Net profits, human costs:

How supermarkets shape exploitation in shrimp aquaculture

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September 12, 2024

This report provides a summary of field-based research and secondary data analysis in Indonesia's export-oriented shrimp sector, conducted from July 2023 through May 2024 by three Indonesian non-government organizations: the Institute for Policy Research and Advocacy (ELSAM) Jakarta, the Akatiga Center of Social Analysis (Akatiga) Bandung, and the Migunani Research Institute (Migunani) Yogyakarta.

Migunani conceived the study. ELSAM and Akatiga contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript. Akatiga coordinated the data collection and provided feedback to the analysis. ELSAM and Dr. Katrina Nakamura of the Sustainability Incubator provided data inputs and feedback to the analysis including the market component. Migunani took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis and report.

Front cover image: Early Shrimp Harvest to Reduce Feeding Costs, East Java
Photo: © Akatiga and Migunani

Executive Summary

This study investigates the labour and employment conditions in Indonesia's export-oriented shrimp supply chain, as they line up with the International Labour Organization (ILO) Indicators of Forced Labour. **This study finds that labour and human rights violations, including instances of debt bondage, occurs in the production tiers of Indonesia's shrimp supply chain and that this exploitation is fuelled by price pressures by actors in the purchasing and retail tiers.**

The exploitation is driven by **supermarkets in the United States, United Kingdom and Europe, which are paying less for shrimp than the cost to farm it and preventing price recovery by raising prices for consumers.** Since the pandemic, workers in the production tiers report worsening safety conditions and declining earnings that no longer meet minimum wage requirements. Wages are paid variably at their employers' discretion and linked to declining market prices for shrimp.

Shrimp workers reported experiencing ILO indicators of forced labour, unsafe conditions, wage deception and income withholding in shrimp sold to supermarkets across the globe. Supermarkets worldwide seem to be profiting from shrimp produced through labour exploitation and widespread unpaid work in Indonesia. Since at least 80% of Indonesia's shrimp exports go to the U.S., the study identified links between this abusive production and the supply chains of private label shrimp sold by U.S. supermarkets such as Walmart, Kroger, and Costco.

The research discovered that, given the dominance of informal workers in production, most shrimp exports from Indonesia are not traceable, overall, or sustainably produced. Therefore, a real danger exists that consumers are being mislead about the status of shrimp workers by supermarkets' claims to respect human rights.

The study adopts a cross-sectional design and employs mixed methods, integrating primary research on working conditions with secondary trade research on Indonesia's export-oriented shrimp industry. Key informant interviews were conducted with 221 individuals in nine provinces, where at least two-thirds of the export-oriented shrimp supply chains operate, including Lampung, Bali, West Nusa Tenggara, West Java, Central Java, East Java, South Sulawesi, Banten, and Jakarta.

Key finding 1: Labour

Labour conditions in shrimp farms and early processing meet many of the ILO Indicators of Forced Labour and are worse than in other parts of the supply chain. Observed indicators include instances of debt bondage, widespread withholding of wages[1], forms of deception in the recruitment process in relation to wages, abuse of vulnerability, excessive overtime, forms of restriction of movement and isolation and instances of threats and intimidation – including intimidation of workers that tried to raise a grievance through a union. Additionally, workers are often not paid minimum wage, as informal workers are not covered by the government minimum wage laws and regulations. Taken together, systemic labour exploitation was common.

Informal employment arrangements create a high risk of forced labour in the export-oriented shrimp supply chain. The engagement of informal employment in Indonesia's supply chain of export-oriented shrimp is common, especially in the production tiers predominantly run by informal businesses. These informal businesses are unregistered and small, neither taxed nor monitored by any form of government, and these features significantly contribute to the export market's challenges in traceability. Workers engaged in informal employment lack formal contracts that govern protection from non-payment of wages, retrenchment without notice or compensation, unsatisfactory occupational health and safety conditions and an absence of social benefits such as pensions, sick pay and health insurance.

In contrast, the study found that labour conditions in the inputs sector (hatchery, feed industries, and medicines) and final processing/exporters are relatively better because workers had formal employment arrangements, such as contracts, and were covered by government labour laws and social security.

Key finding 2: Product

At least half of the exported shrimp from Indonesia are sourced from farms that employ informal workers who are subject to labour and human rights violations and insecurity, increasing their vulnerability to forced labour.

The majority of the production (68 percent) is harvested from semi-intensive (51 percent) and traditional farms (17 percent) that use informal employment arrangements. The study asserts that at least half of the shrimp exports from Indonesia are sourced from these informal parts of the shrimp supply chain, where evidence of abusive business models prevails – such as absence of contracts, withholding of bonuses/benefits, abusive working and living conditions, and excessive overtime. In this way, there is a link from the farms in the study through to the largest exporters and key international retailers.[2]

[1] Usually withholding of 'bonus' payment, that would enable the worker to earn a minimum wage
[2] More detail provided in full report

Key finding 3: Price

Retailers' profit-maximizing practices significantly impact labour conditions. The price paid to shrimp farmers does not cover the cost of producing shrimp. Therefore, the prices paid and profits earned by final processors, exporters, and retailers on shrimp are built on unpaid labour.

The study highlights the significant impact of the pricing structure within the shrimp supply chain on labour conditions. Shrimp farms have the lowest profit margins at 10% and are the most vulnerable link in the supply chain, facing annual inflation rates ranging from 2.6% to 5.51%, coupled with fluctuating prices (showing a downward trend)[3] of up to 27% over the past three years. In this section of the supply chain, labour accounts for 6% of costs, compared to the average of 12-14% in other low wage sectors in Indonesia.

Given the rising expenses of shrimp feed, as well as increased costs in power, logistics, and seed expenses, labour costs become the primary target for reduction to maintain the economic viability of the industry. This trend extends to the subsequent stages of the supply chain, particularly in cold storage and export. Within the exporters' sphere of control, the two elements that can be reduced are the price of shrimp at the farm gate and processing labour. The cost structures for both the production and export processes directly impact conditions in the lower tiers of the supply chain, particularly labour.

Key finding 4: Market failure

The data in this study reveals a clear connection between labour and human rights violations, including instances of debt bondage, in the production tiers of Indonesia's shrimp supply chain (supply side) and the pricing strategy of international retailers. On the demand side, the retailers' market power over all sellers in export countries and market failures in rectifying unfair profit-maximizing business models play a crucial role. Meanwhile, on the supply side, gaps and weak governance and rule of law, along with socio-economic vulnerabilities, contribute significantly to labour exploitation. Additionally, supply chain dynamics, such as prices, logistics, and disease disruptions, coupled with asymmetric access to technologies among supply chain actors further exacerbate these challenges, fostering the proliferation of unfair profit-maximizing business models that have a profound impact on labour conditions.

[3] The literature provides mixed data on the impact of COVID-19 on shrimp prices, but generally agrees that there will be a moderate price recovery, with a CAGR of 4-7% during the forecast period of 2024-2032. However, despite the recovering prices due to increasing demand, the production segment will remain the lowest profit margin because the cost of shrimp feed is also on an upward trend. Schmitz, A., & Nguyen, L. (2022)) provide the evidence on the recovery of demand: Period 1 (March–June 2020): there is a net economic loss globally of $194 million due to lockdowns. Period 2 (July 2020–June 2021): there is a net welfare gain globally of $885 million due to increased shrimp demand. Overall, the global net economic gain was $692 million. For the United States alone, shrimp consumers gained $470 million while shrimp producers gained $24 million, which is relatively consistent with the net quasi-consumer gain of $475 million due to the Covid-19 pandemic.

Recommendations

The study found that forced labour conditions in the shrimp supply chain in Indonesia can be created or exacerbated by the pricing and purchasing practices of large firms with few competitors, such as supermarkets. These unfair practices, along with weak law enforcement and a vulnerable regulatory framework, have created an unholy collusion that enables forced labour.

The recommendations, therefore, are presented in alignment with these enablers.

Demand side (market states/countries):

Companies/retailers

Supermarkets/seafood companies in market states must ensure sustainable cost of production throughout the shrimp supply chain, mapping all tiers of their supply chains and ensuring living wages. This mapping and subsequent action to ensure living wages throughout the entire shrimp supply chain should occur with global and local unions, to ensure an approach led by and centered on workers.

Supermarkets/seafood companies should report on how they are monitoring the implication of their pricing strategy to the workers conditions in the production tiers.

Supermarkets should be required to regularly publish their compliance with any claims made about human rights and sustainable shrimp on their supermarket websites. They should also publish evidence of transparency and traceability in their supply chains. Additionally, supermarkets should offer platforms for grievance mechanisms that are safe, independent, and have a clear path to remedy for supply chain members in supplying countries.

Supermarkets should prioritise suppliers that support farmers to ensure labour and human rights compliance throughout their entire supply chain, regardless of direct employment relationship, and ensure their purchasing practices prioritize sustainable cost of production in contracts. Supermarkets should seek advice from leading labour rights experts in this area.

Noting the failures of certifications and third-party audits to detect exploitation in the informal employment, supermarkets and seafood companies should not rely on certifications to demonstrate their responsibilities in a sustainable shrimp supply chain. They should explore other ways to ensure labour rights compliance. For example, by negotiating binding agreements with strong co-governance mechanisms, engaging with unions and worker organisations, or other sustainable means for workers to raise issues and concerns.

Government

Regulators and human rights authorities should monitor and regulate the market's role in labour exploitation. This is because the exploitative situation in origin countries is a consequence of price pressure and purchasing practices. A key predictor for forced labour in the shrimp supply chain is price. Therefore, regulators in the destination countries should monitor the price along the supply chain, ensuring that shrimp imported into their country is produced at or above the cost of sustainable production. Governments should also include white-collar crime and price/cost manipulation in their analysis of root causes of forced labour and child labour in supply chains.

There is some movement towards improved regulation of companies in Europe, with the new Corporate Sustainability Due Diligence Directive requiring certain companies in Europe to report on steps taken to ensure compliance to human rights throughout their whole supply chain, even if they do not have a direct contractual relationship with all actors in the supply chain. Additionally, the European Unfair Trading Practices Directive in food and agriculture could be expanded upon to include the unfair trading practice of requiring production/sale below the cost of sustainable production. This is already included as an unfair trading practice in Spain, and could be included in other member states' legislation. Other market state countries outside the European Union, such as the US and UK, should adopt similar legislation.

Supply side (producer countries):

Government

On the supply side, efforts should prioritize regulatory improvements in the supply chain, particularly targeting informal employment. This is crucial as informal employment serves as a predictor of forced labour within the shrimp supply chain in Indonesia. Informal workers, who lack legal protections and social security benefits, are particularly vulnerable to exploitation and abuse. Therefore, implementing strategies to protect and enhance the welfare of informal workers is essential.

Addressing the disparities in access to technologies (especially regarding hatcheries and feed, disease control and farming techniques) and resources among supply chain actors is crucial for protecting workers in small scale businesses (traditional and semi-intensive). Yet, businesses may not easily share their competitive advantage in shrimp technologies. Therefore, governments must exercise a multifaceted approach that involves regulating equitable access to technology, training, budget/subsidies and incentives for all supply chain actors. Additionally, efforts to promote transparency and disclosure in supply chains can help hold companies accountable for their treatment of workers.

Non-Government Organizations

For civil society organizations (CSOs), one key strategy is advocacy (targeting related ministries and the National Social and Health Insurance – BPJS) to expand existing social safety nets to cover informal workers. This may involve extending access to healthcare, education, and financial assistance programs to informal workers and their families. By providing a safety net, informal workers are better equipped to cope with economic shocks and emergencies, reducing their vulnerability to exploitation.

Advocacy efforts should also focus on the recognition of informal workers by government agencies, employers, and other stakeholders. Informal workers often face marginalization and discrimination, which can hinder their access to rights and benefits. By advocating for the formal recognition of informal workers and their contributions to the economy, policymakers can help ensure that they receive fair treatment and protection under the law.

Advocating to financial institutions and regulators to implement regulations that promote transparency and disclosure is one way to achieve this goal. For example, requiring suppliers to provide accurate information about their products or services, including labour practices, can help consumers make more informed choices and incentivize companies to improve working conditions throughout their supply chains.

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Shrimp feed staff conducting regular pond monitoring, West Java.
Photo credit: © Akatiga and Migunani

Introduction

In 2023 and 2024, three Indonesian civil society organizations (Migunani, Akatiga and ELSAM) undertook research on the labour and employment conditions in the export-oriented shrimp supply chain in Indonesia, in accordance with the ILO Indicators of Forced Labour. This alliance of three Indonesian civil society organizations (CSOs) combines expertise in investigative research with experience in organizing collective action and advocacy in Indonesia. Our alliance consists of:

- The Institute for Policy Research and Advocacy (ELSAM), a prominent research and advocacy CSO focusing on human rights and business;
- Akatiga, Center of Social Analysis, with core expertise in investigating labour issues with reality check approach, and
- Migunani Research Institute, with experience in an extensive study on the Seafood Supply Chain in Indonesia (managed by the Research and Communications Group) in 2019/2020.

Figure 1: Conceptual framework for measurement of forced labour in export-oriented shrimp supply chain

Empirical assessment
(actual and perceived labour conditions)

FORCED LABOUR INCIDENCE

Structural lens
(the creation of forced labour)

The ILO forced labour indicators

- Abuse of vulnerability;
- Deception;
- Restriction of movement;
- Isolation;
- Physical and sexual violence;
- Intimidation and threats;
- Retention of identity documents;
- Withholding of wages;
- Debt bondage;
- Abusive working and living conditions;
- Excessive overtime.

Enablers of forced labour

Structural forces:

- Monopsony power of retailers;
- Demand for cheap food;
- Asymmetric access to information and technology between supply chain actors;
- Monopsony power of employers (supply of cheap manual workers);
- Irresponsible sourcing practices;
- Market failure in correcting unfair profit-maximizing business model;
- Governance gaps/rule of law issues in labour market.

Socio-economic vulnerabilities:

- Lack of livelihood opportunities;
- Knowledge about safe employment;
- Lack of social capital.

This framework suggest the following propositions:

- Forced labour is a consequence of socio-economic vulnerabilities and individual exposures to external risks. Specifically, groups of individuals with a lack of knowledge about safe employment are more likely to be at risk of forced labour. However, these vulnerabilities are not solely responsible for creating the conditions of forced labour. Forced labour conditions flourish if the structural risks or enablers (such as demand for cheap food) are in place, leading to an unfair profit-maximizing business model.
- Forced labour conditions could be manifested in three distinctive but interrelated forms: as crime, human rights violations, and business/administrative issues. These multiple manifestations suggest that a single metric is not adequate to understand the magnitude of force labour conditions. For example, the absence of reported incidents of forced labour filed by law enforcement agencies does not imply that forced labour does not exist.

This framework is used to assess forced labour conditions in the whole supply chain, from inputs for farms (hatchery, feed industries and medicines), farming, processing industries and exporters.

Traditional fishers' fleets, East Java. Photo credit: © Akatiga and Migunani

Methodology

The study employs a cross-sectional design and utilizes mixed methods, combining primary research on working conditions with secondary trade research on Indonesia's export-oriented shrimp industry. Primary data collection was enhanced by employing a live-in observation technique to gain deeper insights into both the de jure and de facto conditions within Indonesia's shrimp value chain. Secondary data methods include desk reviews, consultations, and triangulation processes with experts; plus review of similar studies conducted in Vietnam and India. The primary data collection phase involved engaging 221 individuals through key informant interviews conducted across nine provinces[4]. These provinces were selected based on their significance, representing at least two-thirds of the export-oriented shrimp supply chains. They include Lampung, Bali, West Nusa Tenggara, West Java, Central Java, East Java, South Sulawesi, Banten, and Jakarta (Figure 2).

Figure 2: Data collection sites

The selection of these provinces was based on their proximity to export infrastructure. Although shrimp farming developments are expanding beyond Java, the majority of shrimp processing still remains concentrated on the island. Processing companies in other provinces, such as Sulawesi and Nusa Tenggara, contribute only minor export volumes. In 2020, East, West, and Central Java combined accounted for 97% of total Indonesian shrimp exports (Pijl, 2023).

Secondary data on the shrimp industry in Indonesia was collected through a review of existing literature and publications, including national surveys, censuses, and reports on forced labour and trafficking from NGOs and international organizations. We examined 13 regulations in Indonesia and internationally, including court verdicts related to fishery, aquaculture and forced labour to understand the legal dimensions and loopholes in Indonesia's legal system[5].

The study was approved by the Research Ethics Committee of Atmajaya University Jakarta dated 3 November 2023. Detailed methodology and instruments are available in Appendix.

[4] These study participants comprise 39 government officials, 30 CSOs/Associations, 22 shrimp farm owners, 8 shrimp feed/medicines staff, 14 small farm owners, 61 farm and hatcheries workers and peelers, and 47 community members. Given abuses in many cases are "hidden in plain sight", we conducted site observations through a live-in approach in the neighboring areas of targeted shrimp farms for ten days to understand the hidden dynamics and what takes place within it.

[5] Key regulations include: Law No.45/2009 on fishery, Law No. 6/2023 on Job creation-in fishery sector, Law No. 7/2016 on protection of fishers, Law No. 21/2007 on counter trafficking in person, Law No. 1/2023 on penal code (KUHP), Government Regulation (PP) No. 22/2022 on fishers and migrant workers protection, Ministerial Regulation No. 18/2016 and No. 33/2021 on protection of fisher workers, and No. 2/2017 on human rights certification procedures.

Limitations

The study aimed to examine proximate determinants of forced labour, rather than defining the presence of forced labour from a legal perspective. Although the presence of indicators of forced labour signals an increased risk, each case requires individual assessment, sometimes longitudinally, to determine whether it qualifies as forced labour. Our conclusions stem from interviews, direct observations by researchers, expert consultations, and a comprehensive literature review. Analyzing proximate factors and risk distribution does not allow us to estimate the number of individuals in forced labour by Indonesian law.

We selected sites based on an initial supply chain analysis, assuming higher risk in chains with more workers. Study participants were chosen from these sites according to their roles in the supply chain. However, this non-random selection framework precludes inferential statistical analysis. Patterns observed in survey data were corroborated with insights from focus group discussions, expert interviews, and evidence from similar studies conducted in India and Vietnam.

Findings

The findings are presented in three sections. The first section discusses the working conditions within Indonesia's export-oriented shrimp supply chain, drawing from primary data collection. The second section focuses on the setting of these conditions, specifically delving into the architecture of Indonesia's shrimp supply chain, informed by secondary data and interviews. Lastly, the triangulation analysis examines the factors contributing to forced labour, including an exploration of why exploitative labour conditions exist or are less prevalent at each tier of the supply chain, along with an assessment of the roles played by various industry players.

Early Shrimp Harvest to Reduce Feeding Costs, East Java. © Akatiga and Migunani

Forced labour conditions

We initiated our investigation with the hypothesis that there is no significant difference in the prevalence of forced labour across each tier of Indonesia's export-oriented shrimp industry. To test this hypothesis, we conducted interviews with all actors[6] involved in the supply chain and visited a total of 17 sites/districts, including two feed factories, three hatcheries, eight shrimp farms, and four final processing sites for export. The preliminary findings reveal varying levels of risk factors for forced labour at each stage of the supply chain, each with distinct implications for the prevalence of forced labour. One such factor identified is business and employment status, distinguishing between formal and informal business and employment contracts. Informal employment characterized by no formal contracts that govern protection from non-payment of wages, retrenchment without notice or compensation, unsatisfactory occupational health and safety conditions and an absence of benefits such as pensions, sick pay and health insurance. Informal business refers to unregistered and small, neither taxed nor monitored by any form of government.

Field work conducted across nine provinces indicated that all workers under formal employment contracts reported receiving wages at least equal to the minimum wage in their respective provinces. This finding aligns with research in Indonesia's labour-economic literature (Pratomo and Manning, 2022), which suggests that while formal employment does not guarantee freedom from forced labour, it is strongly associated with improved labour conditions.[7] For instance, all formal workers interviewed across all tiers reported being registered or covered by the Government of Indonesia's employment social security insurance and health insurance, which are strong indicators of relatively favorable labour conditions. In contrast, interviews with 49 informal workers and 11 focus group discussions involving both formal and informal workers confirmed that informal status is a key predictor of negative labour conditions such as excessive work hours, unpaid overtime, pay below minimum wage standards, and absence of legal protections.

Informed by this finding, the team conducted the second stage of field work and analysis in tiers of the supply chain where the concentration of informality in the business is high. As detailed in the section on the architecture of Indonesia's shrimp supply chain, shrimp feed and hatcheries are largely managed through the formal sector, which employs formal employment. There are at least three reasons why the shrimp feed segment for export-oriented shrimp in Indonesia operates through the formal industry sector:

- First, the whiteleg shrimp (*Litopenaeus vannamei*), which accounts for 80% of total shrimp production and export, requires standardized manufactured feed to meet its economic scale, necessitating a formal, industry-level business model[8].
- Second, the feed that is tailored to the whiteleg shrimp relies on imports for key ingredients. Data interviews with informants from two major shrimp feed companies, triangulated with secondary data from the ADB shrimp project, reveal that at least 80% of the ingredients are imported, including fish meal that is imported from Vietnam[9] (Box 1).
- Lastly, cost-effective shrimp feed infrastructure is reached when it is integrated with poultry feed facilities, which predominantly operates through the formal sector[10].

[6] The participants included staff from shrimp feed/medicine companies (8 informants), hatchery formal workers (6 informants), shrimp farm owners (12), 14 small-scale farm owners, 61 farm workers and peelers (12 formal and 49 informal workers), formal workers from final processing and export companies (4), middlemen (3), government officials (8), and activists from civil society organizations (CSOs) (16), and community members living nearby the sites (47).

[7] Pratomo, D. S., & Manning, C. (2022). Structural Change and Formal Sector Employment Growth in Indonesia. Journal of Southeast Asian Economies, 39(1), 1–20. https://www.jstor.org/stable/27130818

[8] Shrimp feed production in Indonesia is relatively consolidated and concentrated in the hands of only a few players. The top 4 players (CP Prima, Japfa, CJ and Matahari Sakti) hold around 70% of total shrimp feed manufacturing capacity in the country.

[9] An informant from one of the major shrimp feed companies reported that most shrimp feed companies import fish meal due to consistency in supply and quality concerns as they employ strict control on raw materials acquisition and feed production processes. In Indonesia, the fish meal industry is dominated by small-scale suppliers, leading to uncertainty in supply and quality/food security standards. This heavy reliance on imported fish meal implies that labor conditions for fishers involved in fish meal production are less relevant in Indonesia.

[10] All major shrimp feed mills are integrated with poultry mills, where shrimp feed typically represents 10% of the production capacity.

Box 1: At least 80% of shrimp feed ingredients for the whiteleg shrimp are imported

The composition of the feed is tailored to the specific species of shrimp being farmed, as different shrimp species have different dietary needs and preferences. In commercial shrimp farming, proper nutrition and feeding management are essential to achieve optimal growth rates, high survival rates, and disease resistance. The use of industrial-generated shrimp feed has become increasingly dominant in Indonesia's export-oriented shrimp farming. At least 80% of the ingredients relies on imported materials, as described below:

- Wheat flour (25%-import)
- Soybean meal (25%-import)
- Fish meal premium (10%-import)
- Fish meal standard (20%-partly local)
- Soya lechtin (2.5%-import)
- Fish oil (1.5%-import)
- Squid liver powder (6%-import)
- Ricebran (6%)
- Additives (vitamins and proteins, fatty acids, antioxidants, feed enzymes, antibiotics)-4% import)

Source: Interview with a senior shrimp feed nutritionist

The similar situation applies in the cold storage/final processing and exporters segments of the shrimp supply chain. Requirements on legal formalities and complex export-import business arrangements compel most companies to engage their workers in formal employment arrangements. Data from all nine provinces confirm this fragmented situation in the shrimp supply chain in Indonesia. This fragmentation occurs because steps in the supply chain break down into distinct segments carried out by different suppliers or partners in various geographic locations. These segments often use siloed technologies and disconnected processes. For example, shrimp exporters in East Java source shrimp from various farming technologies (traditional, semi-intensive, intensive) and suppliers of variable size and capacity across different islands in Indonesia. The feed segment and export-oriented processing and exporters differ from production or farming segments of the value chain. Similar to Ecuador and Vietnam, the shrimp feed manufacturing segment is already highly consolidated, with four companies controlling 70% of the supply. A similar consolidation is occurring in the export segment, where the top four exporters of shrimp to the U.S. hold a 60% market share.

An analysis of actual earnings among formal workers across the supply chain also confirms that the production segment (farming and early processing) yields lower earnings for its workers (see Figure 4). This suggests that even among formal workers, the financial opportunities within the production segment are the most limited.

Figure 3: depicts the shrimp feed stock at a shrimp farm, indicating that the farm utilizes shrimp feed sourced from the shrimp factory

Shrimp feed stock at a shrimp farm, Banten. Photo credit: © Akatiga and Migunani

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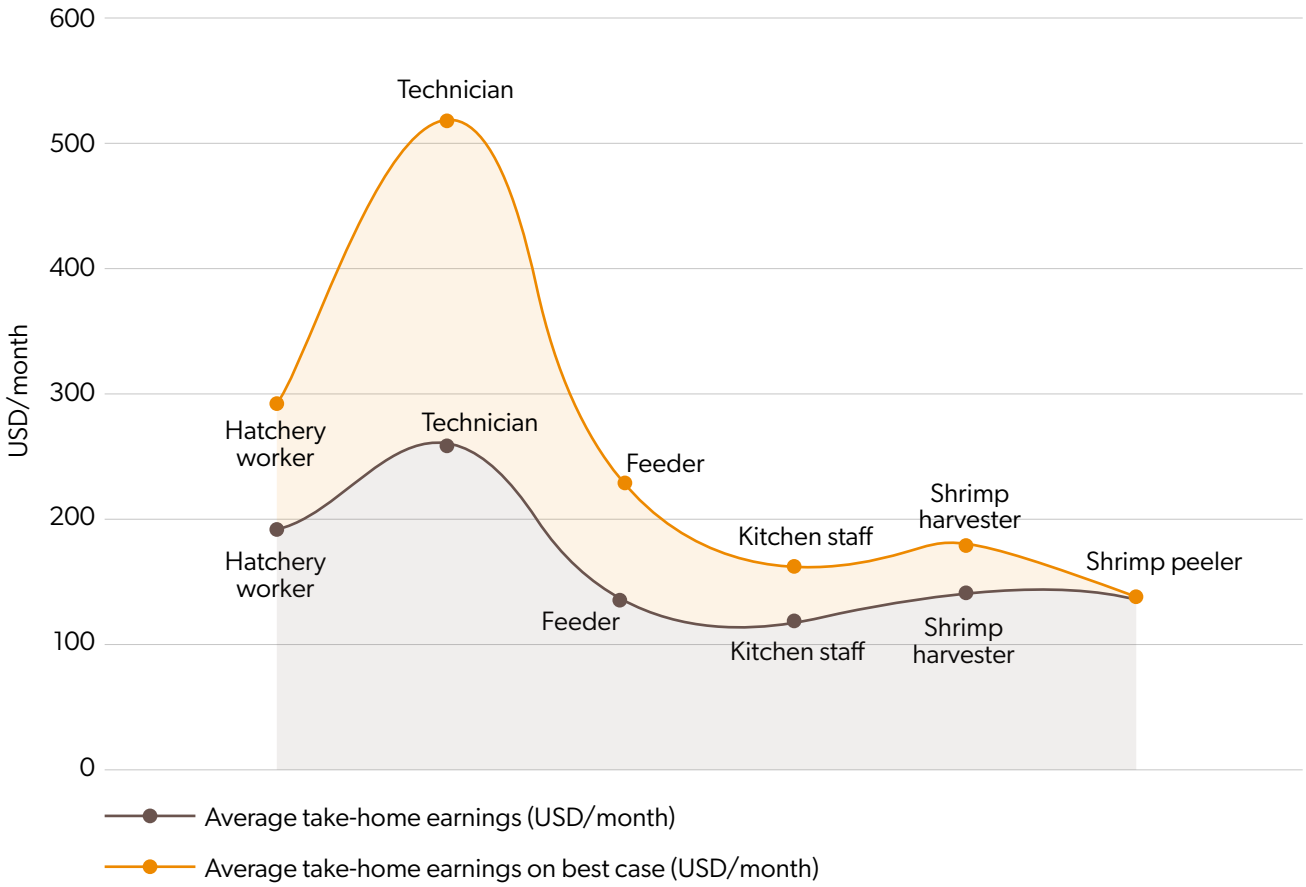
Figure 4: Average monthly earnings for formal workers in nine provinces



Incidence of 11 ILO Forced Labour Indicators

Findings from the initial phase indicate that the risk factors for forced labour vary across each tier of Indonesia's export-oriented shrimp industry. Empirical data from the second round of fieldwork and secondary sources on non-compliant labour conditions, such as inadequate social protection and health insurance coverage, indicate that **the prevalence of the 11 ILO forced labour indicators are more pronounced in the production (shrimp farms) and early processing or peeling stages across the nine sample provinces.** This does not imply the absence of forced labour indicators in the other segments of the supply chain (shrimp feed, hatchery, and export). Stronger determinants of forced labour are found in the shrimp farm and peeling stages, given that approximately **half of Indonesia's shrimp production originates from traditional and semi-intensive farms, which predominantly operate within the informal sector and informal employment arrangements.**

Among the 11 ILO forced labour indicators, the study found that the prominent indications of forced labour include exploitation of individual and governance vulnerabilities, deception, and excessive overtime, each of which is described below.

Forced labour indicator: Abuse of vulnerabilities. In all sites visited in the second phase of data collection, both traditional farms and companies in all tiers apply two types of employment: informal (daily wage scheme and performance-based payment) and formal employment. Formal employment only applies to middle-management staff up to senior levels. This scheme allows them to operate within a grey area as an unregulated sector, thereby avoiding labour protection policies such as minimum wages, insurance and freedom of association. This situation reflects an abuse of vulnerabilities of individual workers and governance systems. Below is a summary of the situation in each tier.

Feed segment

As described previously, the shrimp feed segment for export-oriented shrimp in Indonesia operates through the formal industry sector. Unlike Vietnam, where local fish meal contributes significantly to shrimp production in country and for export, in Indonesia the contribution of local fish meal to the export-oriented shrimp supply chain is insignificant (between 5-10%). Local fish meal is primarily used by shrimp farms for the domestic market. The second round of field work therefore involved interviewing workers and observing working conditions in two provinces where the two major feed segments operate (West Java and East Java). The findings show that all feed mills (three companies) utilize two types of employment (direct-hire staff and subcontracted workers).

The interviews reveal significant differences in conditions between direct staff and contractual/outsourced workers. While direct staff enjoy basic protections such as minimum wages, health and social security insurance, **outsourced workers are at constant risk of not receiving minimum wages, work insurance, or having equal bargaining power** with the outsourcing company. There are two common modalities of exploiting governance vulnerabilities in outsourcing systems in Indonesia. First, **the outsourcing company charges additional management fees to workers, resulting in deductions from monthly wages ranging from 20-35%**. Second, there is no annual increase in their wages because contracts are based on an annual basis, and they have little bargaining power as the employer can easily replace their position with new, younger workers willing to accept the minimum offer. As reported by two informants in East Java, "We have been in this job for more than five years with two breaks, but we never get salary increases… but it is better than other jobs like being a motor taxi driver".

Hatchery

The hatchery business strategy typically involves being close to or having a presence near shrimp farms. In all the shrimp farm sites we visited, farm owners reported that they source larvae from nearby hatcheries. The hatchery segment of the supply chain was most accessible for our field work. We were able to visit their farms, interview staff at all levels, and observe the production process (West Java, South Sulawesi, East Java, Lampung, NTB-two sites, Bali). Most of the hatcheries (six out of seven, with three from the initial visits) operate as satellites of large hatchery companies, indicating the formal nature of the business. Interviews with staff confirmed this, as most are employed through formal contracts directly with hatchery companies. As seen in Figure 4, their salaries are all above the minimum wages in their respective province. According to the informants, the specialized skills and knowledge required for hatchery work are the main reasons for this working arrangement. Site observations and interviews with community members near the hatcheries also supported the findings on hatchery workers' living and working conditions (Figure 5). With this evidence, the hatchery segment appears to offer the best working conditions within the supply chain.

Figure 5:Hatchery technician housing, West Nusa Tenggara. Photo credit: © Akatiga and Migunani

Figure 6: Seasonal harvest workers in Bali. Photo credit: © Najib Yakini

Shrimp farm

We visited 12 (four in the second round) shrimp farms in six provinces (West Java, South Sulawesi, East Java, Lampung, NTB, Bali), consisting of two traditional farms, three extensive farms, five semi-intensive farms, and two intensive farms. In all these farms, there are gig workers, even in intensive farms. For instance, workers in many sites are compelled to accept permanent daily work positions due to their need for employment. The average pay for gig workers across the observation sites for 10-12 hours of work is USD $3.75 per day (shrimp farm). Interviews with 49 workers revealed the following modus operandi or patterns contributing to abusive working conditions.

Forced labour indicator: deception in relation to wages being able to be earned. Deception is prevalent across all supply chain sites, but it is more pronounced for migrant workers from other provinces in Indonesia, especially those that stay at the company accommodation on site. The deception involves deceptive recruitment practices in the form of falsely promising certain wages/income and falsely promising an employment status that would include certain benefits and protections. The workings of this deception are described below:

- Deceptive payment scheme: During recruitment, workers are informed about the benefit structure, which includes a basic salary and a bonus. The key assumption of the bonus is net profit, not the market price of shrimp – which the workers can verify. However, what workers cannot verify is operating cost. Shrimp farm owners factor in any costs that can reduce the profit to be distributed as a bonus. For example, in Situbondo, a shrimp farm owner informed our researcher that he included the cost for long-term investments (such as road construction and contingency funds) into the operating year cost, which resulted in a net loss for the year (from an accounting perspective, this kind of investment should be prorated across its life of benefit). This trick is common across sites, and workers neither have access to this information nor the power to challenge the profit calculation, keeping them paid below minimum wage.
- Deceptive employment relationship: This is common in sampled sites where workers are recruited with promises of permanent and direct hire jobs. However, once they begin working, the promised employment status does not materialize. Some of them are actually hired under a third party (an outsourcing company), some are engaged as contract workers, and others as seasonal workers or performance-based workers. These types of employment relationships limit their access to decent wages, health and social security, and working conditions.

Forced labour indicator: restriction of movement, excessive overtime, and isolation. In all sites, with the exception of two sites in East Java and NTB, all workers reported that they can leave or change jobs at any time. However, restrictions are imposed directly or indirectly through the withholding of bonuses, and in some cases wages as well. In all sites, a bonus is the common instrument used to retain workers. From all the interviews conducted with workers, the primary reason for them to stay is an expectation of receiving a bonus; otherwise, they would have nothing to take home after years of working. In some sites in East Java, Lampung, and NTB provinces, due to limited disposable income workers reported that they request an advance payment of their wages. This situation is different from the practice of withholding wages in migrant workers where they do not get paid. In this case, basic wages are paid, but wages are withheld to repay the debt (a situation known as debt bondage). This is reported on further below.

Additionally, workers are bound through tight tasks or responsibilities. For instance, the standard operating procedures require feeders must remain on standby 24 hours a day, ready to work in unforeseen situations, and must stay on standby during production. The procedures are established by shrimp feed technical advisors seconded in the farm by shrimp feed supplier with full authority by the owner to run the business processes, inclusive of managing the workers. For example, an agreement on this arrangement was witnessed by local civil servants and dignitaries at shrimp seed halls in one of the sites we visited. This situation has created the equivalent of a cage for workers, limiting their freedom of movement and leading to isolation, especially for those who live in the company's compound/complex or are required to stay overnight on the farm during the production season. In processing/peeling it is common for the payment scheme (performance-based fee) to force peelers to work at least 12 hours per day to meet minimum targets. There are cases of "loyalty hours" – unpaid overtime as proof of loyalty to the employer.

Figure 7: Work schedule for shrimp ponds workers, NTB Province. Photo credit: © Akatiga and Migunani

This working arrangement, compounded by abusive working and living conditions, serves as a catalyst for the tragic death of a worker in East Java, a migrant from NTT provinces (Box 2). In addition, a published report by a district government hospital in Bima (RSUD Bima), NTB in early 2023 documented the case of a malnourished 18-month-old child treated by the hospital. The parents, both migrant workers (from Sumba Island), work in a shrimp farm located in Sape sub-district of Bima, with a combined monthly salary of USD $97. Due to their financial constraints and lack of government health insurance (BPJS-K) coverage, the child received treatment under a special financing scheme. These two cases, along with stories from other provinces (Lampung and Banten) begin to illuminate the plight of migrant workers as the most marginalized group within the shrimp supply chain in Indonesia, highlighting the structural invisibility of their circumstances.

Forced labour indicator: withholding of wages: As already explained above, the payment system in each part of the shrimp supply chain becomes part of abusive working conditions. Our findings highlight the precarious financial situation of these workers, who are caught in a cycle of low wages, dependence on bonuses, debt, and limited options. It underscores the need for fair labour practices, wage regulations, and worker protections to prevent exploitation and improve living conditions for these workers. It also raises questions about the effectiveness of current labour laws and their enforcement. With regard to bonuses as a retention tool, the study found that bonuses are used across all sites as a primary tool to retain workers. This suggests that the bonus system is an integral part of the compensation structure, and workers are forced to stay in anticipation of this additional income. The interviews documented that workers' expectation of receiving a bonus is a significant factor in their decision to continue working, despite potentially challenging conditions. This could indicate that basic wages are not be sufficient for their needs, making the bonus a crucial part of their income.

Forced labour indicator: Debt bondage. This was reported by workers in almost all sites. In this situation, workers interviewed owe debts to a loan shark and bank, which prevents them from quitting. In Indonesia, loan sharks operate outside the law, frequently using threats of violence or other illegal, aggressive, and extortionate actions to enforce repayment. These individuals offer loans at extremely high or illegal interest rates, with strict terms of collection. When wages are extremely low, people are forced to seek alternative sources of income, often turning to these moneylenders. As a result, these workers become trapped in a cycle where they must continue working at the peeling sites to repay their loans, with no other viable livelihood options available.

The wider problem of debt bondage is prevalent in most interviews with workers in traditional and semi-intensive farms. In some regions (NTB, Bali, East Java, Banten, and Lampung), workers request advance wage payments due to limited disposable income. This could be indicative of a hand-to-mouth existence where workers are dependent

Box 2: Killed by abusive working and living conditions

In early February 2024, one of the participants in this research – a young man originally from Nusa Tenggara Timur province – died after several days of illness while residing in a shrimp farm compound

During the fieldwork in November 2023, our researchers have closely observed the living and working conditions, which appear to be abusive (poor sanitation, inadequate space for rest/sleep and endless working schedule). Participants shared with our researchers that they must search for food in nearby villages because the company does not adequately provide for their nutritional needs. Additionally, these workers are required to be on standby for 24 hours. Our observations also confirm that hygiene and sanitation within the compound are subpar.

… living and working conditions, which appear to be abusive (poor sanitation, inadequate space for rest/sleep and endless working schedule).

Despite being unwell for several days, he did not receive any medical treatment. Sadly, he succumbed to his illness while en route to the hospital. It is disheartening to think that this loss could have been prevented.

Notably, economic analysis may dismiss this tragedy as unrelated to the shrimp price regime, which is primarily influenced by supply and demand dynamics--and efficiency. However, from a human rights and sociological perspective, this preventable death serves as a stark consequence of the existing regime.

on each paycheck to meet their immediate needs. This situation differentiates from practices in migrant labour where wages are withheld entirely. Here, while basic wages are paid, they are subsequently withheld to repay debts of advance salary, creating a cycle of debt bondage.

Forced labour indicator: intimidation and threats. Intimidation and threats are pervasive but manifest in a variety of ways. For example, one company which is informally "backed up" by state apparatus, organizes regular "character building sessions" with Indonesian armed forces personnel as the mentor. In Lampung, a company explicitly intimidated workers who were raising grievances through the trade union which the company perceived as troublesome. **The company threatened to dissolve the trade unions.** In NTB Province, the local security personnel became involved in disputes and violence cases that resulted in a "permanent" solution – a solution that none is dare to challenge.

Forced labour Indicator: Under-age Workers

Under-age labour does exist in certain sectors and regions. For instance, in traditional farms and peeling sites located in Lampung, East Java, and NTB, children of the workers, who are 10- to 15-year-old, are found assisting with feeding and peeling tasks. These tasks are typically performed in the afternoon, taking about two to four hours of their day.

During interviews, workers said they do not force their children to help. This might suggest that there is no direct coercion involved. However, the situation is more complex than it initially appears. The company sets production targets that are unrealistic for their parents to meet on their own, so as a result children feel indirectly compelled to assist their parents.

This compulsion stems from a payment scheme that links production targets to wages. If the targets are not met, it could potentially affect the family's income. Therefore, the children step in to help their parents meet these targets, even though they should be spending their time on education and age-appropriate activities.

This situation could be considered as structural employment of underage workers. It's not direct employment where the company hires the children, but a structural issue where the company's policies indirectly force the children into labour. This form of child labour is subtle and often overlooked, but it is just as detrimental. It deprives children of their childhood, disrupts their education, and can be harmful to their physical and mental development.

Shrimp processing plant

We visited eight cold storage/final processing and exporters segments within the shrimp supply chain, spanning five provinces (Bali, South Sulawesi, East Java, Banten, and Lampung), conducting interviews with 16 staff and five managers. All these plants are managed under formal entities or PT (Perusahaan Terbatas in Indonesia, or Limited Enterprises). This form of business is in response to the legal formalities and complex export/import business arrangements required. Consequently, all companies engage their workers in formal employment arrangements. However, interviews revealed that these companies source at least 25% of the workers from traditional or informal middlemen for seasonal jobs. This indicates that this formal sector also relies on the informal sector for employment. The study did not trace these links, nor did it investigate whether the middlemen charge workers a fee for the job. However, an anecdotal comment from a former cold storage facility worker in East Java noted that they had to give money to the local strongmen after receiving their pay.

We found a similar working arrangement in shrimp processing plants as in the hatchery segment, where most staff are engaged formally but some workers are kept under outsourcing arrangements which allow the companies to pay slightly higher than minimum wages. Major concerns from the workers documented during the interviews included long working hours of 10 to 14 hours per day, while 8 is the limit for working hours. They do this to meet work targets, leading to overtime without salary increases even after working for more than five years. An interviewee in East Java explained, "It's true that our salary is slightly above the minimum wage (around USD 161/month), but in reality, it's below the minimum wage because we have to work more than eight hours to get paid the minimum wage."

To earn the minimum wage, workers are required to work more than the standard eight-hour workday. This effectively means that their hourly wage falls below the minimum wage, as they are not compensated for additional hours worked.

This situation is a clear violation of labour rights and standards, which stipulate fair compensation for all hours worked, including overtime.

The impact of this unfair labour practice extends beyond the workers' financial situation. Observations in surrounding areas where workers live or rent rooms reflect how they are forced to survive on low incomes, many of them residing in slum-like environments. These homes are a reflection of the systemic issues stemming from unfair labour practices. The living conditions of these workers provide a stark illustration of the broader social and economic impacts of such practices. Our observation shows that in the surrounding areas where these workers live or rent rooms, the harsh realities of their lives are clearly visible.

Box 3: Exploitative working and living conditions

Workers find themselves caught in a challenging situation. Despite their existing hard work, they are compelled to labour further, driven by the need for a salary rather than facing unemployment. The feeder workers, all recruited from Sumba Island – the neighboring province, dare not resist due to their remote location, far from the safety of their village. This vulnerability is evident, as exemplified by the wife of one worker during an interview – she appeared fearful and uncomfortable, worried about being associated with the company and the potential repercussions for her husband.

… they are compelled to labour further, driven by the need for a salary rather than facing unemployment.

Deceptive practices and unfair bonuses. The workers have reported instances of deception. Although the feeders believe their yields are satisfactory, farm owners consistently attribute crop failures. Furthermore, the clarity surrounding bonuses remains murky. While the owners claim bonuses are tied to personal or group achievements, the reality is that they are calculated based on the overall success of all feeders. Consequently, the distinction between individual and collective accomplishments loses its meaning.

Movement restrictions. These migrant workers face heightened vulnerability due to restrictions on their movement. Both feeders and other workers are required to stay overnight on the farm during production periods unless explicitly permitted otherwise. The owner allows feeders a mere half-hour to venture out for essential daily needs.

Intimidation and harsh conditions. This company employs soldiers and thugs to maintain control and security over its workforce. Additionally, the working and living conditions are abusive. According to an informant, one pond used to subject workers to harsh discipline, forcing them to endure full days under the scorching sun – to "dry them out" rather than providing proper sustenance to the feeders. Their dwellings consist of small huts constructed by the feeders themselves, with tarpaulin walls.

Excessive overtime and urgent concerns. Feeder workers must remain on standby 24 hours a day, prepared for unforeseen situations such as blackouts or heavy rain. This situation underscores the urgent need for improved treatment of workers, ensuring their well-being and dignity in such challenging environments.

These living conditions are often characterized by overcrowding and poor sanitation, posing significant health risks to the residents. This not only affects their physical health but also their ability to work effectively, creating a vicious cycle of poor health leading to reduced income and further impoverishment. In essence, the unfair labour practices do not just rob these workers of fair wages; they also deny them the opportunity to lead decent lives. They perpetuate a cycle of poverty and hardship, trapping the workers and their families in difficult living conditions.

Demographics, mobility, and vulnerability of workers in shrimp supply chains

The general pattern in the seven provinces is that informal/daily workers are recruited from local villages, rather than onsite. In total, 86% of workers interviewed in shrimp farms and peeling sites were hired locally. However, 14% of shrimp farm workers and peeling shed workers were recruited from a distant province and therefore were internal migrant workers. These internal migrant workers had experienced exploitative conditions and lived on site (Box 2 and Box 3).

In general, the lowest level of workers (e.g. feeders in shrimp farm, peelers in processing) have a lower level of education (junior/senior high school and in some cases just elementary school). Workers with some diploma or university degrees are at the technician or administrative level and workers in some areas with junior high school degrees and more experience are also found at this level.[11]

Workers are gender segregated based on the types of work. Basically, shrimp farming is a male dominated sector. Shrimp farm workers and technicians are men around 20-50 years old. Women on the farm are restricted to cooking. In the traditional, family-managed farm, female family members (wife, children) may work with the men in feeding. At the hatchery, most workers are also men, where women are working as administrative or lab staff. Peeling processing is female dominated, and peeling workers in Lampung are mostly women from 20-40 years, mixed between married and unmarried women .

Groups of workers particularly vulnerable to exploitation are those recruited from other provinces and living in the company's compound, those with informal working arrangement and performance-based payment (peelers). Informal workers are vulnerable in terms of income and job security since the processing industry can find loopholes in existing labour regulations to avoid giving the workers their full rights. For example, feeders' **monthly wages in most locations are below the local minimum wage because of their informal status**, but they expect to be compensated during the harvest time with bonuses that is rarely realized. See how this deceptive payment scheme works on pages 19-20.

Recruitment and employment practices in shrimp supply chains

In most of our research sites, farm workers are recruited from the local area (the same district where the farms are located), especially if the farm owners or investors also come from the same district (e.g. in West Java or Banten). Even farm sites where investors were coming from outside of the local area, farm managers tend to recruit locals, with the exception of two sites in Lombok and East Java (Box 2 and 3). This practice of locally hired staff is often due to the local government's requirement or demand from the local informal authorities (strongmen).

Shrimp feeders on farms are often recruited by word-of-mouth. There is generally no formal contract, and workers are relatively free to leave the job and rejoin between seasons if they remain in good standing with their employer. In these particular circumstances, our researchers found no evidence of debt bondage. Similarly, women who work as peelers in Lampung province are mostly from the local area and recruited through word-of-mouth. There are also examples where local governments facilitate recruitment for farm workers, especially in the districts where farms are newly opened. Positions that requires more skills are sometimes advertised.

[11] Marriage status is relevant in the discussion about poverty in Indonesia because marriage has correlation with poverty reduction (being marriage reduces the poverty rate among families with children by 3.5 percentage points).

Availability of grievance mechanisms and/or unions in shrimp supply chains

There is very limited access to grievance mechanisms or unions throughout shrimp supply chains. With the exception of an international affiliated company in Lampung province, in general workers have limited meaningful and effective platforms to raise concerns. Workers with a formal working arrangement are better positioned to raise their concerns compared with the informal workers. Due to the lack of employment opportunities in Indonesia, many of the informants, such as shrimp peelers, feel that performance-based payment is reasonable, although they do not find their wages satisfactory. Since many of these workers are unaware of their rights, they do not recognize performance based pay or low wages as violations of the law. Even if there is a case of labour law violation, the collusion between business and government makes elevation of the case impossible. A review of court decisions in the last five years shows no settlements for disputes in the shrimp industry for informal workers.

In addition, this situation of voiceless workers is perpetuated by an increasingly ineffective regulatory framework, including the Omnibus law on job creation, as well as weak labour unions in this sector. See section on regulatory framework for how the Omnibus labour law is a hindrance to decent working conditions[12].

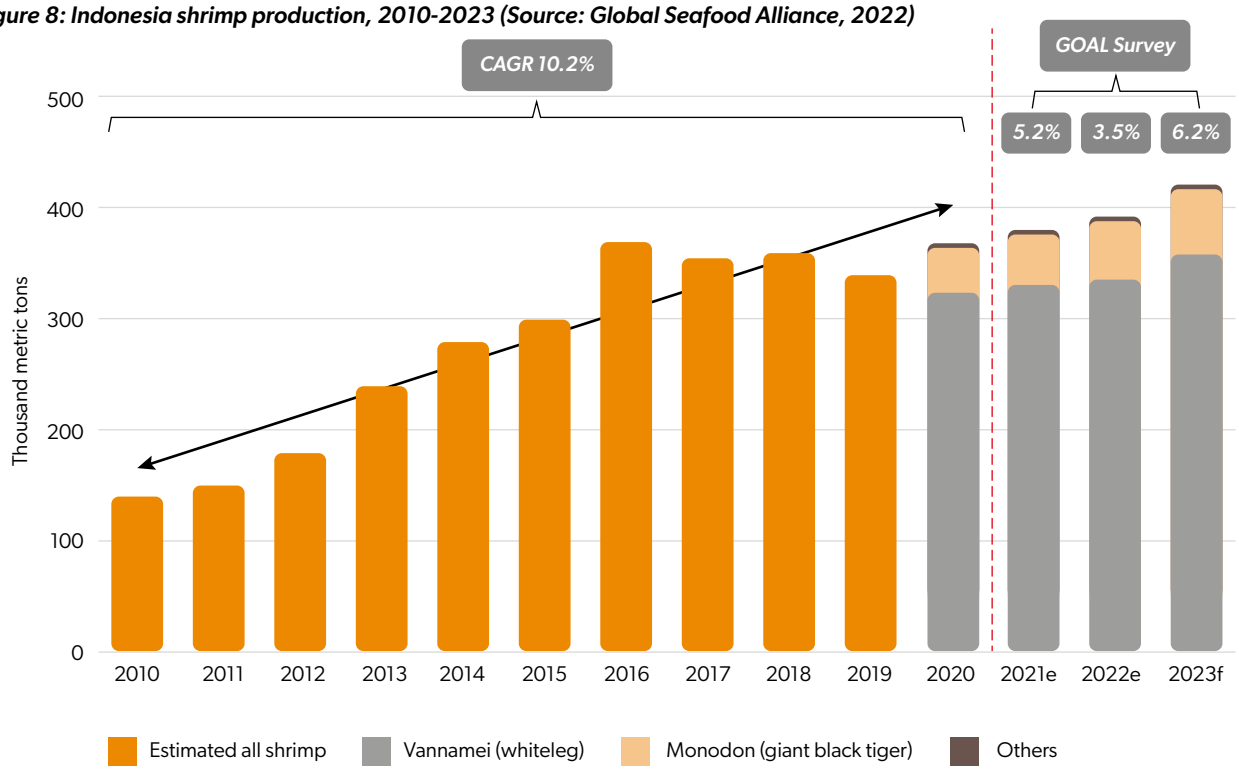
[12] Amidst law enforcement challenges, the Indonesian Omnibus Law has sparked significant apprehension regarding workers' rights. This comprehensive bill on job creation, approved by the House of Representatives in October 2020 – then revised in March 2023, imposes restrictions on labor rights and significantly diminishes the safeguards established by the 2003 labor law. Key areas impacted include minimum wages, severance pay, vacation, maternity benefits, and healthcare. These reductions expose workers to greater vulnerability. Furthermore, the law eliminates legal protections in non-permanent employment contracts, thereby weakening job security for workers. Notably, this extensive 1,000-page legislation was primarily crafted by the business community, with minimal input from labor unions and other affected groups. Critics contend that while promoting job growth and attracting investment are crucial objectives, they should not come at the expense of fundamental labor rights and the rights of Indigenous communities.

The setting: the architecture of Indonesia's export-oriented shrimp supply chain

Shrimp production. The primary shrimp species farmed in Indonesia is the whiteleg shrimp (Litopenaeus vannamei) which accounts for 80% of total shrimp production. The Asian Development Bank estimated that in 2021, Indonesia's shrimp production spanned 679,448 hectares of ponds, but many estimate that only about 40% of the farms are in production. Of these, 93% were traditional ponds, covering an area of 592,778 hectares, but contributing to only 17.4% of the total production volume (1 hectacre = 2.47 acres). Productivity varied across different systems: approximately 30 tons per hectare per year for intensive systems, 10 tons per hectare per year for semi-intensive systems, and a mere 0.6 tons per hectare per year for traditional ponds. Shrimp farming productivity in 2022 showed a decline compared to the previous year, with a value of only 10.68 tonnes per hectare, down from 11.7 tonnes per hectare in 2021 (ADB, 2022).

The FAO data on shrimp production in Indonesia differs significantly from the industry-reported data. According to adjusted figures, Indonesia's production was less than 350,000 tonnes in 2020, with black tiger shrimp accounting for less than 50,000 tonnes. The growth rate of 5.2% in 2021 was primarily driven by demand in the U.S. market, which remains the main market for Indonesian shrimp. As depicted in Figure 9, according the Global Seafood Alliance, looking ahead, the survey anticipates marginal increases in production at 3.5% in 2022, followed by a more substantial 6.2% in 2023 (Global Seafood Alliance, 2022).

Figure 8: Indonesia shrimp production, 2010-2023 (Source: Global Seafood Alliance, 2022)



At the Global Seafood Marketing Conference in early 2023, the shrimp panel was more optimistic with a forecast of 380,000 tonnes of vannamei shrimp in 2023 (Aqua Culture, 2024).

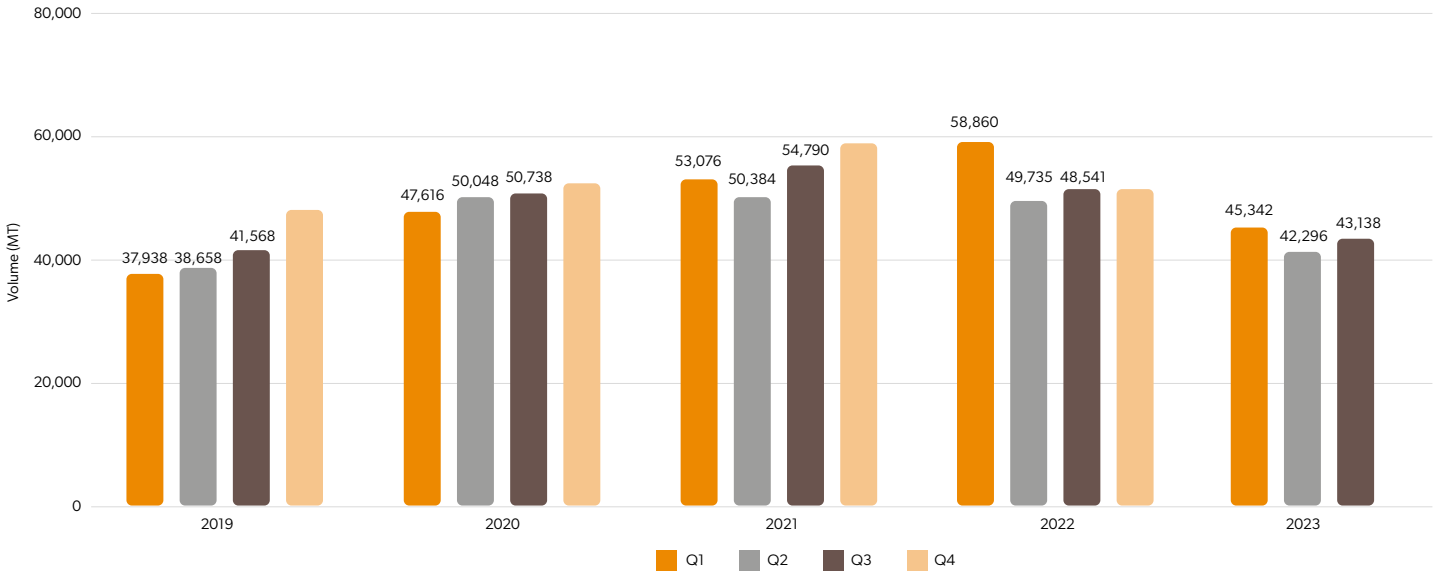
Figure 9: A semi-intensive shrimp farm in West Nusa Tenggara. Photo credit: © Akatiga and Migunani

Market and Export. In 2008, Indonesia held the distinction of being the third largest exporter of frozen shrimp globally, ranking third after Vietnam and Thailand. However, Indonesia's export growth has been relatively subdued compared to India and Ecuador. By 2016, Indonesia slipped to the fourth position, trailing behind India, Ecuador, and Vietnam, with an export share of 6-7 percent. As reported in ShrimpInsights.com in November 2023, year-on-year exports in the first three quarters of 2023 dropped by 17% (Figure 10)[13]. The negative price trend has significantly impacted the overall export value[14].

[13] Literature identified key factors to this decline from the supply side, including declining of production due to low survival rate (white spot diseases), price (Ecuador and other countries provide cheaper price), and domestic regulatory barriers (Indonesian government regulation that forces exporters to deposit part of their earnings in a government-controlled bank account).

[14] The benchmark farm gate prices of vannamei shrimp for 60 pc per kilogram in June 2023 were record low at USD 3.83 in Viet Nam, USD 2.88 in India, USD 3.62 in Indonesia and USD 2.20 in Ecuador.

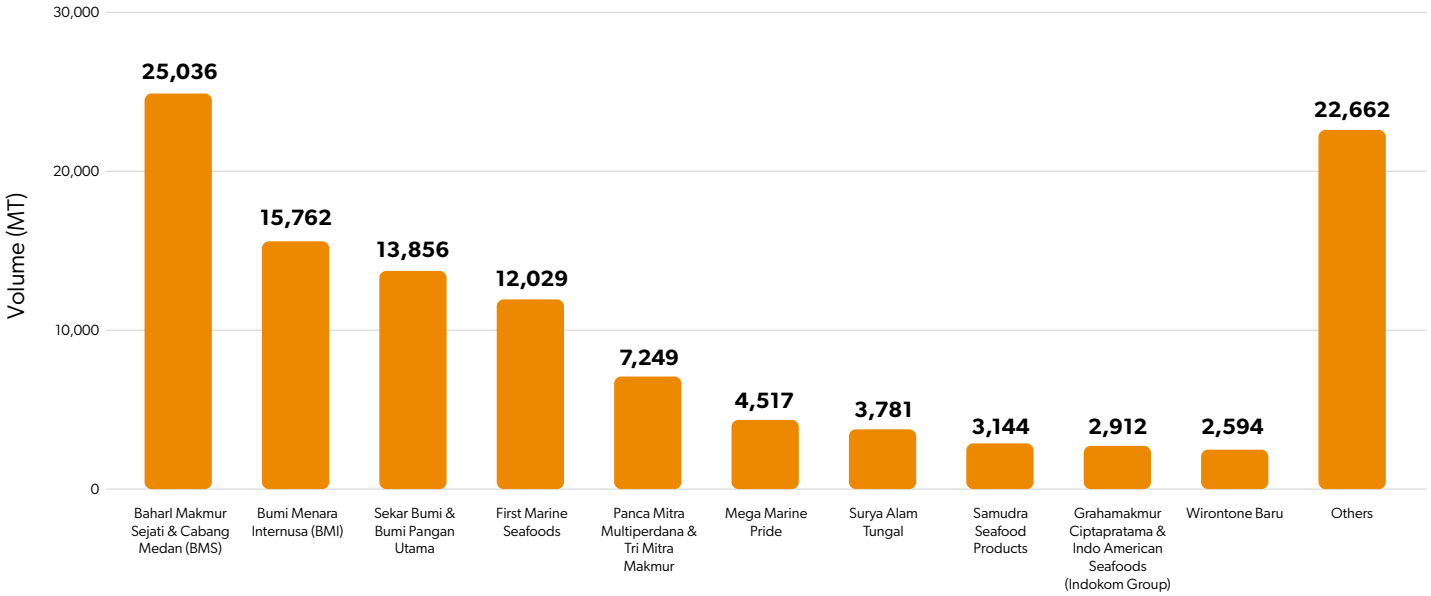
Figure 10: Indonesia's L. vannamei exports between 2019 and Q3 2023. Source: MMAF, in ShrimpInsights, 2024)



Between 2018 and 2023, approximately 68-80% of Indonesia's total shrimp exports were to the United States. However, after a 10% drop from 2021 to 2022, exports further decreased by 16% from 2022 to 2023 (*ibid*). Similarly, Indonesia's exports to Japan, which had been steadily increasing from 2020 to 2022, experienced a 16% decline in 2023. The other major export destination is China, but Indonesia's exports to China remain highly unpredictable. They appear to be influenced, at least in part, by a large integrated shrimp farming project in Maluku and Nusa Tenggara Timur province. However, the stability of production from this project remains uncertain.

The top four exporters to the U.S. are Bahari Makmur Sejati (BMS), Bumi Menara Internusa (BMI), Sekar Bumi, and First Marine Seafoods (Figure 11). Together they have a 60% market share. The other top 10 players jointly add 20% to that, and the top 10 altogether represent 80% of total exports to the U.S.

Figure 11: Top Indonesian Shrimp Exporters to US



In the context of U.S. shrimp imports, there is a notable level of consolidation. Major Indonesian players opt for a different approach by colLabourating with traditional U.S. importers. According to data from Rubio (cited in Pijl, 2023), the top 25 importers of Indonesian shrimp account for a significant 81% of total imports, while the top 10 importers represent 68% (as shown in Figure 12). Interestingly, this level of consolidation is even higher than that observed for U.S. imports from India, where the top 25 importers contribute only around 58% of total imports.

The key players in U.S. markets remain consistent, with Aqua Star (part of the Red Chamber Group) and Chicken of the Sea (part of Thai Union) leading the way. It is interesting to see the role of CP in Indonesian shrimp supply chain where CP sources from its network in Indonesia to supply to the EU via its network in Thailand, using Thailand as a hub for export to the EU.

Figure 12: Key US Importers of Indonesian Shrimp (Rubicon, cited in Pijl, 2023)

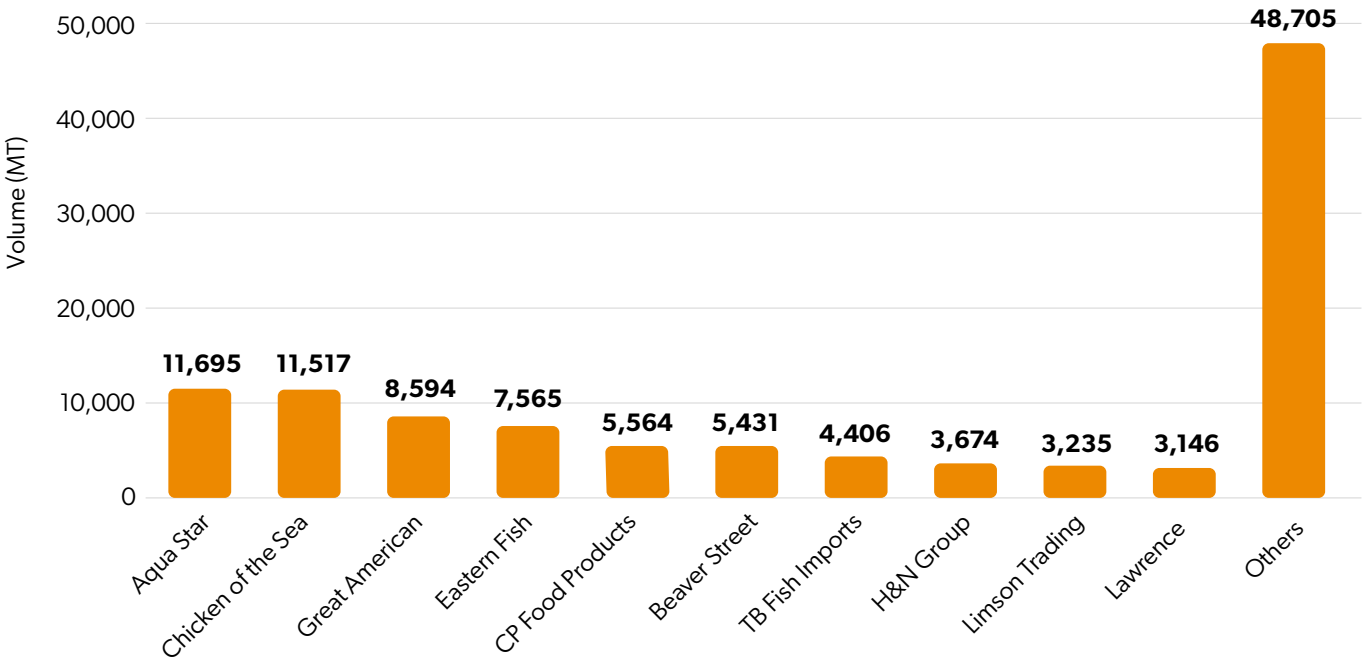


Figure 13: Hatchery. Photo credit: © Akatiga and Migunani

Direct export vs. export to intermediary countries for value-add processing and export to market states

In general, Indonesian shrimp is directly exported to the final point of sale. However, Charoen Pokphand business networks indicate a consolidation of the supply chain between Indonesia and Thailand, using Thailand as an intermediary for Indonesia's exports to Thai and European markets. Unlike most other major exporters, CP Prima does not focus heavily on the U.S. market. In 2021, CP Prima's exports to the U.S. amounted to only 1,325 metric tons, which is one-third of its total exports. Despite this, with a total export volume of 4,000 metric tons, CP Prima remains an overall top 10 exporter of Indonesian shrimp, primarily targeting Asian markets and the EU.

Buyers sourcing from supply chains connected to exploitative labour practices

While structural abuses are pervasive in supply chains, the study identified more obvious exploitation in traditional and semi-intensive shrimp farms and processing. Given at least half of Indonesia's shrimp production is supplied by these groups, and that the concentration of exporters and U.S. importers, we can hypothetically say that at least half of the exports managed by the top four exporters to the U.S. (who jointly have a 60% market share) – Bahari Makmur Sejati (BMS), Bumi Menara Internusa (BMI), Sekar Bumi, and First Marine Seafoods – are sourced from traditional and semi-intensive farms using processing with primarily informal employment arrangements. As noted throughout this report, informal employment arrangements increase the risk of exploitative labour and forced labour significantly as they operate in the grey area of the formal and informal sector where the certification apparatus found ineffective[15]. In addition to this, our observation in the area of Philips Seafoods in Lampung, PT Bumi Harapan Jaya in Sumbawa and most of the traditional farms in Banyuwangi, East Java have connections with those big exporters. See Table below for the link to exporters and retailers.

Table 1: Link to exporters and retailers

Grocer retailer:	Indonesian suppliers	Shrimp products:	Records:
Walmart USA	Bahari Makmur Sejati Modern Industri, Cikande, Serang, Banten 42186, Indonesia	Frozen Breaded Shrimp 18, 425 kg Frozen raw shrimp 18,583 kg Frozen raw shrimp 17,775 kg Frozen raw shrimp 17,775 kg Frozen raw shrimp 19,351 kg Frozen raw shrimp 17,775 kg Frozen raw shrimp 18,514 kg Frozen raw shrimp 18,212 kg Frozen raw shrimp and frozen cooked shrimp 18,617 kg Frozen raw shrimp 19,391 kg	March 30/31, 2024, PO Number 167354: https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=walmart+shrimp+indonesia&commit=Search
Walmart USA	Pt. Mega Marine Pride Desa Wonokoyo, Kecamatan Beji, Pasuruan, Jawa Timur, 67154, Indonesia	EZ Peeled raw shrimp 21,110 kg	March 30, 2024, https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=walmart+shrimp+indonesia&commit=Search

[15] While the literature generally mentions a weak social auditing process and lack of enforcement, including a heavy reliance on self-assessments, as the main factors contributing to the ineffectiveness of the certification regime in addressing forced labor in the shrimp supply chain, this study was informed by participants who outlined how complex and fragmented supply chains make traceability extremely difficult. The shrimp export industry has such complex supply chains that it can be difficult to trace the origin of products and verify labor practices. This complexity can allow products produced using forced labor to enter certified supply chains.

Grocer retailer:	Indonesian suppliers	Shrimp products:	Records:
Walmart USA	Pt Pabrik Lamongan Bmi Jl. Raya Sugio - Lamongan, Kabupaten Lamongan, Jawa Timur, Indonesia	Frozen shrimp, 24,510 kg Frozen shrimp, 25,510 kg	March 30, 2024, PO NUMBER: 2-38313, https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=walmart+shrimp+indonesia&commit=Search
Walmart USA	Bumi Pangan Utama Millennium industrial Estate, Peusar, Panongan, Tangerang, Banten 15710, Indonesia	Cooked, tail-on shrimp 23,527 kg	March 30, 2024, https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=walmart+shrimp+indonesia&commit=Search
Costco, Kirkland Signature Brand	Pt. Mega Marine Pride Desa Wonokoyo, Kecamatan Beji, Pasuruan, Jawa Timur, 67154, Indonesia	Frozen raw peeled, deveined tail-on shrimp, March 6 2024: 19,340 kg 19, 452 kg 19,620 kg January 30: 19,252 kg 19,220 kg	March 6, 2024, January https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=kirkland+shrimp+indonesia&commit=Search
Kroger, Signature Brand	Pt Pabrik Lamongan Bmi Jl. Raya Sugio - Lamongan, Kabupaten Lamongan, Jawa Timur, Indonesia	Frozen shrimp 17,876 kg Frozen shrimp 21,713 kg Frozen shrimp 22,226 kg Frozen shrimp 20,239 kg Frozen shrimp 20,159 kg Frozen shrimp 20,351 kg Frozen shrimp 19,974 kg	March 29, 15, February 28, 25, 22, 2024: https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=kroger+shrimp+indonesia&commit=Search
Kroger Signature Brand	Pt. Bumi Menara Internusa, Jl. Raya Gresik - Lamongan No.KM 40.200, Gajah, Rejosari, Kec. Deket, Kabupaten Lamongan, Jawa Timur 62291, Indonesia	Frozen shrimp 15,669 kg	February 25, 2024: https://panjiva.com/shipment_search/results?user_term=1&prefilter=none&type=us_imports&q=kroger+shrimp+indonesia&commit=Search

As imports into the U.S. are relatively consolidated, we can link the top four Indonesian exporters to major buyers in the U.S. such as Aqua Star (part of the Red Chamber Group) and Chicken of the Sea (part of Thai Union). Additionally, profit margin analysis (Table 1 and data from Gibson 2023) – which indicates at least 40% profit margin at the expense of longer working hours and harsh working conditions – provides a direct link between exploitative working conditions in Indonesia and U.S. shrimp retailers. A list of U.S., UK and EU importers and Indonesian exporters is available in Annex 1.

The enablers of forced labour in Indonesia's shrimp industries

Drivers of exploitative labour conditions

Both primary data collection and secondary sources corroborate the study hypothesis regarding the genesis and facilitators of abusive business models within Indonesia's export-oriented shrimp supply chain. The overarching theme revolves around structural factors that foster and perpetuate the prevalence of forced labour in Indonesia's shrimp supply chain, essentially reflecting market failure phenomena in rectifying unfair profit-maximizing business models. The key enablers are elucidated below.

Exploitative price and value chain structure. Just like other global commodities such as oil and coffee, many people consider shrimp price fluctuations as a simple economic equation of supply and demand. For instance, the decline in shrimp prices in 2023 was attributed to an oversupply (with Ecuador producing 19% more than in 2022) and weaker than expected Chinese demand, despite high feed costs incurred over the past two years. However, the consequences of these price fluctuations extend beyond mere business considerations.

We argue that the *pricing structure and business models within the shrimp supply chain significantly impact labour conditions*. How does this work? As illustrated in Table 1, where data is triangulated between published market prices and actual prices documented from interviews, the production segment (shrimp farm) emerges as the node with the lowest profit margin. Annual inflation rates ranging from 2.6% to 5.51%, combined with fluctuating prices (showing a downward trend) of up to 27% over the past three years, result in a narrow 10% profit margin, rendering the shrimp farm the most vulnerable link in the supply chain. This data indicates that Covid-19 pandemic has indifferent effect but the literature describe mixed opinion about that.

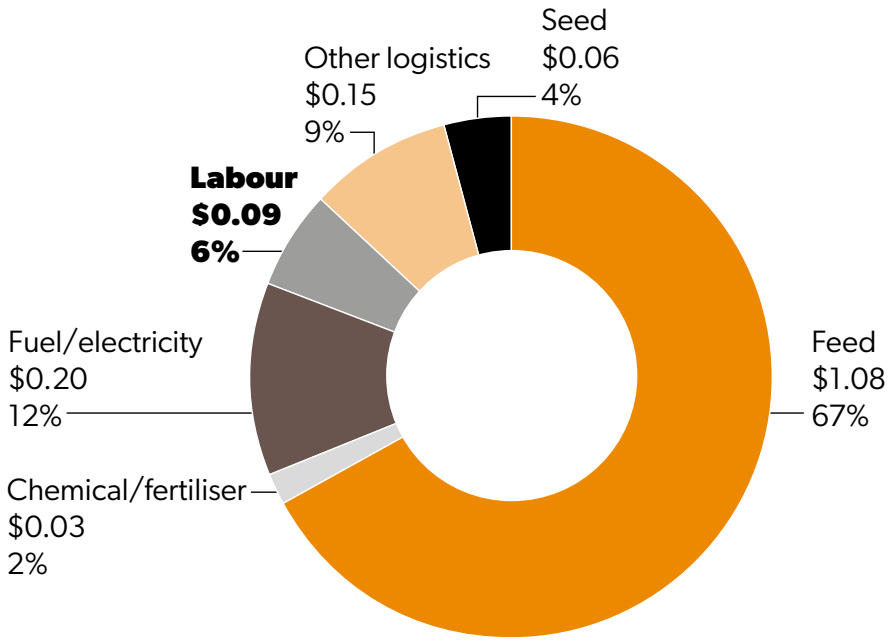
Table 2: Average price of Vannamei shrimp from Indonesia, 60pcs/kg in USD (2020-2023)

Description	Production cost	Farm gate price	Free on Board price	Wholesale/ importer price	Retailer price
Low price scenario	2.69	2.95	3.895	6.69	9.55
Profit margin		10%	32%	72%	43%
High price scenario	2.69	3.15	5.08	13.37	19.1
Profit margin		17%	61%	163%	43%

Source: Interviews combined with public information such as company websites, blogs and published analysis. The data presented is an average during the observed period but should not be perceived as exact. Price volatility, disease outbreaks, environmental concerns, currency fluctuations, and trade policies, will continue to shape the price. However, despite the recovering prices, the production segment will remain the lowest profit margin because the cost of production costs, especially shrimp feed is also on an upward trend.

Which element in the production segment is most vulnerable to the fluctuating global shrimp price? Feed, power, logistics/operations, labour, and seed constitute the primary elements in the production segment. Considering the escalating cost of shrimp feed (which has increased by 25% since early 2021 according to Villarreal, 2023), along with the increasing cost of electricity, logistics, and seed expenses, labour cost emerges as the element most likely to be reduced to retain economic viability of the industry. Feed represents between 40%-65% of total shrimp production costs (Figure 15), while labour is just 6%. **According to normative law, labour costs should be between 12-14%, double the current situation.**

Figure 14: Shrimp Production Cost Structure (vannamei/kg, median cost). Source: KIIS with farmers and salesperson feed and chemical)



A similar situation applies in the next segment of the supply chain from farm to exporter (cold storage and export). As described in Table 3, the median cost is USD 3.18 and the two elements that can be reduced within the exporters' sphere of control are price at the farm gate (production cost) and processing labour because other elements such as middlemen margin, storage , transportation etc. are beyond their control. Both cost structures at the production and export processes (business model) impact conditions in the bottom tiers of the supply chain, namely labour.

Table 3: Cost Elements from Farms to Exporter (Source: KIIs and published prices)

Cost item	Median cost/kg ($)
Production (from farm)	2.2
Middlemen margin	0.264 (12.05%)
Processing labour	0.02
Processing management cost	0.286
Storage	0.0016/day
Transportation	0.11
Handling fee	0.286 (13%)
Total	**3.18**

All the interviews confirm the strategy to adjust the impact of declining wholesale shrimp prices, while other elements of production cost soar. However, as reported by Gibson (2023), and in alignment with data in Table 1, supermarkets in the U.S., UK, and European Union (EU) managed to keep 40% profit by holding retail prices high. This confirms our proposition that international supply chain actors are key contributors to deteriorating labour conditions in the bottom tiers of the supply chain. The business model forces workers to pay a steep price to supply consumers with cheap shrimp through the following mechanisms:

Deceptive wages & indicators of forced labour: In all sites, informal farm workers and peelers receive inadequate compensation for their labour, leading to financial struggles. The shrimp industry in Indonesia perpetuates a low-wage regime by exploiting socio-economic vulnerabilities, as outlined in the conceptual framework (lack of employment opportunities, limited knowledge of labour rights, and lack of social protection). There are systemic findings of debt bondage and restriction of movement, achieved through creating a deceptive payment scheme (low basic salary and conditional bonus). Withholding bonuses retains staff despite poor working conditions, and paying low salaries forces workers to take salary advances. This creates a situation of debt bondage as they can't leave without settling the debt.

- While some workers' salary appears to be slightly above minimum wage, the reality is quite different. To earn minimum wage, workers are required to work more than the standard 8-hour workday. This effectively means that their hourly wage falls below the minimum wage, as they are not compensated for the additional hours worked.
- To keep business afloat, longer working hours are unavoidable due to worker reductions. This has led to harsh conditions and contributes to physical and mental strain for those employed in shrimp production (see Box 3).
- Use of contracts, lack of benefits: Many workers stay on contracts, despite working in the same role for many years, denying them of important social protections and benefits.
- The repercussions of unfair labour practices are far-reaching and extend well beyond the immediate financial implications for the workers. Forced to survive on low incomes, many of them reside in slum-like environments. The living conditions of these workers provide a stark illustration of the broader social and economic impacts of such practices.

Shrimp workers' conditions, as detailed in the section on forced labour conditions, are intertwined with the broader dynamics of the shrimp market. Cost-cutting measures negatively impact workers' conditions, leading to the conclusion that behind the lucrative profit margin and relatively convenience of inexpensive shrimp lies a human cost borne by those who toil in the supply chain.

Business model. The second critical factors contribute to the exploitation of workers in the shrimp sector is a business model where traceability faces chronic challenges, preventing retailers and buyers from tracing the product back to its origins. The certification regime for traceability in Indonesia has encountered difficulties in safeguarding workers' rights and environmental concerns. According to the Boston Consulting Group (BCG), shortcuts have been taken, hindering the achievement of comprehensive traceability (BCG, 2019).

In 2014, Indonesia's Ministry of Marine Affairs and Fisheries (MMAF) introduced the Aquacard, a traceability system aimed at helping buyers trace shrimp back to the farm of origin. However, it remains unclear how rigorously this system is enforced (*ibid*, 2019). Twelve information systems are managed by different government agencies, resulted in interoperability challenges. More recently, with support from the Food and Agriculture Organization (FAO), the MMAF developed the National Fisheries Traceability and Logistics System (STELINA). This integrated information system links data related to capture fisheries, aquaculture, food safety, and distribution points along the value chain. Despite its implementation, the effectiveness of this new system remains uncertain.

Traceability in Indonesia's shrimp supply chain keeps posing a challenge due to several factors, including the substantial involvement of more than 401,000 smallholders, spread in around 308,000 farms[16]. Dominant exporters continue to source from small holders, who predominantly operate in the ambiguous space between formal and informal sectors.

[16] It means that some farms belongs to one small holder. The number of shrimp farmers at 2021 is 401,841 people, more than 90% of them have been culturing Vaname shrimp since 2001. The area of shrimp culture reaches 247,000 hectares consisting of 90% of land for traditional systems, 8.3% semi-intensive systems and 1.7% intensive system, but until 2021 the active area is only 300,501 m 2 (54.6%). With average pond size is 0.79 hectare, it is estimated that there are about 308,00 shrimp farms in Indonesia. Although Indonesia is expanding intensive shrimp farming, ADB estimated in 2022 that the whiteleg shrimp (Litopenaeus vannamei) which accounts for 80% of total shrimp production and is cultivated by large companies and about 50% of the smallholders (ADB, 2022). The study confirm this estimation. CP Prima that operates vertically integrated model participating in a policy called " kampong vannamei" to source from shrimp farmer.

A domestic shrimp and fish market, NTB. Photo credit: © Akatiga and Migunani

The consolidation of the Indonesia/U.S. shrimp trade exists on both sides. Indonesia's processing industry is relatively consolidated with large players such as BMS and BMI dominating exports and the U.S has large well-known importers such as Aqua Star, Chicken of the Sea, and Great American Seafood that dominate imports from Indonesia. Efforts to improve traceability could leverage this agglomeration pattern.

The cost structure of Vannamei shrimp reflects a phenomenon of asymmetric access to technologies[17] between supply chain actors, where suppliers for inputs (feed, seed, and additives) control cost elements, placing labour costs at the bottom tiers of the value chain. On the supply/production side, the exploitative business models take advantage of vulnerabilities of the host government. In provinces where the local government is weaker, businesses exploit this weakness by avoiding the protection of informal workers.

On the demand side, the monopsony power of U.S. retailers and their effect on the shrimp market is evidenced by their ability to keep 40% profits amid declining global shrimp prices by holding shrimp prices at record highs ($17-27/kg). The profit/value is not shared along the supply chain, and they are still purchasing/buying at low prices, resulting in a huge squeeze on labour costs in the supply chain (as set out above).

Socio-economic factors. The third contributing factor is related to socio-economic and governance/structural factors, each of them described below.

Abundant supply of cheap labour due to significant unemployment and informal sector in Indonesia's economy. The structure of Indonesia's labour market puts workers at risk of forced labour, especially for the unemployed and those working in the informal sector. The underlying factors are concentrated poverty and regional disparities/inequality. Nearly 30% of Indonesia's population falls within an expenditure range between the poverty line (approximately USD 35.5) per capita per month and 1.5 times that threshold. Inequality remains a pressing issue in Indonesia. Several regions in Eastern Indonesia, particularly in Nusa Tenggara Timur and Papua, face poverty rates surpassing 30%. In addition, there is a significant number of internal migrants (about 12 percent of the population (around 32 million people) are internal migrants.

[17] It refers to imbalances in power and expertise. Most supply chain relationships exhibit asymmetry. One party often possesses more power or expertise than the other. Focal companies with less expertise may receive less power distribution but face greater uncertainty in supply chain relationships. For instance, a supplier of inputs (such as shrimp feed and seed) may control cost elements due to their technological advantage in feed formula and control to inputs, while downstream actors (like shrimp farms and early processors) may have less expertise and face uncertainty.

The structure of Indonesia's labour market puts workers at risk of forced labour, especially for the unemployed and those working in the informal sector. In 2023, about 7.85 million Indonesians had no job (Indonesia's unemployment rate stood at approximately 5.32 percent, with the labour force comprising over 147.7 million people). For those who have jobs, the majority do not have 'good jobs'[18] and do not earn enough to provide an entry point to the middle class (World Bank, 2020). For example, in agriculture sector (shrimp is under this category), which accounts for almost a third of all employment, less than 3% of all workers earn a middle-class wage (defined as at least IDR 3.7 million per month, or US $260). Moreover, more than 59 percent of those whose jobs were engaged in informal employment are in construction, agricultural and fisheries industries. More broadly, half of all salaried employees do not have a written contract, and employer compliance with severance pay and social security benefits is limited. As reported by the World Bank (*ibid*), Indonesia need not worry as much about the quantity of jobs as the quality of those jobs.

In Indonesia, the sector of agriculture-forestry-fisheries stands out with the most significant negative elasticity value, specifically -0.57 percent. This value indicates that for every 1 percent increase in GDP within the agriculture-forestry-fisheries sector, there will be a corresponding 0.57 percent reduction in the availability of employment. Moreover, the labour supply elasticity in this sector is notably the lowest compared with other sectors, signifying that changes in labour supply due to a percent change in wages are inelastic (Yoong and Sander, 2021). In other words, even if labour wages decrease due to declining shrimp prices, it won't significantly impact the supply of labour in the shrimp sector because at population level, there are abundant of desperate people live below the poverty line and lack of livelihood opportunities. This economic-employment structure explains that exploitation of labour in shrimp sector in the form of pressing labour wages will not hurt the industry in terms of labour supply.

Box 4. Poverty in fisheries sector.

In Indonesia, the fisheries sector grapples with significant poverty rates. Approximately 11.34% of individuals working in this sector are classified as poor, surpassing the poverty rates observed in other fields such as restaurant services (5.56%), building construction (9.86%), and waste sorting (9.62%). Despite its crucial role in the economy, the fisheries profession remains financially precarious for many. Data from the Indonesian Statistics Bureau (BPS) shows that the number of workforces actively engaged in aquaculture has decreased over the years. In the year 2020, there were 2,238,847 workers, declined 10.25% from the previous years.

Underlying push factor: poverty and inequality. Poverty is considered one of the factors of the abusive labour market (LeBaron et al, 2019). In Indonesia, shrimp farming is categorized under fishery sector where proverty prevails (Box 4). The Central Statistics Agency (BPS) recently reported that as of March 2023, 9.36% of the population (approximately 25.9 million people) lived below the national poverty line (approximately USD 35.5 per capita per month), a slight decrease from the 9.18% recorded in March 2022. While some districts and cities have managed to keep poverty rates below 5%, many others still struggle with rates exceeding 10%.

Nearly 30% of Indonesia's population falls within an expenditure range between the poverty line and 1.5 times that threshold. These individuals face living conditions not significantly different from those below the poverty line. Vulnerable to unexpected events such as illness, job loss, crises, or disasters, they struggle to maintain stability. Moreover, more than a third of districts and cities have over 40% of their population classified as poor or vulnerable. In March 2023, the national poverty line was set at Rp 550,458 (approximately USD 35.5) per capita per month, with 66% of this amount allocated for food (BPS, 2023).

[18] International Labor Organization's 'Decent Work' agenda refers to a broad situation, namely "opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity". Other sources provide some criteria include stability, safe working conditions, collective bargaining rights, and regulations against arbitrary dismissal (Rodrik and Sabel, 2019).

Inequality remains a pressing issue in Indonesia. Several regions in Eastern Indonesia, particularly in Nusa Tenggara Timur and Papua, face poverty rates surpassing 30%. The Asian Development Bank estimates that the economic impact of the COVID-19 pandemic could push an additional 15.6 million people below the international poverty line of $1.90 per day. In March 2023, Indonesia's Gini Ratio, a measure of income inequality, stood at 0.388 where zero (0) means equal and 1 refers to completely inequal.

Internal migration. Being a migrant may make certain individuals more vulnerable to forced labour than others (IOM, 2019). In Indonesia, about 12 percent of the population (around 32 million people) are internal migrants. It ranks 43rd globally in terms of migration intensity, according to the World Migration Report 2022. This percentage is higher than that of India (the lowest at 5 percent), the Philippines, and Thailand, but quite close to Vietnam (ranked 42nd) and China (ranked 41st).

A longitudinal study using data from the Indonesia Family Life Survey sheds light on internal migration patterns in Indonesia (Pardede, 2020). This research examines individual characteristics, household structures, and economic factors that influence migration decisions. Age, education, marital status, previous migration experience, dependents, family size, and income significantly impact migration choices. Gender also plays a role, with female heads of households more likely to engage in various types of migration, including migration for spouse or child reasons. Residents of Java are less likely to migrate within smaller spatial scales but are relatively active in inter-provincial migration. Urban-originating moves are more common than rural-originating moves, except in Sumatra, where rural residents exhibit a higher probability of inter-provincial migration.

Harvest time, shrimp pond in East Java. Photo credit: © Akatiga and Migunani

Regulatory framework. Weakened regulations and lack of law enforcement are also another enabler of forced labour. According to the Labour Rights Index 2022 (LRI, 2022), Indonesian workers face challenges in accessing decent work, with Indonesia's overall score being 60.5 out of 100. This score places Indonesia in a similar range as Thailand (62) and India (65). In contrast, Vietnam falls under the category of "Reasonable Access to Decent Work" with a score of 75. Unfortunately, the Index does not cover Ecuador. However, the Global Rights Index issued by the International Trade Union Confederation (2023) rates countries based on their compliance with collective labour rights and documents violations by governments and employers regarding internationally recognized rights.

In Indonesia, there are specific laws and regulations related to the fishery sector, but unfortunately, none of them specifically address workers in the aquaculture shrimp sector. Law No. 45/2009 pertains to the fishery sector and covers various aspects. However, it does not specifically focus on aquaculture shrimp workers. Existing regulations prioritize the protection of seafarers in ocean capture fisheries. These provisions aim to safeguard the rights and well-being of those working at sea. Workers in the aquaculture shrimp supply chain are typically classified either as agriculture workers or industry workers. Their rights and protections fall under regular labour laws applicable to these categories. Interviews with government officials at national level and provincial levels documented confusion among them about the responsible agencies for protection of workers in shrimp sectors.

Amidst law enforcement challenges, the Indonesian Omnibus Law has sparked significant controversy regarding workers' rights. This comprehensive bill on job creation, approved by the House of Representatives in October 2020 and revised in March 2023 (UU No. 6/2023), imposes restrictions on labour rights and significantly diminishes safeguards established by the 2003 labour law. Key areas impacted include minimum wages, severance pay, vacation, maternity benefits, and healthcare. These reductions expose workers to greater vulnerability. Furthermore, the law eliminates legal protections in non-permanent employment contracts, thereby weakening job security for workers. Notably, this extensive 1,000-page legislation was primarily crafted by the business community, with minimal input from labour unions and other affected groups. Critics contend that while promoting job growth and attracting investment are crucial objectives, they should not come at the expense of fundamental labour rights and the rights of Indigenous communities.

Low wage regime and ineffective regulation. For the fishery sector, Indonesia is still applying an old belief in economic development that encourages the use of low wage labour to induce manufacturing opportunities. Indonesia implements a minimum wage system that only applies to formal workers while the majority of shrimp farms operate in informal sector area, unregistered and untaxed. Those who operate in the formal sector and are taxed hire many of their workers without contracts, proper wages and benefits. The exploitative business models also abuse weak law enforcement and policy gaps in Indonesia, sustaining the monopsony power of employers due to abundant supply of cheap manual workers and lack of livelihood opportunities).

The underpinning assumption is that a cheaper labour force helps to make the country competitive on a global scale, and this ultimately is the first step involved with a country leaving a traditional agrarian lifestyle and beginning basic manufacturing.

Indonesia implements a minimum wage system that varies across its provinces. Among these, Jakarta, the capital city, boasts the highest minimum wage at USD $316 per month. In contrast, the lowest minimum wage is observed in Nusa Tenggara Timur Province, amounting to approximately USD $136 per month. However, it is important to note that this minimum wage regime only applies to formal workers, with notes on inconsistent enforcement in some cases. Given more than 59 percent of employees engage in informal employment, these workers often fall outside the scope of formal minimum wage regulations and can result in workers receiving pay below the official minimum wage. Also, despite these established rates, there have been reports of inadequate enforcement (see regulatory framework section).

Conclusion

Due to the inherent characteristics of business models and regulatory requirements, input nodes of the shrimp supply chain, such as shrimp feed and seed segments, as well as the cold storage/final processing and exporters, predominantly operate within formal industry settings that engage formal employment practices. However, approximately half of the production segment, comprising almost all shrimp farms and early processing stages, operates with informal employment practices. While formal employment does not guarantee freedom from forced labour conditions, the study suggests that employment status (formal or informal) serves as a significant predictor of such conditions. Field work findings indicate that workers in formal employment typically receive wages comparable to the minimum wage (although in some cases, they may receive less) in their respective provinces, have contracts, and are paid regularly. This industrial setup and field work observations suggest a higher likelihood of the presence of indicators of forced labour in the shrimp farm and early processing nodes due to the prevalence of informal employment arrangements including no contracts, piece wage payment systems, no transparency on payment rate and unpaid overtime. In many cases, there is deception and coercion at play in different ways.

… a higher likelihood of the presence of indicators of forced labour in the shrimp farm and early processing nodes due to the prevalence of informal employment arrangements including no contracts, piece wage payment systems, no transparency on payment rate and unpaid overtime.

Although some ILO forced labour indicators, such as the restriction of movement, isolation, physical and sexual violence, and retention of identity documents are not widespread, other forced labour indicators are evident. Overall, a systematic pattern of human rights violations is observed in the forms of exploiting vulnerabilities, deception, withholding of bonuses/benefits that lead to debt bondage, abusive working and living conditions, and excessive overtime.

The implication of this industrial setup is that at least half of the exported shrimp are sourced through abusive business models, given half of Indonesia's shrimp production originates from traditional and semi-intensive farms.

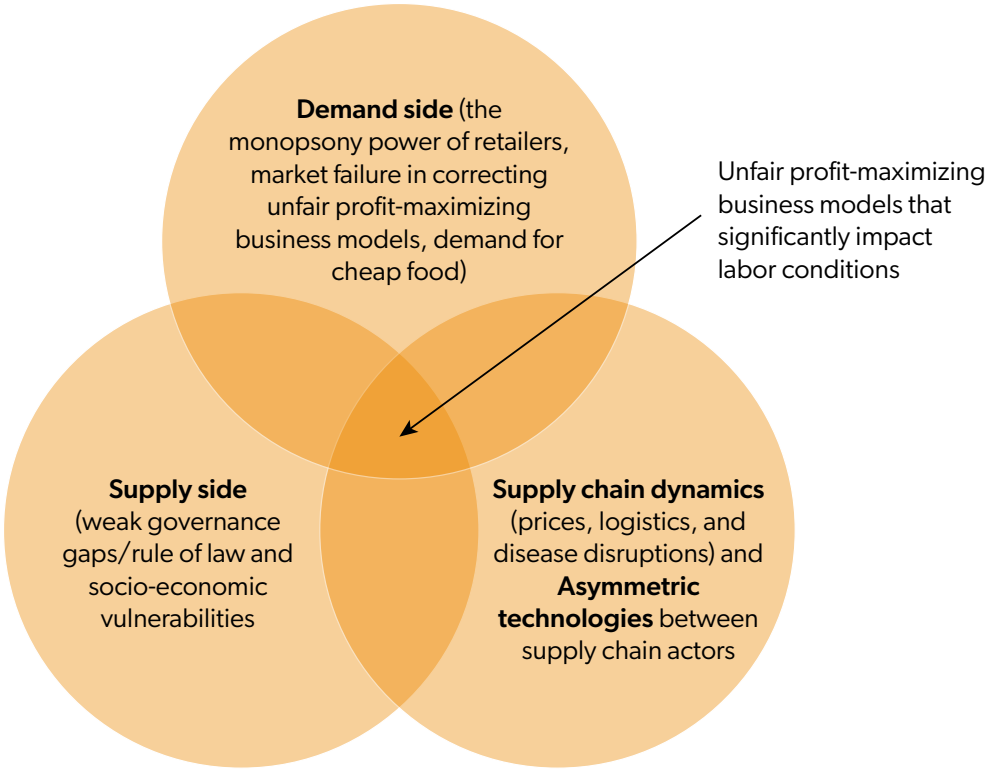
The study also highlights the significant impact of the pricing structure within the shrimp supply chain on labour conditions. The production segment (shrimp farm) emerges as the node with the lowest profit margin (10%). With annual inflation rates ranging from 2.6% to 5.51%, coupled with fluctuating prices (showing a downward trend) of up to 27% over the past three years, a 10% profit margin renders the shrimp farm the most vulnerable link in the supply chain.

Given the rising expenses of shrimp feed, as well as increased costs in power, logistics, and seed expenses, **labour costs become the primary target for reduction to maintain the economic viability of the industry.** This trend extends to the subsequent stage of the supply chain, particularly in cold storage and export. Within the exporters' sphere of control, the two elements that can be reduced are the price at the farm gate and processing labour. The cost structures at both the production and export processes directly impact conditions in the lower tiers of the supply chain, particularly labour.

The data presented in this study illustrates a clear correlation between the demand-side factors (such as the monopsony power of retailers in export countries and market failures in addressing unfair profit-maximizing business models) and the supply-side factors (including weak governance, rule of law issues, and socio-economic vulnerabilities) with labour conditions (Figure 15). Alongside supply chain dynamics,

such as pricing, logistics, and disease-related disruptions, and the asymmetric distribution of technologies among supply chain actors, these combined forces contribute to the proliferation of unfair profit-maximizing business models that have a significant impact on labour conditions.

Figure 15: The creation of forced labour conditions in shrimp supply chain



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Appendix:

List of US, UK or EU importers and Indonesian exporters

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Southwind Foods Long Beach, United States of America 2. Aqua Star Usa Seattle, United States of America 3. Eastern Fish Teaneck, United States of America 4. H&N Group City Lands of Los Angeles, United States of America 5. Tampa Maid Foods Lakeland, United States of America 6. White Oak Commercial Finance Albany, United States of America 7. Lawrence Wholesale Vernon, United States of America 8. Relish Foods Culver City, United States of America 9. Great American Seafood Import Long Beach, United States of America 10. Censea Northbrook, United States of America 11. James J Boyle Monterey Park, United States of America 12. Beaver Jacksonville, United States of America 13. Rod International Downey, United States of America 14. Global Seafood Sourcing Bolingbrook, United States of America 15. Cape Gourmet Seafood United States of America 16. Az Gems Redlands, United States of America 17. Blue Sea Products Perth Amboy, United States of America 18. William A Flegenheimer El Segundo, United States of America 19. King & Prince Seafood Fanwood, United States of America 20. Pacific Seafood Group Clackamas County, United States of America 21. Tb Fish Import City Lands of Los Angeles, United States of America 22. H & N Foods International Vernon, United States of America 23. Steer Chesapeake, United States of America 24. Vfp Asset Funding United States of America 25. King And Prince Seafood United States of America 26. Endeavor Seafood Newport, United States of America 27. Choice Canning City of Jersey City, United States of America 28. To Order Bahari Makmur Sejati Benton, United States of America 29. Williams Clarke United States of America 30. H & T Seafood Bell Gardens, United States of America 31. High Liner Foods Portsmouth, United States of America 32. C P Food Products Columbia, United States of America 33. H And N Foods International Vernon, United States of America 34. Joseph C Murray And Aura, United States of America 35. Southern Fisheries Pinecrest, United States of America 36. Limson Trade Norwalk, United States of America 37. Expack Seafood Woodbridge, United States of America 38. Direct Source Seafood Redmond, United States of America 39. International Marketing Specialist West Newton, United States of America 40. Rubicon Resources Culver City, United States of America 41. Gourmet Fusion Foods Culver City, United States of America 42. Tiaa Fsb F/K/A Everbank Parsippany, United States of America 43. Sea Port Products Kirkland, United States of America 44. United Seafood Enterprises Township of Randolph, United States of America 45. Seafood Castle Monterey Park, United States of America 46. Mpi Fisheries Import Vernon, United States of America 47. Chicken Of The Sea Frozen Foods Manhattan Beach, United States of America 48. Watermark Foods City Lands of Los Angeles, United States of America 49. Harbor Seafood New Hyde Park, United States of America	Bahari Makmur Sejati	Utama Modern Industri Aa1 Serang Banten 42186 Indonesia	Food safety management system (HACCP) as well as Good Manufacturing Practice (GMP) standard; Best Aquaculture Practice (BAP) program; claimed to be in compliance with BRC Global Standard for Food Safety.

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. C P Food Products Columbia, United States of America 2. Aqua Star Usa Seattle, United States of America 3. Chicken Of The Sea Frozen Foods El Segundo, United States of America 4. To Beaver Jacksonville, United States of America 5. Eastern Fish Teaneck, United States of America 6. Beaver Jacksonville, United States of America 7. Suram Trade Miami, United States of America 8. Southwind Foods Long Beach, United States of America 9. White Oak Commercial Finance Albany, United States of America 10. H & T Seafood Bell Gardens, United States of America 11. The Fishin Homestead, United States of America 12. Cape Gourmet Seafood United States of America 13. Seattle Shrimp & Seafood Seattle, United States of America 14. Jc Murray Hillside, United States of America 15. Choice Canning City of Jersey City, United States of America 16. Lawrence Wholesale Vernon, United States of America 17. Wells Fargo Capital Finance Charlotte, United States of America 18. Fishin Homestead, United States of America 19. To S S C Union City, United States of America 20. Lipari Foods Warren, United States of America 21. Az Gems Redlands, United States of America 22. Joseph C Murray And Aura, United States of America 23. Imaex Trade Suwanee, United States of America 24. Red Chamber Vernon, United States of America 25. Censea Northbrook, United States of America 26. Jomara Seafood Hialeah, United States of America 27. Ssc Union City, United States of America 28. W & T Seafood Brooklyn, United States of America 29. Lotus Seafood Pueblo Lands of San Diego, United States of America 30. Mpi Fisheries Import Vernon, United States of America 31. Liberty Seafood Horsham, United States of America 32. Blue Sea Products Perth Amboy, United States of America 33. Ore Cal City Lands of Los Angeles, United States of America 34. A&V Seafood Investments New Milford, United States of America 35. Mazzetta Highland Park, United States of America 36. To Bankunited N A United States of America 37. International Marketing Specialist West Newton, United States of America 38. Crystal Cove Seafood Floral Park, United States of America 39. Pacific Coral Seafood Miami, United States of America 40. Seafood Castle Monterey Park, United States of America 41. International Gourmet Fisheries City Lands of Los Angeles, United States of America 42. The Mazzetta Highland Park, United States of America 43. Hanwa American Seattle, United States of America 44. To Order Pueblo Lands of San Diego, United States of America 45. To Evertrust Bank Rowland Heights, United States of America 46. Southern Fisheries United States of America 47. Ocean Bistro Vernon, United States of America 48. Stavis Seafoods Boston, United States of America	Sekar Bumi Tbk	Jl Jenggolo Ii/17 Sidoarjo Jawa Timur Indonesia	FDA, HACCP, world food safety organisation, best aquaculture practices, BRC 

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Aqua Star Usa Seattle, United States of America 2. Tb Fish Import Vernon, United States of America 3. King & Prince Seafood Brunswick, United States of America 4. High Liner Foods Portsmouth, United States of America 5. Pltc Costa Mesa, United States of America 6. Ocean Bistro Vernon, United States of America 7. Handy Seafood Salisbury, United States of America 8. Lawrence Wholesale Vernon, United States of America 9. King And Prince Seafood United States of America 10. Censea Northbrook, United States of America 11. Chicken Of The Sea Frozen Foods El Segundo, United States of America 12. Sea Delight Miami, United States of America 13. Ael Seafood Enterprises Fort Lee, United States of America 14. Tampa Maid Foods Lakeland, United States of America 15. Eastern Fish Teaneck, United States of America 16. Heron Point Seafood Newmarket, United States of America 17. Ssc Union City, United States of America 18. Harbor Seafood New Hyde Park, United States of America 19. Anova Food Pueblo Lands of San Diego, United States of America 20. Orca Bay Foods Renton, United States of America 21. Seattle Shrimp & Seafood Seattle, United States of America 22. Empire Group, Paterson, United States of America 23. To The Order Of Miami, United States of America 24. Grobest Seafood Global La Verne, United States of America 25. Relish Foods Culver City, United States of America 26. Grobest Global Service La Verne, United States of America 27. North Atlantic Seafood Waltham, United States of America 28. North Atlantic Import Portland, United States of America 29. Az Gems Redlands, United States of America 30. Pacific Seafood Group Clackamas County, United States of America 31. 2Nd Notify Party Phillips Foods Halethorpe, United States of America 32. Monarch Trade Vernon, United States of America 33. Vfp Asset Funding Boca Raton, United States of America 34. Handy International Salisbury, United States of America 35. Beaver Jacksonville, United States of America 36. Tampa Bay Fisheries United States of America 37. Great American Seafood Import Vernon, United States of America 38. Gourmet Fusion Foods Culver City, United States of America 39. Arista Industries Wilton, United States of America 40. Cape Gourmet Seafood United States of America 41. C P Food Products Columbia, United States of America 42. National Fish And Seafood Gloucester, United States of America 43. Ore Cal City Lands of Los Angeles, United States of America 44. Sunnyvale Seafood Union City, United States of America 45. International Marketing Specialist West Newton, United States of America 46. Southwind Foods Vernon, United States of America 47. Blue Sea Products Perth Amboy, United States of America 48. Livingston International Norfolk, United States of America 49. Ocean World Ventures, Chicago, United States of America 50. United Seafood Enterprises Township of Randolph, United States of America	Bumi Menara Internusa	No 1 Dampit Malang Jawa Timur Indonesia	Not available

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Aqua Star Usa Seattle, United States of America 2. Tb Fish Import City Lands of Los Angeles, United States of America 3. Lawrence Wholesale Vernon, United States of America 4. Ocean Bistro Vernon, United States of America 5. Censea Northbrook, United States of America 6. King & Prince Seafood Brunswick, United States of America 7. Sea Delight Coral Springs, United States of America 8. Monarch Trade Vernon, United States of America 9. Pltc Costa Mesa, United States of America 10. Beaver Jacksonville, United States of America 11. Ael Seafood Enterprises Fort Lee, United States of America 12. Az Gems Redlands, United States of America 13. King And Prince Seafood United States of America 14. High Liner Foods Portsmouth, United States of America 15. Ssc Union City, United States of America 16. Eastern Fish Teaneck, United States of America 17. C P Food Products Columbia, United States of America 18. Empire Group Paterson, United States of America 19. Choice Canning City of Jersey City, United States of America 20. Chicken Of The Sea Frozen Foods El Segundo, United States of America 21. The Fishin Homestead, United States of America 22. Heron Point Seafood United States of America 23. Handy Seafood Salisbury, United States of America 24. Orca Bay Foods Seattle, United States of America 25. Seattle Shrimp & Seafood Bellevue, United States of America 26. Grobest Seafood Global La Verne, United States of America 27. Rod International Santa Fe Springs, United States of America 28. Tampa Maid Foods Lakeland, United States of America 29. Nova Sea United States of America 30. Wells Fargo Capital Finance Charlotte, United States of America 31. North Coast Seafoods Boston, United States of America 32. Efishery C/O Candor North Pompano Beach, United States of America 33. Nova Cold Storage Town of Dighton, United States of America 34. Stellar Seas Import Westmont, United States of America 35. Seafood Import Pueblo Lands of San Diego, United States of America 36. International Seafood & Bait United States of America 37. North Atlantic Seafood Waltham, United States of America 38. Tai Foong Usa Seattle, United States of America 39. Ocean World Ventures Westmont, United States of America 40. Jp Morgan Chase Bank Chicago, United States of America 41. Great American Seafood Import Long Beach, United States of America 42. Mpi Fisheries Import Vernon, United States of America 43. Cape Gourmet Seafood United States of America 44. Arista Industries Wilton, United States of America 45. Blue Sea Products Perth Amboy, United States of America 46. Eastman Kodak Teaneck, United States of America	Pabrik Lamongan PT BMI	Raya Lamongan-Gresik Km 40 Dusun Gajah Desa Rejosari Kecamatan Deket Lamongan Jawa Timur Indonesia	Not available
1. Export Packers United States of America 2. John S Connor Glen Burnie, United States of America 3. Bbva Compass Houston, United States of America 4. 3Rd Notify Party Or Other Notify Party Bbva Usa Houston, United States of America 5. Party Or Other Notify Party Bbva United States of America 6. John Deere Commercial Products Chesapeake, United States of America 7. To Order Halethorpe, United States of America	Phillips Seafoods Indonesia's	Jl Ir Sutami Km7 Tanjung Karang T Bandar Lampung Indonesia	Not available

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Calgrain Canada 2. International Feed Canada 3. Archer Daniels Midland Decatur City, United States of America 4. Swift Trade Group Canada 5. Cargill Meat Solutions Canada 6. Jbs Usa Canada 7. Flint Hills Resources Canada 8. Gavilon Ingredients Omaha, United States of America 9. Globerunners United States of America	Japfa Comfeed Indonesia Tbk		ASC, BAP, BRGS, seafood saver, GMP, HACCP, ISO 9001,FSSC 22000, halal Indonesia, NKV, SNI, Cosher certificate, ISO 9001 2015, Food safety ISO 22000, Program managemen resiko, Smeta
1. Ael Seafood Enterprises Fort Lee, United States of America 2. Eastern Fish Teaneck, United States of America 3. C P Food Products Columbia, United States of America 4. Lawrence Wholesale Vernon, United States of America 5. Zalo Fresh Frisco, United States of America 6. Limson Trade Norwalk, United States of America 7. Kyokuyo America Seattle, United States of America 8. Wismettac Asian Foods Santa Fe Springs, United States of America 9. Rod International Santa Fe Springs, United States of America 10. Beaver Jacksonville, United States of America 11. Blue Sea Products Perth Amboy, United States of America 12. Sea World United States of America 13. Terra Sea Trade United States of America 14. To Evertrust Bank Vernon, United States of America 15. Chicken Of The Sea Frozen Foods El Segundo, United States of America 16. Limson Canada Richmond, Canada 17. Ssc Union City, United States of America 18. Arista Industries Wilton, United States of America 19. Certi Fresh Foods United States of America 20. Imaex Trade Duluth, United States of America 21. Kohyo America Torrance, United States of America 22. Sea Lion International Hammondville, United States of America 23. Worldwide Seafood Products Perth Amboy, United States of America 24. Cincinnati Seafood Import Ponte Vedra Beach, United States of America 25. New York Customs Brokers Jamaica, United States of America 26. White Oak Commercial Finance Albany, United States of America 27. Censea Northbrook, United States of America 28. Tb Fish Import United States of America 29. Southwind Foods Long Beach, United States of America 30. To The Order Of Hammondville, United States of America 31. Ocean Garden Products Pueblo Lands of San Diego, United States of America 32. Liberty Seafood Horsham, United States of America 33. Sea Ranch Purveyors Arcadia, United States of America 34. Ocean Bistro Vernon, United States of America 35. Az Gems Redlands, United States of America 36. To Order Tri Mitra Makmur United States of America 37. Sterling Seafood Cresskill, United States of America 38. Trans Ocean Products Bellingham, United States of America 39. H&N Group Vernon, United States of America 40. Mpi Fisheries Import Vernon, United States of America 41. F C Gerlach Lawrence, United States of America 42. William Clarke United States of America 43. Global Seafood Sourcing Bolingbrook, United States of America 44. Gourmet Fusion Foods Culver City, United States of America	Tri Mitra Makmur	Dusun Laok Bindung Rt 02 Rw 03 Landangan Kapongan Situbondo Indonesia	Not available

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Beaver Jacksonville, United States of America 2. Eastern Seafood Distributors Jacksonville, United States of America 3. C P Food Products Columbia, United States of America 4. Richwell Group La Puente, United States of America 5. Ocean Bistro Vernon, United States of America 6. Lawrence Wholesale Vernon, United States of America 7. Lin S Distribution Phoenix, United States of America 8. Williams Clarke United States of America 9. Monarch Trade Vernon, United States of America 10. Censea Northbrook, United States of America 11. Sea Lion International Hammondville, United States of America 12. Pacific Coral Seafood Miami, United States of America 13. Wismettac Asian Foods Santa Fe Springs, United States of America 14. Imaex Trade Duluth, United States of America 15. Suram Trade Miami, United States of America 16. Baywatch Seafood Temple City, United States of America 17. Seattle Shrimp & Seafood Seattle, United States of America 18. Ocean World Ventures Chicago, United States of America 19. Crystal Cove Seafood Floral Park, United States of America 20. Metafoods Atlanta, United States of America 21. Global Quality Foods Hayward, United States of America 22. To El Rey Usa Meats And Seafood Chicago, United States of America 23. Inter Ocean Seafood Trader El Potrero de San Carlos, United States of America 24. Pacific American Fish Vernon, United States of America 25. Chicken Of The Sea Frozen Foods El Segundo, United States of America 26. Lin S Distribution Houston Katy, United States of America 27. Kohyo America Torrance, United States of America 28. El Rey Usa Meats & Seafood Chicago, United States of America 29. Midland Food Products Toronto county, Canada 30. Aaa International Seafood Vernon, United States of America 31. Choice Canning City of Jersey City, United States of America 32. Cape Gourmet Seafood United States of America 33. North Food Group Dallas, United States of America 34. Quirch Foods Miami, United States of America 35. Ssc Union City, United States of America 36. Koryeo International City of Jersey City, United States of America 37. Blue Sea Products Perth Amboy, United States of America 38. Az Gems Redlands, United States of America 39. International Marketing Specialist West Newton, United States of America 40. Five Star Seafoods Arcadia, United States of America 41. Ruby Seas International Carteret, United States of America 42. Mpi Fisheries Import Vernon, United States of America 43. Fresh Select Seafood Brooklyn, United States of America 44. Eastern Fish Teaneck, United States of America 45. Hanwa American Seattle, United States of America 46. Seafood Castle Monterey Park, United States of America 47. Jomara Seafood Hialeah, United States of America 48. Trans Ocean Products Bellingham, United States of America 49. Seafresh Trade Temple City, United States of America 50. Harbor Seafood New Hyde Park, United States of America	Wirontono Baru	Our company currently consists of more than **2,300** skilled workers. Our plants are located in Jakarta, Balaraja (Tangerang-Banten), and Banjarmasin (South Borneo), producing a total 8,000 M/T annual output of processed shrimps in 2020. Our product is export-oriented, of which about is sold to 51% to USA, 22% to Japan, 23% to Europe	BAP, 4 star certified, BRCS, HACCP, GMP,

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1. Chicken Of The Sea Frozen Foods El Segundo, United States of America 2. Aqua Star Usa Seattle, United States of America 3. Eastern Fish Teaneck, United States of America 4. The Fishin Homestead, United States of America 5. C P Food Products Columbia, United States of America 6. White Oak Commercial Finance Albany, United States of America 7. Beaver Jacksonville, United States of America 8. Williams Clarke United States of America 9. Limson Trade Norwalk, United States of America 10. Monarch Trade Vernon, United States of America 11. Fishin Homestead, United States of America 12. Lotus Seafood Pueblo Lands of San Diego, United States of America 13. Cape Gourmet Seafood United States of America 14. Seattle Shrimp & Seafood Bellevue, United States of America 15. Joseph C Murray And Aura, United States of America 16. Suram Trade United States of America 17. Lawrence Wholesale Vernon, United States of America 18. Choice Canning City of Jersey City, United States of America 19. Red Chamber Vernon, United States of America 20. Ael Seafood Enterprises Fort Lee, United States of America 21. Southwind Foods Long Beach, United States of America 22. Flegenheimer International El Segundo, United States of America 23. John Deere Commercial Products Chesapeake, United States of America 24. Az Gems Redlands, United States of America 25. Censea Northbrook, United States of America 26. Seoul Trade Englewood, United States of America 27. Ssc Union City, United States of America 28. Worldwide Seafood Products Perth Amboy, United States of America 29. Pacific Coral Seafood Miami, United States of America 30. Sea Lion International Hammondville, United States of America 31. H & T Seafood Bell Gardens, United States of America 32. Steer Chesapeake, United States of America 33. Harbor Seafood New Hyde Park, United States of America 34. Liberty Seafood Horsham, United States of America 35. Quirch Foods United States of America 36. Wells Fargo Capital Finance Charlotte, United States of America 37. Crystal Cove Seafood Floral Park, United States of America 38. Great American Seafood Import Long Beach, United States of America 39. Jc Murray Aura, United States of America 40. Seafood Castle Monterey Park, United States of America 41. Hanwa American Seattle, United States of America 42. Sunnyvale Seafood Union City, United States of America 43. Imaex Trade Duluth, United States of America 44. Trans Ocean Products Bellingham, United States of America 45. Watermark Foods City Lands of Los Angeles, United States of America 46. A&V Seafood Investments New Milford, United States of America 47. Southern Fisheries Miami, United States of America 48. Mpi Fisheries Import Vernon, United States of America 49. William A Flegenheimer El Segundo, United States of America	Bumi Pangan Utama	Jl Millenium Raya Blok L1No 1 Tangerang Indonesia	Part of PT Sekar Bumi located in Cikupa, Tangerang – Banten.

Importer's Name/customer's (US, UK or EU):	Exporter's Name:	Address for shrimp peeling/office :	Certifications:
1. Chicken Of The Sea Frozen Foods El Segundo, United States of America 2. White Oak Commercial Finance Albany, United States of America 3. Eastern Fish Teaneck, United States of America 4. Beaver Jacksonville, United States of America 5. Ore Cal City Lands of Los Angeles, United States of America 6. Jc Murray Hillside, United States of America 7. To Order Northbrook, United States of America 8. Ifc Seafood Sainte-Lucie-des-Laurentides, Canada 9. Wild Bull Services Chandler, United States of America 10. Aqua Star Usa Seattle, United States of America 11. Amerin Monrovia, United States of America 12. Choice Canning City of Jersey City, United States of America 13. Williams Clarke United States of America 14. Southwind Foods Long Beach, United States of America 15. Rod International Santa Fe Springs, United States of America 16. Williams And Clarke United States of America 17. Ael Seafood Enterprises Fort Lee, United States of America 18. Northwestern Selecta United States of America 19. Lipari Foods Warren, United States of America 20. Pacific Seafood Group Clackamas County, United States of America 21. Logan Walker Edward J Zarach & Associates Bensenville, United States of America 22. To The Order Of Parrish, United States of America 23. Limson Trade Norwalk, United States of America 24. Seattle Shrimp & Seafood Seattle, United States of America 25. Ocean Bistro Vernon, United States of America 26. Blue Sea Products Perth Amboy, United States of America 27. Fortune Import1068 Thorndale United States of America 28. Five Star Seafoods Arcadia, United States of America 29. Censea Northbrook, United States of America 30. Pacific Coral Seafood Miami, United States of America 31. Nicci Sheptick Edward J Zarach & Associates Customs Brokers & International Fre1099 Pratt United States of America 32. Mazzetta Highland Park, United States of America 33. Vfp Asset Funding Central Point, United States of America 34. Az Gems Redlands, United States of America 35. Cape Gourmet Seafood United States of America 36. International Marketing Specialist United States of America 37. Mpi Fisheries Import Vernon, United States of America 38. Harbor Seafood New Hyde Park, United States of America 39. High Liner Foods Portsmouth, United States of America 40. Bonamar Miami, United States of America 41. Bama Sea Products Saint Pete Beach, United States of America 42. To Order Mega Marine Pride Whitewater, United States of America 43. Tb Fish Import Vernon, United States of America 44. Ssc Union City, United States of America 45. Stile Associates North Valley Stream, United States of America 46. Direct Source Seafood Redmond, United States of America 47. Sea World United States of America 48. Damco Customs Services South Gate, United States of America 49. Star Agro Marine Pasadena, United States of America 50. National Fish And Seafood Gloucester, United States of America	Mega Marine Pride	D S Wonokoyo Kec Beji Pasuruan 67154 Jawa Timur Indonesia	

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