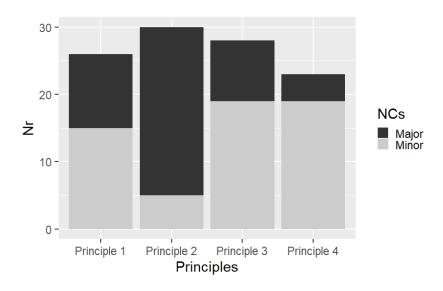


Figure 7: Overview of minor and major NCs across the four principles of the FISH Standard.

Principle 1 requires an organisation to "emphasise socially responsible labour practices and ethical behaviour". Major NCs were found in one fleet across three criteria – no forced labour, fair recruitment and placement of fishers, and provisions for repatriation (Figure 3). The respective fleet received one major NC under the criterion 'no forced labour', as they did not have a written resignation and termination policy regarding forced labour in place. The highest number of NCs were for the 'fair recruitment and placement of fishers' criterion, with most issues linked to the recruitment agency used to hire local (i.e., PNG) crew. Regarding 'provisions for repatriation', the fleet did not have a repatriation policy in place. Such a policy needs to include, for example, the fact that the vessel owner will generally bear the cost of repatriation. The policy also needs to be communicated to employees before departure.

All three fleets had minor NCs across several criteria under Principle 1. Most NCs related to the 'crew list' criterion, mainly because crew lists were incomplete and/or were missing relevant information such as 'crew rating'. Two fleets had minor NCs on the 'no child labour' criterion, the main reason being the lack of specific child labour policies and remediation processes in case a child was accidentally hired.

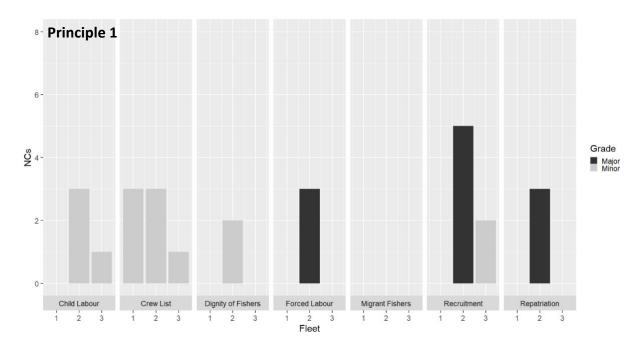


Figure 8. Bar plot presenting major (in black) and minor (in grey) NCs across the three audited fleets and the different criteria of Principle 1 of the FISH standard.

As noted previously, Principle 2, requiring organisations to establish socially responsible labour practices and ethical behaviours, had the highest number of major NCs. Most of the major NCs are related to the criteria concerning employment contracts, freedom of association, and collective bargaining (Figure 4). The main issue regarding criteria 2.1 on contracts was that crew members did not have a signed copy of their contract. Issues regarding the freedom of association and collective bargaining criteria referred to the lack of written policies concerning this topic. Two fleets had major NCs under the criterion 'fair remuneration', addressing issues such as lack of knowledge and details regarding payment and catch bonuses. Only a few minor NCs (i.e., contract, non-discrimination, and social security) were found, while no NCs were found for the criteria 'grievances'.

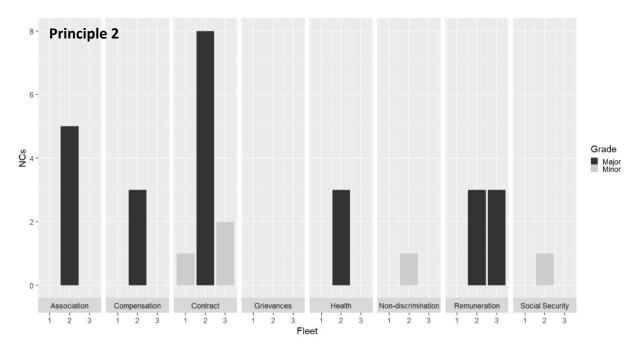


Figure 9. Bar plot presenting major (in black) and minor (in grey) NCs across the three audited fleets and the different criteria of Principle 2 of the FISH standard.

Under Principle 3, only two criteria – fitness standards and medical exams and occupational safety and health contained major NCs (Figure 5). For example, one fleet received a major NC under fitness standards due to the lack of health records of their fishing crew. All fleets had minor NCs for occupational health and safety, and two had major NCs. Issues included, for example, workers not wearing appropriate safety uniforms (i.e., uniform with visibility, hard hat, and safety shoes), injuries and accidents not recorded, or lack of a copy of the World Health Organisation's *International Medical Guide* for ships. Two fleets received minor NCs under the criterion 'medical treatment' due to the inadequate supply of medicines or expired medicines on board.

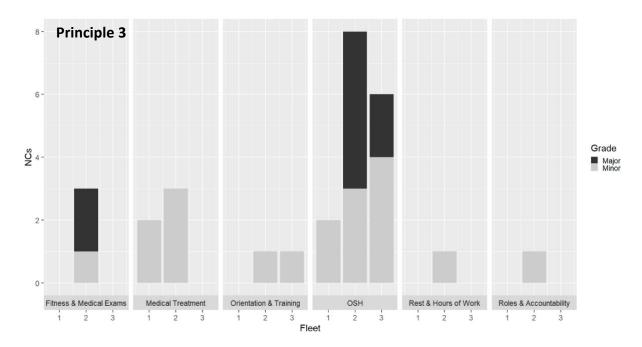


Figure 10. Bar plot presenting major (in black) and minor (in grey) NCs across the three audited fleets and the different criteria of Principle 3 of the FISH standard.

Principle 4 (requiring the provision of decent accommodations, water and food) had the lowest number of major NCs (4) across the four Principles. Most of the major NCs are related to the 'food and potable water' criterion (Figure 6). Findings under this criterion included, for example, the provision of potentially insufficient food supplies or uncertainty regarding the safety of drinking water from a desalination machine due to the lack of tests. Other major NCs were issued because of the lack of emergency lighting in sleeping and common areas. All three fleets had minor NCs under the criterion 'spaces are well maintained' due to the lack of recorded inspections of facilities, insects (e.g., cockroaches, flies) in the sleeping area and mess hall, or lack of a designated area for chemical storage.

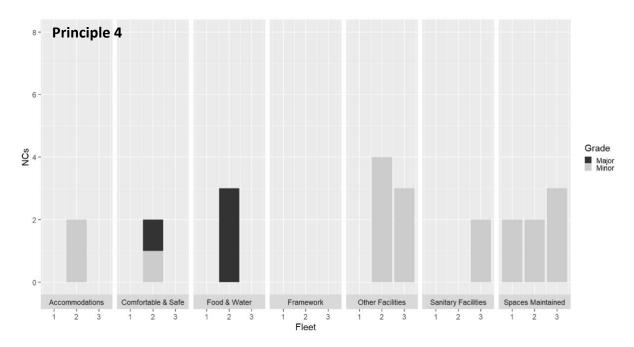


Figure 11. Bar plot presenting major (in black) and minor (in grey) NCs across the three audited fleets and the different criteria of Principle 4 of the FISH standard.

In addition to the three fishing fleets, the FIA PNG headquarters also underwent an audit. Annex 4 contains specific requirements for FISH Standard certificate holders with multiple vessels, such as FIA PNG (FISH, NA). All NCs identified for FIA PNG headquarters were of a major nature (Figure 7). Most NCs are related to the 'internal audits' criterion, including a lack of a programme to conduct internal audits against the FISH Standards. Furthermore, the headquarters did not have written procedures in place for adding or removing member vessels from the unit of certification.

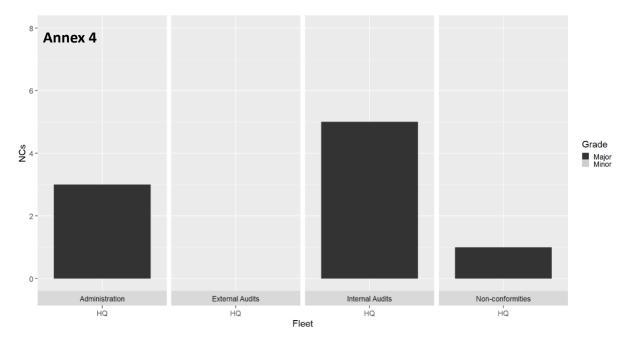


Figure 12. Bar plot presenting major (in black) and minor (in grey) NCs of the headquarters (HQ) and the different criteria of Annex 4 of the FISH standard.

5. Discussion

In the absence of formal governance requirements, companies often use third-party tools such as certifications to address market demands and ensure social accountability (Lout, 2023). While the ability of certification tools to protect the rights of fishers has been questioned (Lout, 2023), we suggest that private certification can be a useful addition to the suite of tools that seek to achieve social accountability in the fishing industry. This research aimed to provide insights into the third-party audit process for FISH standard certification of the FIA PNG tuna fishery, including the most commonly encountered compliance issues and the industry response to findings of non-compliance. The non-compliance findings have been summarised into five themes, described below.

5.1. Lack of policies and procedures

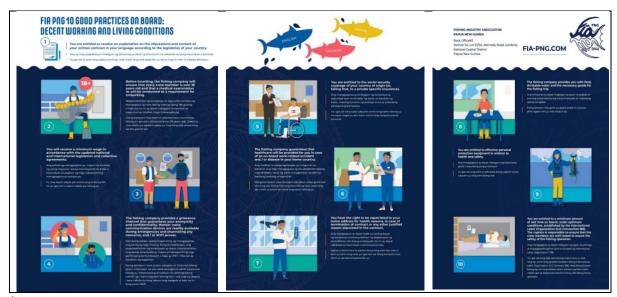
The lack of policies and procedures was a weakness found across all four FISH standard principles. For example, while none of the fleets employed children, two fleets did not have a detailed no-child work policy in place, and nor did they have remediating procedures in case of accidental hiring (Principle 1 – emphasise socially responsible labour practices and ethical behaviours). Under Principle 2 (i.e., establish fair conditions of service for all fishers), one fleet lacked a written policy on non-discrimination. Furthermore, fleets did not have occupational health and safety policies and procedures (Principle 3 – ensure the safety and health of all fishers) or sleeping arrangement policies (Principle 4 – provide decent accommodations, water, and food). Occasionally, fleets had the required policies and regulations in place, but these were not fully enforced. This was verified by the lack of evidence, for example, of training or inspections and the lack of use of incident and accident investigation reports.

Companies addressed these NCs by drafting and enforcing the missing policies or regulations. In the case of weak enforcement, reminders were sent out to the vessels to follow relevant policies, and more inspections were conducted to ensure that the regulations and policies were followed.

5.2. Lack of communication between employer and crew

The audit process revealed that even where fleets had the necessary policies and regulations in place, in some cases, they were not communicated to the crew, who, therefore, remained unaware of their existence. Examples of policies that were not communicated to the crew included the company's regulation fleet operation and code of conduct or the compensation systems. However, the audits revealed that the lack of communication between the employer and crew went beyond company policies. On one fleet, it was found that the crew did not even know their employment status.

To address these identified NCs, pre-departure orientation seminars were implemented, in which crew members were made aware of the relevant policies and regulations. Regarding the concerns of lacking engagement with the crew, companies installed suggestion boxes and their existence was communicated to the crew. These suggestion boxes allow workers to provide anonymous feedback to the company.



stCommunication tool to place onboard to address this non-conformity in a continuous manner

5.3. Contract-related issues

The highest number of NCs were related to contract issues. The availability of contracts or fish worker agreements has often been cited as a concern in the fishing industry (e.g., Nakamura et al., 2022; Decker Sparks et al., 2022).

All the NCs were found under principle 2 (i.e., establish fair conditions of service for all fishers). Across all three fleets, the existing contracts often did not meet the FISH Standard requirements (FISH, 2021). As a response, the companies updated the contracts to include the information needed per FISH Standard in compliance with ILOC 188.

The audit revealed a more significant issue in relation to the hiring of local crew (i.e., from PNG) through a recruitment agency. In two fleets, the local crew did not have copies of their signed employment contracts. Copies were only made available after the company requested them from the recruitment agency. The lack of contracts was connected to other issues, such as uncertainty regarding remuneration.

5.4. Different treatment of local crew

One of the notable findings from the audit process was the different treatment of local PNG crew from the Filipino crew. Across all three fleets, the Filipino crew was hired directly, while in two of the three fleets, the local crew was hired through a recruitment agency. As a result, the local crew, for example, did not have a signed copy of their contract and were unaware of their remuneration. The audit revealed that the local crew were unable to contact the recruitment agency. Furthermore, while the recruitment agency occasionally deducted a fee from the crew's wages, the crew was unsure of the amount, as they only received payslips at the end of the contract. To address this issue, the companies implemented a manpower agency accreditation policy. Additionally, it was noted that one of the companies had started negotiations with a different recruitment agency.

The audit results highlight the need for further work targeting the role of recruitment agencies in improving fishing crew welfare. Addressing governance issues related to recruitment agencies can be difficult, particularly when agencies are based in a third country, leading to jurisdictional complexities (Ridings, 2021). Research to date has often focused on the role of these agencies in criminal activities such as human trafficking or forced labour (e.g., Stringer et al., 2021; Yea et al., 2023) and less on the governance side.

The FIA PNG FISH certification audits also revealed differential treatment in the context of health insurance. The three audited fleets are owned by Filipino companies, and the Filipino crew, therefore, had access to the Filipino health system. However, no such services were provided to the local crew. After receiving this NC, the fishing company underwent negotiations to provide health services in PNG and to local crews.

5.5. Concerns regarding health and safety

According to an FAO report, working on a fishing vessel is one of the most dangerous jobs, resulting in up to 32,000 fatal injuries per year (FAO, 2020). Hence, Principle 3, on ensuring the safety and health of all fishers, is of utmost importance. The audit reports identified numerous instances of minor and major NCs under this principle.

Many NCs noted a lack of regulations and policies, such as not using injury and accident reports, as discussed under the first theme. Other issues included inadequate buoys or the crew not wearing necessary safety equipment. In some cases, the provided safety equipment was too old. The auditors also highlighted the importance of safety training for crew and inspections to ensure that life-saving appliances and firefighting equipment are in good condition. The relevant corrective actions included updating the safety equipment, providing regular safety training, and regular inspections of life-saving appliances and firefighting equipment.

6. Reflections

FIA PNG's implementation of its responsible sourcing policy (RSP), particularly its pursuit of FISH certification concerning fishing crew welfare, has provided a significant learning opportunity. After undertaking the third-party audit process in 2022, FIA PNG addressed all of the identified NCs and obtained FISH certification in 2023. A number of 'lessons learned' can be identified from our analysis of the findings of the 2022 audit reports. While these lessons are based on the particular experience of FIA PNG, and some will reflect the particular circumstances of the FIA PNG fleet, we believe that these findings also contain valuable insights for other fleets who are considering whether or not to undertake social accountability certification.

First, it is essential to have relevant policies and procedures in place across the entire fleet to ensure consistency and to support the rollout of updates and improvements. Adopting uniform policies and procedures ensures that identified issues can be addressed on board every vessel in their fleet.

Second, while it is important to address all the NCs identified in the audit reports, it is critical to understand the origin of the problem to ensure that it does not happen again. This approach is known as 'root cause analysis' (RCA). The International Organisation for Standardisation defines RCA as a technique to systematically identify the source of non-conformance (isoTracker, 2024). An RCA is approached through the repeated posing of 'why' questions (see Box 1), which aim to identify the underlying reasons for an issue or problem (ISO, 2016). Overall, conducting RCAs can empower fishing companies to understand problems at a deeper level, make informed decisions, and create sustainable solutions that address human and labour rights.

Box 1. One of the identified issues under Principle 4 (Provision of decent accommodation, water and food) was that crew members were purchasing their own bottled drinking water.

- 1. WHY are crew members buying drinking water?
 - a. Because water from the desalination machine is unsafe to drink.
- 2. WHY is the water from the desalination machine unsafe to drink?
 - a. Because the desalination machine is not subject to regular maintenance.
- 3. WHY is the desalination machine not subject to regular maintenance?
 - a. Because there is no procedure in place that requires regular maintenance of the desalination machine.
- 4. WHY is there no procedure in place?
 - a. Because the company was not aware that a procedure was required.

Third, it is important to be aware that gaining certification is only the beginning. While it is often difficult to get certified, maintaining the certification is even more challenging. As noted previously, vessels will be randomly selected each year for third-party auditing. Hence, it is important that fishing companies ensure that any identified issues are coherently addressed throughout their fleet and across all vessels. As per Annex 4 of the FISH standard, when NCs are raised, the fleet has 12 months to address these, and if they fail to do so, they shall be suspended for a period of up to six months (FISH, 2021; Annex 4. A4.3).

Finally, echoing what has already been said, FIA PNG has undertaken the FISH standard certification process because of a lack of formal government intervention. Although companies may undertake their own due diligence to protect the rights of the fishing crew (Nakamura et al., 2022), markets often demand verification of their actions, and third-party certifications provide a valuable tool in this context. However, in an ideal situation, the national government would sign up to C188 and establish the necessary regulatory framework to ensure the implementation of the international standards. In this case, a third-party certification process, which is often very costly, would not be required.

7. Summary

Third-party certifications are only one tool amongst others to ensure the protection of the human rights of fishing crew. As governance regulations are weak or non-existent, fishing companies rely on certification tools to satisfy the market's demand for social accountability. FIA PNG started the process of obtaining the FISH standard certificate in 2022 and after 16 months, the FIA PNG tuna fleet obtained the recognition of its good practices for human and labour rights onboard fishing vessels. The analysis

of NC presented here will provide important insights for other fishing companies that want to ensure the welfare of fishing crews.

8. Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used Grammarly in order to improve the readability and language of the manuscript. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.





Annex 1. FISH Standards

Principle 1. Emphasize Socially Responsible Labour Practices and Ethical Behaviours

Criterion 1.1 - No Child Labour

Criterion 1.2 - No Forced Labour

Criterion 1.3 - Crew List

Criterion 1.4 - Respect the Dignity of Fishers

Criterion 1.5 - Protect Migrant Fishers

Criterion 1.6 - Fair Recruitment and Placement of Fishers

Criterion 1.7 - Provisions for Repatriation

Principle 2. Establish Fair Conditions of Service for All Fishers

Criterion 2.1 - Fisher Work Agreement

Criterion 2.2 - Fair Remuneration

Criterion 2.3 - Freedom of Association and Collective Bargaining

Criterion 2.4 - Non-discrimination in Employment

Criterion 2.5 - Social Security

Criterion 2.6 - Health Protection and Medical Care

Criterion 2.7 – Fisher's Compensation System

Criterion 2.8 – Grievances

Principle 3. Ensure the Safety and Health of All Fishers

Criterion 3.1 - Defined Roles and Accountability

Criterion 3.2 - Occupational Safety and Health

Criterion 3.3 - Safety Orientation and Training

Criterion 3.4 - Rest Periods and Hours of Work

Criterion 3.5 – Fitness Standards and Medical Exams

Criterion 3.6 – Medical Treatment

Principle 4. Provide Decent Accommodations, Water and Food

Criterion 4.1 – A Framework for Oversight

Criterion 4.2 - Accommodations are Appropriate

Criterion 4.3 - Spaces are Well Maintained

Criterion 4.4 - Spaces are Comfortable and Safe

Criterion 4.5 - Sanitary Facilities are Provided

Criterion 4.6 - Food and Potable Water

Criterion 4.7 - Galley and Other Facilities

Annex 4 for companies with multiple vessels FISH standard

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