

# Women Workers in the Asian Seafood Processing Industry

Case Studies from  
Bangladesh and India







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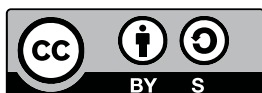
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Cover Photo features

Women workers engaged in the seafood processing industry  
look at the approaching fishing boats from the coast of Gujarat.

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Society for Labour and Development (SLD), India, is a Delhi-based labour and women's rights organization that believes in equitable development through social and economic well-being of labour, migrants and women workers; and through cultural renewal among disenfranchised people. SLD is a national organization that originated with a focus in the National Capital Region and works with partners in Bihar, Gujarat, Jharkhand and Uttar Pradesh.

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KARMOJIBI NARI

Karmojibi Nari (KN), Bangladesh, is a non-profit, non-government, women-led organisation. Registered in 1991, KN works to advance the rights, dignity, and authority of women workers by organising formal and informal sector women workers and engaging in legal and policy advocacy. KN also seeks to strengthen and increase women's participation and leadership in trade unions, development policy, and national women's movements.

[www.karmojibinari.org](http://www.karmojibinari.org)

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# Abbreviations and Acronyms

<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FGD</b>	Focus Group Discussion
<b>GIDC</b>	Gujarat Industrial Development Corporation
<b>GVC</b>	Global Value Chain
<b>IQF</b>	Individual Quick Freezing
<b>KN</b>	Karmojibi Nari
<b>PPE</b>	Personal Protective Equipment
<b>SLD</b>	Society for Labour and Development
<b>SPI</b>	Seafood Processing Industry
<b>TNC</b>	Transnational Corporation
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>US</b>	United States
<b>WTO</b>	World Trade Organization

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## Introduction

Globally, seafood consumption is on the rise, facilitated by global value chains (GVCs) that provide consumers across the world with seafood sourced and processed overwhelmingly in Asia and Africa. Seafood processing plants constitute the main interface between domestic value chains and international markets, and accordingly have emerged as an important site of food safety regulation. For the most part, however, these standards do not extend to protecting the rights of workers employed in seafood processing—an overwhelmingly female workforce.

On seafood GVCs as a whole—including fisheries, aquaculture, seafood processing and all related services—women represent half of the total working population worldwide (World Bank 2012; OECD 2014). While male workers dominate fisheries and aquaculture, women workers comprise the vast majority of workers employed in seafood processing. Consistent with these global trends, in both Bangladesh and India, the majority of workers employed in fishing and fish farming are men, but the seafood processing industry (SPI) is dominated by women workers.

In Bangladesh and India, the seafood industries include seafood capture and processing segments of seafood GVCs. This research seeks to understand how GVCs, factory employment structures, and local workforce dynamics in Bangladesh and India interact to set working conditions for women employed in seafood processing—including wages and hours, occupational health and safety, exposure to gender-based violence and harassment (GBVH), and conditions for freedom of association.

We answer these questions with in-depth case studies of the seafood processing industries in Bagerhat and Khulna Districts, Bangladesh; and Veraval-Somnath, Gujarat Industrial Development Cluster (GIDC) India. Together, these sites include both fish and shrimp value chains. They encompass lower end manual seafood processing as well as secondary processing of higher value products requiring significant automation. Our case studies draw from field engagement by Karmojibi Nari (KN) in Bangladesh and the Society for Labour and Development (SLD) in India, including information collected through engagement with more than 250 women employed in seafood processing in the Bagerhat area; and 250 women employed in seafood processing in the Veraval-Somnath GIDC.

**Part 1, Global context of the seafood processing industry**, sets the backdrop for this research. It details the global rise in seafood consumption, and the structure of seafood GVCs, including brief discussions of harvesting, processing, distribution, and marketing segments.

**Part 2, Shrimp processing in Bagerhat and Khulna Districts, Bangladesh**, presents the findings of our investigation on working conditions for women employed in shrimp processing factories in Bagerhat and Khulna Districts. The section begins with a discussion of local shrimp value chain segments. It then lays out how shrimp harvesting patterns in Khulna District create seasonal work, with spikes and dips in processing during harvest times within the season. Factories manage this routine variation in workforce requirements by hiring workers daily and monthly through recruitment intermediaries.

As a result, processing workers have no direct employment relationship with the factory, excluding them from labour rights protections. Without labour standards protections, seafood processing workers—who are, for the most part, women—are exposed to poor working conditions, including low wages, extended working hours, and occupational health and safety risks. As temporary workers, they face significant challenges in exercising their fundamental rights to freedom of association and accessing relief when they face rights violations.

**Part 3, Seafood processing in the Veraval-Somnath Gujarat Industrial Development Corporation (GIDC) Cluster**, lays out the findings of our research on working conditions for women employed in seafood processing factories in the Veraval-Somnath GIDC. It provides an overview of the local processing segments, and their interaction with raw materials and export markets. Seafood processing in this area is also seasonal. Local women from villages surrounding the Veraval-Somnath GIDC are hired by factories through recruitment intermediaries from their villages. Accordingly, they have no direct employment relationship with the factories in which they work. Factories also hire migrant women, predominantly from the Northeastern States of India, who live in employer provided housing above factories. This bifurcated workforce of local and live-in migrant workers provides employers with round-the-clock access to labor to process fresh catch on demand. Due to the role of recruitment intermediaries in meeting factory labor requirements, women workers hold no direct employment relationships with the factories where they work and are therefore excluded from labor rights protections. These conditions have significant implications for wages, occupational health and safety, gender based violence and harassment (GBVH), and freedom of association.

In each of these case studies, our research found that labor conditions for women workers are shaped by a complex interaction between global and local forces: GVC dynamics on one hand; and local labor markets and employment practices on the other, including practices of gendered workforce segmentation that circumscribe opportunities for women workers, leaving them overwhelmingly concentrated in low wage temporary positions.





**Table 1: Summary of rights violations and risk factors across research areas in Bangladesh and India**

	<b>Bagerhat and Khulna Districts, Bangladesh</b>	<b>Veraval-Somnath GIDC, India</b>
<b>Gendered management structure</b>	Male supervisors, women workers hired on a temporary basis make up the majority of workers	
<b>Low Wages</b>	BDT 4,500 to BDT 6,675 (USD 52.22 - 77.46) a month	INR 8,000 to 10,000 (USD 106.14 to 132.67) per month
<b>Extended working hours</b>	12-14 hour shifts	12 hours shifts
<b>Occupational health and safety risks</b>	Overwork in cold temperatures; cuts and skin infections due to inadequate safety equipment; regular fevers and headaches; eye-infections; respiratory problems; joint, leg, lower back, back, and shoulder pain from repetitive activities for long hours.	
<b>GBVH</b>	Locally specific patterns of physical and mental harms; sexual harm and suffering; coercion, threats, and retaliation, and deprivations of liberty	
<b>Risk factors inhibiting freedom of association</b>	<ul style="list-style-type: none"> <li>» Employment as contract workers with no formal employment relationships with seafood processing factories</li> <li>» Incentives for recruitment intermediaries who are from workers communities to mediate challenges between factory management and workers and maintain a stable and compliant workforce</li> <li>» Retaliation for reporting workplace violations</li> <li>» Extended working hours + prevention of meetings between workers during the workday, making it difficult for workers to meet and organize</li> <li>» Temporary employment, undermining job security and increasing worker mobility between factories</li> <li>» Challenges in organizing for women workers in workplaces structured by gendered hierarchies, with male workers in supervisory and management positions and women workers in subordinate positions.</li> </ul>	

**Part 4, Labour rights on seafood value chains**, considers how lead firm bargaining power on seafood value chains interacts with food safety regulations and raw product availability to set the labour rights context for seafood processing workers. On one hand, complex safety standards and regulations together have led to relatively stable relationships between lead firms and a relatively small number of exporters. On the other hand, lead firms still dominate these value chains: in this global economic crisis precipitated by

COVID-19, for instance, lead firms were able to significantly shift the costs of supply chain disruptions onto downstream firms and their workers by canceling orders and refusing to pay for already produced and even partially received goods. Between fluctuating costs of raw seafood inputs, and fluctuating costs of market prices in a globally integrated market, stable relationships with lead firms do not necessarily translate into stable margins. The financial risks of this instability are transferred by seafood processing factories onto their workforce, via temporary employment stints, low wages, and little investment in the health, safety, and skills upgradation of processing workers. In Bangladesh and India, where there is significant surplus labour in the overall national labour market, processing factories are able to hire women workers to fill these temporary positions despite low wages and poor working conditions. Relatively stable business relationships do, however, provide a basic framework for addressing labor standards. Lead firms have the ability and the standard enforcement processes in place to include labor rights alongside food safety and quality standards. In particular, additional research is required on strategies for infusing product traceability aimed at consumer safety and supply chain management with enforceable labor rights protections.

These complex dynamics call for sustained research and analysis in order to develop robust recommendations for a slate of actors with roles to play in transforming these dynamics—including local seafood processing firms, lead firms on seafood supply chains, policymakers in production countries, policy makers in headquarter economies of lead firms, and trade unions and workers organizations. Accordingly, in Part 5, Areas for further research, we end with an agenda for further research that aims to develop a framework of action for transforming working conditions for women workers in Bagerhat and Khulna Districts of Bangladesh, and Veraval-Somnath, GIDC in India.

## Recommendations

- » Lead firms should include labor rights alongside food safety and quality standards. In particular, they should develop strategies for infusing product traceability aimed at consumer safety and supply chain management with enforceable labor rights protections. They should reward processing factories and exporters who include the costs of living wages, eight-hour working shifts, adequate occupational health and safety measures, and social security in costing seafood products by maintaining preferred relationships with these suppliers.
- » The Governments of Bangladesh and India should extend labor rights protections to all workers, including all temporary workers, employed in seafood processing factories. This includes establishing and enforcing wage and hour protections, occupational health and safety standards, freedom of association protections, and proactive measures to end all forms of GBVH.
- » Seafood processing factories should include the costs of living wages, eight-hour working shifts, adequate occupational health and safety measures, and social security in costing seafood products.
- » Trade unions and workers organizations should continue initiatives to support seafood processing workers to form collectives engaged in identifying and addressing rights violations. These collectives should take measures to establish links with trade unions and workers organizations across global seafood value chains, including in fishing, aquaculture, transport, and retail. Worker organizing across countries and value chain segments has the potential to address lead firm practices of capturing the gains of value chains by driving down labor standards and working conditions.





# Research Methods







## Objectives and research questions

This research was conducted as part of a joint initiative by Karmojibi Nari (KN), Bangladesh, and Society for Labour and Development (SLD), India supported by Der Deutsche Gewerkschaftsbund Bildungswerk (DGB). This multi-country initiative aims at Organizing Women Workers in the Seafood Processing Industry (SPI), and Building and Strengthening their Leadership within Workers' Collectives in India and Bangladesh. Complementing field-based programming, this research aims to understand the interaction between global value chain (GVC) and local labor market dynamics to inform organizing initiatives and develop a common framework for advocacy to advance the rights of women workers engaged in the SPI.

Accordingly, this research sought to answer the following questions: What are the working conditions for women workers, including wages, occupational health and safety, risk factors for GBVH, and conditions for advancing freedom of association? How do GVC dynamics—including raw materials supply, seafood processing, and distribution and marketing segments—inform the labor context in seafood processing factories? How does the structure of employment in project areas, including labour contracting and factory-level subcontracting practices, relate to labour standards?

In studying the experiences of seafood processing workers, this research engages in network-based rights mobilization as a research practice (Nathan and Silliman Bhattacharjee et. al. 2022: 21). This approach seeks to use positions of power in knowledge generation to address extreme imbalances in both information and power. It does so by using research opportunities to strengthen network relations among research participants at all stages of the research process. Consistent with this approach, we conducted field investigations alongside initiatives by KN and SLD to support women workers in forming local collectives to identify and address shared workplace concerns. Between March 2020 and December 2021, KN and SLD field initiatives supported 250 women living in Bagerhat District and employed in seafood processing in Bagerhat and Khulna Districts in Bangladesh; and 270 women employed in seafood processing in the Veraval-Somnath GIDC in India to form village-level local collectives. These collectives of women workers also engaged in training to develop as leaders, and identify and respond to labour rights violations and workplace violence—including but not limited to gender based violence and harassment (GBVH).



In the long term, we also aim to use this research in advocacy to advance decent work in the SPI. Such an approach joins a line of research committed to ‘pragmatic solidarity’ (Farmer 2003)–not only perceiving social inequalities but also challenging and transforming inequalities of power (for example, Holmes 2013; Chatterji 2015; Nathan and Silliman Bhattacharjee et. al. 2022). Consistent with this approach, our dissemination strategy will include bringing findings back to the local women who participated in this research through their collectives; and to the broader network of KN and SLD allies including national and international trade unions, workers’ and women’s organizations, and other civil society organizations.

## Data collection



### Bangladesh

In Bangladesh, research for this report was conducted by Karmojibi Nari (KN), beginning in October 2020 and extending until December 2021. This period included the second wave of COVID 19 infections in Bangladesh from March - May 2021, with a seven-day national lockdown from April 5-12, 2021; and the third wave from May-August 2021, with two lockdowns in July 2021.

Consistent with the network-based research methodology employed in this study, data was collected alongside programming aimed at forming village-level collectives of women workers who live in Bagerhat District and work in seafood processing factories in the Bagerhat and Khulna Districts of Khulna Division, Bangladesh. Between October 2020 and December 2021, this program engaged with more than 250 women, including repeated

interactions with these women workers during the programme and research cycle. Significant to our network-based research practice, KN will sustain engagement with these women workers, through their collectives, beyond the duration of the research cycle.

Researchers and programme staff employed a range of data collection methods, including semi-structured group discussions, surveys, and interviews with women workers engaged in seafood processing; interviews with government officials and industry stakeholders; and embedded ethnography across the shrimp value chain, including visits to the wholesale shrimp fry markets, hatcheries, shrimp farms, sub-depots and depots that aggregate shrimp from small farmers and sell them to factories, seafood processing factories, and the villages and homes of women employed in the SPI. This mixed method approach sought to adapt to the shifting field engagement and data collection context during successive waves of the COVID 19 pandemic in Bangladesh. Field notes and transcripts were analyzed in November and December 2021, including multiple phases of hand coding to develop the findings presented in Part 3 of this study.

**Table 2: Data collection phases and methods employed in Bagerhat and Khulna Districts, Bangladesh**

Research phase	Data collection sources and methods	Dates	Number of workers engaged
<b>Preliminary site investigation (social mapping)</b>	<ul style="list-style-type: none"> <li>» 5 consultations (3-4 hours each) with government officials and other stakeholders in the Rupsa Upazila, Khulna District, Bangladesh, including Upazila Administrators, Union Parishad leaders, school teachers and social workers</li> <li>» Visits to 8 villages in Rakhalghachi Union Parishad, Bagerhat Upazila; Lakhpur Union and Piljanga Union, Fakirhat Upazila</li> </ul>	October - November 2020	» Engagement with 96 women workers
<b>Embedded ethnography</b>	<ul style="list-style-type: none"> <li>» KN field engagement with more than 250 women workers and recruitment intermediaries from 12 villages, including regular meetings to support women workers in forming village-level workers collectives</li> <li>» Visits to the wholesale shrimp fry markets, hatcheries, shrimp farms, depots that aggregate shrimp from small farmers and sell them to factories, processing factories, and the villages and homes of women employed in the SPI</li> <li>» Regular contact with workers through direct contact, phone contact, and visits to KN offices</li> </ul>	October 2020 - December 2021	» Engagement with more than 250 women workers
<b>COVID 19 impact assessment</b>	<ul style="list-style-type: none"> <li>» Survey of 150 workers</li> <li>» Two FGDs in Bagerhat District including a total of 18 workers</li> <li>» Key informant interviews with representatives of employers, civil society organisations, and labour rights NGOs</li> </ul>		Engagement with more than 168 women workers

<p><b>Village-level group meetings with women workers</b></p>	<ul style="list-style-type: none"> <li>» Formation of 15 groups across program villages, including at least 16-17 group members and identified group leadership structure</li> <li>» Monthly meetings with village-level groups designed to elicit issues of concern for women workers</li> </ul>	<p>October 2020 - December 2021</p>	<ul style="list-style-type: none"> <li>» Engagement with more than 250 women workers</li> </ul>
<p><b>Trainings for women workers</b></p>	<ul style="list-style-type: none"> <li>» 16 group trainings for women workers addressing gender, legal rights at work, government entitlements, employment negotiation, and leadership development, including 15 women workers per training</li> <li>» 2 advanced trainings on leadership, including 25 women per group</li> <li>» 15 trainings on gender sensitization for male workers, including 10 workers</li> <li>» Note: Trainings included opportunities for women workers to share their own experiences in these areas</li> </ul>	<p>October 2020 - December 2021</p>	<ul style="list-style-type: none"> <li>» Engagement with more than 250 women workers</li> <li>» Engagement with more than 150 male workers</li> </ul>







## India

In India, research for this report was conducted by SLD, beginning in August 2019 and extending until December 2021—a period that saw the unanticipated rise of the global COVID 19 pandemic and two national lockdowns (March - August 2020, March - May 2021).

Consistent with the network-based research methodology employed in this study, data was collected alongside programming aimed at forming village-level collectives of local women workers employed in seafood processing in the Veraval-Somnath Gujarat Industrial Development Corporation (GIDC). Between August 2019 and December 2021, this programme engaged with more than 270 women, including repeated interactions during the programme and research cycle.

Significant to our network-based research practice, SLD will sustain engagement with these women workers, through their collectives, beyond the duration of the research cycle.

SLD researchers and programme staff also sought to engage with migrant women workers in the GIDC, the majority of whom are from the Northeastern states of India. Unlike local women who commute to the GIDC daily and are therefore available for engagement in their home villages, migrant women workers live in employer housing above the factory. Accordingly, researchers and programme staff were unable to engage migrant women workers either in forming collectives or in sharing their experiences at work. Therefore, while our research observed segmented employment practices and working conditions between local and migrant women workers, we were unable to get first hand information on the experiences of migrant women. This remains an important area for further investigation.

Researchers and programme staff employed a range of data collection methods, including FGDs, surveys, and interviews with women workers engaged in seafood processing; interviews with recruitment intermediaries, factory management, and other industry stakeholders; and embedded ethnography (Table 3). This mixed method approach sought to adapt to the shifting field engagement and data collection context during successive waves of the COVID 19 pandemic in India. Field notes and transcripts were analyzed in November and December 2021, including multiple phases of hand coding to develop the findings presented in Part 3 of this study.

**Table 3: Data collection phases and methods employed in Veraval-Somnath GIDC, India**

Research phase	Data collection sources and methods	Dates	Number of workers engaged
<b>Preliminary site investigation (scoping study)</b>	<ul style="list-style-type: none"> <li>» Visits to more than 20 villages where women commute for employment in seafood processing to GIDC</li> <li>» 4 FGDs with SPI workers, conducted by a team of two researchers</li> <li>» Surveys with SPI workers</li> </ul>	August 2019	<ul style="list-style-type: none"> <li>» 57 women and 13 male workers engaged in FGDs</li> <li>» 30 women workers engaged in surveys</li> </ul>
<b>COVID 19 worker needs assessment during India's first national lockdown</b>	<ul style="list-style-type: none"> <li>» Immediate assessment of worker context and need</li> <li>» Community engagement through food distribution</li> </ul>	March 23 - August 2020	<ul style="list-style-type: none"> <li>» Engagement, needs assessment, and relief to 200 workers</li> </ul>
<b>Embedded ethnography</b>	<ul style="list-style-type: none"> <li>» SLD field engagement with 267 women workers and recruitment intermediaries from 13 villages, including regular meetings to support women workers in forming village-level workers collectives</li> <li>» Engagement with local stakeholders including Labour and Employment Department officials, the District Collector, and seafood processing factory managers</li> <li>» Regular visits to GIDC, Veraval-Somnath port, and local villages home to workers employed in seafood processing</li> <li>» Maintenance of a local office in Veraval-Somnath where seafood processing workers could come for relief in case of rights violations or other challenges at work</li> </ul>	August 2019- December 2021	Engagement with 267 women workers from 13 villages

Research phase	Data collection sources and methods	Dates	Number of workers engaged
COVID 19 impact assessment	» 1-hour interviews with workers who returned to work (92) and workers who remained out of employment (36)	January, March, and April 2021	» Interviews with 128 women workers
Village-level group meetings with women workers	» 78 village-level semi-structured group meetings designed to elicit issues of concern for women workers	January-August 2021	» Engagement with 267 women workers
Extended semi-structured interviews with women workers	» 2-3 hour interviews with women workers	November 2021	Extended interviews with 7 women workers
Occupational health and safety survey research	» Surveys and medical examinations of 411 workers, from 13 villages, including 327 women workers and 84 male workers	December 2021	Surveys and medical examinations with 411 workers, including 327 women workers and 84 male workers



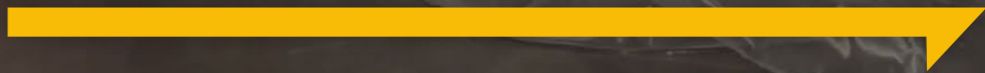






**PART 1**

# Global Context of the Seafood Processing Industry







## Rising seafood consumption

In the last half-century, world fish consumption per capita has almost doubled—from an estimated 9.0 kgs per capita in the 1960's to an estimated 20.3 kgs per capita in 2017 (FAO 2020). By 2018, global fish production reached an all-time record: an estimated 179 million tonnes, with 156 million tonnes for direct human consumption (FAO 2020). In other words, 87% percent of the total fish produced from marine capture fisheries and aquaculture was for direct human consumption—a marked increase from the 1980's when 71 percent of total fish production was for direct human consumption (FAO 2020). Keeping pace with demand, the industrial growth rate of fish for consumption has averaged 3.2 percent annually across the globe—far ahead of the world population growth rate of 1.6 percent (FAO 2014).

While seafood is disproportionately consumed in developed countries, consumption has also increased in developing and low-income food deficit countries. From 1961-2010, fish consumption rose from 5.2 to 17.8 kgs per capita in developing countries (FAO 2014:4). In the same period, fish consumption rose from 4.9 to 10.9 kgs per capita in low income food deficit countries. Emergence of fish as a health food for affluent consumers suggests that fish production will continue to multiply in order to meet consumer demand across the planet (Mohanty et. al. 2013).

## Seafood global value chains

The rise in demand for seafood has unfolded alongside global reorganization of production and processing activities. Fish is now among the most traded food commodities in the world, representing about 10 percent of total agricultural exports and 1 percent of world merchandise trade in value terms (FAO 2014).

In developed countries, a growing share of fish for consumption is imported as a result of steady demand and declining domestic fish production. Within the last two decades, the European Union (EU), United States (US), and Japan have increasingly outsourced production and processing to developing countries in Asia,



Latin America, and Africa. In 2012, the EU—the largest import market for seafood, worth USD 24.9 billion—accounted for 23 percent of world imports in fish and fishery products, excluding intra-EU trade. The majority of fish consumed in the US and Japan, 60 percent and 54 percent respectively, is also imported. Increased export orientation in the seafood industry is reflected in the growth rate of world trade in fish and fishery products: 8.3 percent growth per year in nominal terms and 4.1 percent in real terms between 1976 and 2012 (FAO 2014). In developing countries, by contrast, fish consumption tends to be based upon seasonal availability of local products.

In developed countries, lead firms facilitate access to seafood products for consumption by importing from developing countries. In 2011, fish was the highest exported agricultural commodity for developing countries—leaving coffee, natural rubber, and cocoa far behind in value terms. Developing economies, whose exports represented just 34 percent of world seafood trade in 1982, saw their share rise to 54 percent of total fishery export value by 2012. In the same year, developing country exports represented more than 60 percent of the quantity (live weight) of total fishery exports (FAO 2014). Global export value in seafood for consumption peaked in 2011 at USD 129.8 billion dollars, with a growth rate of 17 percent over the previous year.

Business relationships between lead firms in developed countries and supplier firms in developing economies are structured as GVCs, a term that describes our dominant contemporary production system wherein international trade has shifted from exchanges based on distant market relationships to those based on closely networked firms. Exchanges between firms within this network are structured so that transnational corporations (TNCs) set products, standards, prices, and conditions of sale, but do not formally own the overseas subsidiaries or franchisees but outsource production to them, without the burden of legal ownership. As explained by the World Investment Report 2013 by UNCTAD:

“Today’s global economy is characterized by global value chains (GVCs), in which intermediate goods and services are traded in fragmented and internationally dispersed production processes. GVCs are typically coordinated by TNCs, with cross-border trade of inputs and outputs taking place within their networks of affiliates, contractual partners and arm’s-length suppliers. TNC-coordinated GVCs account for some 80 percent of global trade (UNCTAD 2016).”

In short, the GVC shifts the market relationship between firms from a trade relationship to a quasi-production relationship without the risks of ownership.

As with other GVCs, the way seafood products are prepared, marketed and delivered to consumers has changed significantly. As observed by the FAO, “processing is becoming more intensive, geographically concentrated, vertically integrated and linked with global supply chains” (FAO 2014). Today, 200 countries participate in the seafood GVC. Commodities may cross national boundaries several times before final consumption, with fish products produced in one country, processed in a second, and consumed in a third. Driving forces behind the seafood GVC include:

- » Dramatic decreases in transport and communication costs;
- » Progress in storage and preservation;
- » Outsourcing of processing to countries where comparatively low wages and production costs provide a competitive advantage;
- » Increasing consumption of fishery commodities;
- » Favourable trade liberalization policies;
- » More efficient distribution and marketing; and
- » Continuing technological innovations, including improvements in processing, packaging and transportation.

(Asche and Smith 2009; FAO 2014; Green 2013).

Due to reliance on seafood imports by developed countries to cover increasing consumption of fish and fisheries products, developing countries have been able to supply fishery products without facing prohibitive customs duties. This is due in part to the lowering of tariffs, in particular for non-value-added products—a trend that follows the expanding membership of the WTO, and the entry into force of numerous bilateral and multilateral trade agreements.

## Seafood value chain segments

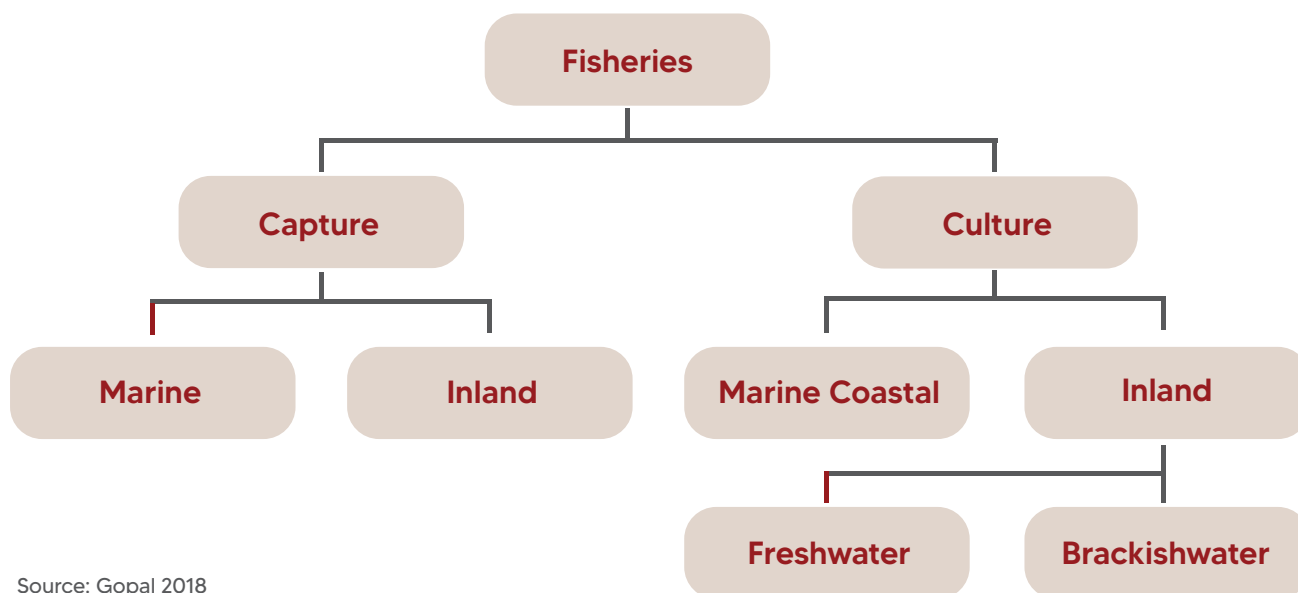
Globally, seafood value chains include four basic segments: harvesting—including aquaculture and capture through either deep sea or coastal fishing; processing; distribution; and marketing. The seafood processing industries in Bagerhat and Khulna Districts, Bangladesh and the Veraval-Somnath GIDC, India include both harvesting and processing segments of seafood GVCs. These segments are predominantly focused on export products, including to the EU, US, and more recently, emerging markets in China.

### Harvesting: fisheries and aquaculture

Harvesting value chain segments encompass aquaculture and capture, whether from deep sea or coastal fishing. They include both industrial fishing operations and marine artisanal fishers with traditional livelihoods rooted in local fishing systems (Poktrant 2014). The UN Food and Agricultural Organization (2020) estimates that 59.5 million people worldwide are engaged as fishers or farmers. Overall, the highest numbers of fishers and aquaculture workers are in Asia, accounting for 85% of the world total.



**Figure 1: Overview of harvest sector**



Source: Gopal 2018

Exploitation of wild fish stocks through overfishing, especially from the shores of developing countries, however, has strained coastal fishing significantly and fueled a rise in aquaculture. By 2018, the total global capture of fish reached 96.4 million tonnes, with 50% of total global capture production located in China, Indonesia, Peru, India, the Russian Federation, and Vietnam.

Aquaculture, the farming of aquatic animals, reached a record high of 114.5 million tonnes (FAO 2020). Aquaculture can be categorized as either inland aquaculture or mariculture. Inland aquaculture generally uses freshwater, but some production operations use saline water in inland areas (e.g. Egypt) and inland saline-alkali water (e.g. China). Mariculture includes production operations in the sea and intertidal zones and land-based (onshore) saline production facilities and structures (FAO 2014: 22). Aquaculture production is dominated by China, India, Indonesia, Vietnam, Bangladesh, Egypt, Norway, and Chile (FAO 2020).

Over the last fifty years, Europe and North America have experienced a progressive decrease in the number of people engaged in capture fishing, and only a marginal increase in fish farming. However, due to high levels of industrialization, those who remain engaged in fishing and fish farming have high outputs, averaging 24 and 20.1 tonnes per person per year in Europe and North America respectively (FAO 2014: 28, 31).

By contrast, Africa and Asia have shown a sustained increase in the number of people engaged in capture fishing and fish farming (FAO 2014: 28). Asia accounts for 88 percent of world aquaculture production by volume. In 2012, China accounted for 61.7 percent of global aquaculture production. India (6.3 percent), Vietnam (4.6 percent), Indonesia (4.6 percent), Bangladesh (2.6 percent) and Thailand (1.9 percent) also ranked among the top seven producers of farmed fish globally (FAO 2014: 21-22). Unlike in Europe and North America, however, harvesting segments in Africa and Asia are overwhelmingly small-scale producers with an average output of between 1.8 and 2.0 tonnes per person per year (FAO 2014: 31).



The UN FAO estimates that globally, 37 percent of people engaged in harvesting segments are engaged full time, 23 percent are engaged part time, and the remaining 40 percent are either occasional workers or had an unspecified status. In total, then, 63 percent of all people employed as fishers and fish farmers are not engaged in full time employment (FAO 2014: 27).

## Processing

Processing plants constitute the main interface between domestic value chains and international markets (Pokrant 2009: 78). Fish product processing plants vary in technology levels, with smaller workplaces relying entirely on manual handling of fish products and larger companies using modern, highly automated processes (Jeebhay 2004). By 2012, 54 percent of fish for human consumption was processed—cured, prepared or preserved in frozen forms (FAO 2014: 42-43).

Seafood processing is distributed into primary and secondary processing. Primary processing consists of sorting, cleaning, grading, and preparation for transportation—tasks that can be completed manually and require low-level technological processes. Secondary processing may include fileting, smoking, preparation of ready meals, and retail packaging. These processes are highly technical and, accordingly, carried out by factories with modern technologies. The growth in seafood processing for value addition has in turn led to more residual by-products. Fish by-products are utilized for a range of purposes including fish sausages, cakes, gelatin, sauces, pharmaceuticals, cosmetics, biodiesel fertilizer, and animal feed (FAO 2014: 45).

Processing facilities operate in some of the world's poorest regions or among poor workforces in developed countries. Traditional labour intensive processing methods—including fileting, salting, canning, drying and fermentation—often take place in rural economies with support from developing country governments as part of rural development and poverty alleviation strategies to generate employment (FAO 2014: 43).

## Marketing and Retail

As large supermarkets expand their range of products to include foods that were previously supplied by small specialty outlets such as fish sellers and butchers, the seafood industry is overwhelmingly led by supermarket chains, large retailers, and food service operators that drive consumption patterns and set production requirements—including how fish is processed, packaged, and shipped for distribution through retail chains (Asche 2009). The model of supermarket chains and large retailers dictating production within the seafood GVC has been referred to as a “buyer driven commodity chain.” Major seafood buyers define the seafood GVC by their demand for seafood products that can be supplied consistently, reliably and in large volumes. They also seek suppliers with the capacity to maintain stable and competitive prices.

By 2013, four supermarket retail brands—LIDL, ALDI, JUMBO and PLUS—together controlled 42.2 percent of the seafood import market in the Netherlands, 15.3 percent of the seafood import market in Germany, and 8.4 percent of the seafood import market in the UK (Fairfood International 2015). Other major retail and food service conglomerates with significant control over the seafood GVC include Walmart, Costco, Safeway, Kroger, Publix, Darden, and Trader Joe's (Accenture 2013). In many areas, integrated traders coordinate trade between large retailers and sub-contracted production and processing activities—

including complex networks of fishing vessels, ports, and processing facilities. In this way, large integrated traders also exert control over large segments of the seafood industry.

Consumer demand has come to include seafood traceability measures aimed at ensuring adequate health standards—with higher standards in the EU and USA when compared to West Asia and China. Concerns with consumer safety, however, have not extended to ensuring that fair labour practices are maintained through all stages of production, processing, and distribution. Instead, low cost production has come to be synonymous with driving down wages and maintaining a low wage workforce.

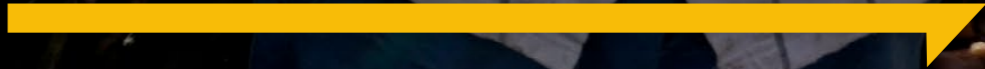






**PART 2**

**Seafood  
processing in  
Bagerhat and  
Khulna Districts,  
Bangladesh**







How does the structure of seafood GVCs interact with the labour market and employment practices in Bagerhat and Khulna Districts, Bangladesh to shape working conditions for women workers? In the section that follows, we answer this question by providing background on the seafood value chain segments in Bagerhat and Khulna Districts, including how shrimp harvesting cycles create seasonal cycles of short term employment. We then situate this discussion in relation to workforce demographics, and finally, look at how employment structures interact with gender to inform working conditions for the majority female workforce in the SPI. Our discussion of working conditions focuses on wages, occupational health and safety, workplace violence, and freedom of association.

## Seafood value chains in Bagerhat and Khulna Districts, Bangladesh

In Bangladesh, aquaculture, fisheries, and related processing employs nearly 17.8 million people (Choudhury, McDougall, and Rajaratnam 2017), and contributes to both export earnings and food security—with the sector fulfilling more than 50% of the national demand for animal protein intake (FAO 2020: 67). Aquaculture in Bangladesh includes production of brackish and freshwater shrimp, as well as freshwater fish such as carp, tilapia, and pangasius. Inland capture fishing is well developed, while marine fishing is comparatively underdeveloped.

Bordering the Bay of Bengal, Bagerhat and Khulna Districts in Khulna Division, Bangladesh, are major hubs for shrimp cultivation and processing. This area saw rapid development in aquaculture and seafood processing in the 1980s. Driven by the promise of foreign direct investment, agricultural land in Khulna Division was systematically transformed into salt water shrimp farms in the 1980s, including through displacement of local communities. Once converted into saline aquaculture farms—a process accelerated by rising sea levels—the land was no longer fit for agriculture or grazing livestock. While impacting human health, ecology, the environment, and sustainability, the industry has provided few benefits to the local

population (Rahman et al. 2013). Instead, shrimp cultivation and processing in this area has had grave socioeconomic impacts including traditional livelihood displacement, loss of land security, food insecurity, marginalization, rural unemployment, social unrest, and local conflict. Environmental impacts such as mangrove degradation, loss of biodiversity, sedimentation, saltwater intrusion, and pollution and disease outbreaks are primary obstacles to the development of sustainable shrimp farming (Hossain, Uddin, and Fakhruddin 2013).

## Raw materials

### Shrimp

For more than a decade, Bangladesh has been among the top 10 countries for shrimp exports in the world (Uddin 2008). Seafood processing plants in Bagerhat and Khulna Districts source raw shrimp from local aquaculture farmers, and also naturally harvested marine shrimp. In both instances, shrimp cultivation and capture is highly seasonal, dictating corresponding cycles in shrimp processing with intense peaks during harvest periods that punctuate the seasonal cycle of raw shrimp production.

In order for shrimp farmers to produce shrimp, they must either collect shrimp fry (larvae) from wild sources like estuaries, or buy shrimp fry from hatcheries. Shrimp supply from hatcheries, however, is in decline due to both the high costs and risks of operating these facilities. If contracted, bacterial or viral infections threaten the entire crop. Naturally collected fry—which sell for twice the price of hatchery fry—are also in higher demand from shrimp farmers since they are more resilient and produce larger and more reliable harvests. Accordingly, although the Bangladeshi government has banned catching fry from rivers in order to protect other local fish species that are harmed through fry catching, shrimp farmers in Khulna Division continue to rely on natural fry collection that takes place in May and June.

Due to the readily available natural supply of shrimp fry in local rivers and estuaries, shrimp fry is collected by local families and sold openly alongside hatchery fry in well-established wholesale fry markets. The Foyla Bazar wholesale shrimp fry market is the only wholesale market in Bagerhat District, and one of the largest wholesale markets in the southwest region of Bangladesh—selling both hatchery and river fry from Noakhali, Ramgati, and the Songazi area. Wholesale fry suppliers in this market provide *dadān*, or an advance, to local fry collectors in order to secure reliable access to shrimp fry; and then in turn, sell fry to farm owners, earning a commission of around BDT 100–200 (USD 1.16–2.32) per thousand fry sold. The interests of wholesale fry suppliers are protected by the *Foyla Bazar Ponar Babsayee Sambay Samity*, a thirty-year-old association of around 100 wholesale fry suppliers. Approximately 1000 workers are employed in the Foyla Bazar wholesale shrimp market, sorting and counting fry for piece rate wages of 20 BDT (USD .23) per 1000 fry sold.

Inland aquaculture shrimp production accounts for more than 80% of shrimp production in Bangladesh. The farming and cultivation of shrimp from fry is undertaken by small farmers, sharecroppers, and daily wage workers. *Bagda* (Tiger Prawn) and *Golda* (Giant River Prawn) are both cultivated locally. The Bagda saltwater shrimp variety, which accounts for approximately 80% of locally cultivated stock, is harvested in August, September, and October; and the Golda shrimp freshwater shrimp variety, which accounts for 20% of locally cultivated stock, is harvested in November, December, and January.

Shrimp farmers sell their products to aggregators referred to as sub-depots. In order to ensure the requisite supply of shrimp, sub-depot owners rely on the *dadni* system wherein they provide farmers with advanced payment in order to secure access to future stock. In a lateral process, shrimp sub-depots also purchase marine shrimp that are harvested naturally within Khulna Division by small farmers from agents. Shrimp sub-depots sell to larger aggregators referred to as depots. Depots, then, supply shrimp to local factories at non-negotiable rates set by factory owners in relation to global market rates.

## Whitefish

Today, aquaculture in the area includes not only shrimp, but also whitefish. Although they take longer to mature, white fish is less temperamental to raise and harvest than shrimp, providing aquaculture farmers with a secure crop to moderate risk associated with shrimp production. Accordingly, within Khulna division, there are two types of whitefish aquaculture production: some farmers raise and harvest only whitefish, while others raise both shrimp and whitefish, often within the same aquaculture ponds.

## Primary and secondary shrimp processing

Shrimp processing factories are at the apex of the shrimp value chain in Bagerhat and Khulna Districts, connecting these local value chain segments to the international export market. Unlike seafood processing factories in Veraval-Somnath, Gujarat which focus on primary processing of lower value products, factories in Bagerhat sell shrimp (a higher value product) under their own brand names. In Bagerhat Division and Khulna Division (Rupsha), approximately two-thirds of seafood processing factories focus on shrimp processing, while one-third conduct a mixture of shrimp, whitefish, and other seafood processing. In order to keep processing factories running year round, during off season for shrimp, even factories primarily dedicated to shrimp processing may package and process frozen vegetables and seafood that is not sourced locally.

In addition to primary shrimp processing, factories in this area also engage in secondary processing and packaging. For instance, Bagerhat Sea Food Industries Limited procures shrimp from farms in the region and undertakes shrimp processing exclusively for export, including as ready-to-eat cooked food sold under the brand names Ocean Star and Sea Star. This secondary processing requires automation in production processes, including technical freezing processes required in producing ready to eat seafood products. These specialized and automated production processes require a more stable workforce. However, as we will discuss in more detail in the section that follows, due to surplus labour in the regional labour market, seafood processing workers employed in Bagerghat and Khulna Districts do not necessarily experience gains in wages and working conditions commensurate with the increased margins typically associated with higher value and branded production processes.

## Export destinations

In Bangladesh, shrimp is the primary seafood export product. According to our field investigations, most seafood processing factories in Bagerhat and Khulna Districts export seafood to the EU, Japan, US, and Russia.



## Structure of employment in the seafood processing industry in Bagerhat and Khulna Districts

Our research in Bagerhat and Khulna Districts spans the time period from October 2020 until December 2021: a period including the second wave of COVID 19 infections in Bangladesh from March - May 2021, with a seven-day national lockdown from April 5-12, 2021; and the third wave from May-August 2021, with two lockdowns in July 2021. During this time, three seafood processing factories in Bagerhat District and 41 seafood processing factories in the Rupsha seafood processing hub in Khulna District remained operational. Women workers living in Bagerhat District work in both of these neighboring seafood production hubs.

The 250 women we engaged over the course of this study worked in all three factories in Bagerhat, and approximately 15 factories in the Rupsha processing area, Khulna District. This group included 50 women hired as monthly wage workers and 200 workers hired as daily wage workers—although women reported moving between these categories on the basis of their employment needs. Seafood processing workers commute from twelve villages in Bagerhat District, including villages in Rakhalgachi Union Parishad in Sadar Upazila; and Piljanga and Lakhpur Union Parishads in Fakihar Upazila (Table 4). These villages are a subset of the villages where workers find employment in seafood processing.

Workers from Rakhalgachi Union and Piljanga Union, for the most part, commute between 6 and 10 kilometers by rickshaw. Workers from Town-Noapara and Jugikhali in Piljanga Union, however, live only a five to seven minute walk from the processing factories in Bagerhat District. Workers from these areas enjoy shorter commutes to work, and often have personal relationships with supervisors and managers in the Bagerhat District factories. They also describe receiving preference in hiring based upon the influence of local political leaders in Bagerhat District who look out for their constituents.

**Table 4: Bagerhat village and towns where women work in seafood processing**

Rakhalgachi Union, Sadar Upazila	Batpara, Shahpara, Sughandi, and Ukpai Villages
Piljanga Union, Fakirhat Upazila	Jugikhali Village, Town-Noapara
Piljanga Union, Fakirhat Upazila	Baruipara, Kahardanga, Chotokhajura, Barakhajura, Jahajghata, and Chargram villages

Internal migrant workers from Bharisal and other neighboring Districts also work in seafood processing factories in the Rupsha processing hub. These workers live in boarding houses owned by contractors near these factories. Our research, however, focused on understanding labor conditions for local women workers who commute daily to Bagerhat and Rupsha seafood processing areas. The experiences of internal migrant workers are an important area for further investigation.

## Workforce demographics

In Bangladesh, during peak season, 80% of workers in the SPI are women. According to the women we spoke to, 60% of the women who work in seafood processing are between 30 and 40 years old, 25% are more than 40 years old, and 15% are less than 30 years old. Women employed in this sector have a range of educational backgrounds, ranging from no literacy to completion of primary and even secondary education. As we will discuss further in subsequent sections, women workers are hired as temporary workers for daily or monthly wages. Processing tasks within factories are distributed by gender, with women involved in grading, sorting, packing, and loading; and men employed to work in cold storage areas and to carry and load products.

## Seasonal work

In Bagerhat and Khulna Districts, shrimp processing is seasonal with a seven to eight month peak period from July to January, followed by a lean period from March to July. This peak season for shrimp processing corresponds with shrimp harvest cycles for the *Bagda* (Tiger Prawn) and *Golda* (Giant River Prawn) that are cultivated locally. Shrimp harvesting is best undertaken during the new moon. Once harvested, the head of the shrimp has to be removed immediately to prevent the quality from declining. Accordingly, within this peak period, primary shrimp processing is undertaken in intensive three to four day periods immediately following harvest cycles. In these processing spikes, factories undertake intensive primary processing with most factories running three shifts, including overnight work shifts. Following these intensive spikes, however, factories require only about half the number of primary processing workers required during harvest cycles.

In the off season, factories may hire workers for other export processing, including white fish and frozen vegetables, but this work is comparatively less. During this time, women workers find employment in agricultural work, and as daily wage workers in the informal sector. Informal sector jobs in this area include livestock and poultry rearing, domestic work, construction work, tailoring, day labor, and sorting fish and fry in the markets.

## Employment types

### Temporary work and recruitment intermediaries

Since seafood processing factories in Khulna District conduct both primary and secondary processing, they hire a bifurcated workforce of daily wage workers responsible for cleaning shrimp products; and monthly contract workers engaged in grading, sorting, icing and packing final products for export.

## Daily wage work

As described in the previous section, the number of workers required for primary processing varies dramatically during the peak season, with peaks immediately following harvest, followed by dips. Most typically, there are two peak seasons a month followed by 3-4 days of intensive work. Consistent with these harvest patterns, daily wage workers are typically employed for approximately 15-20 days a month during peak season. These dates are not entirely predictable, however, as they are subject to not only the harvest but also the transportation schedules of sub-depot and depot-level aggregators. Dispersed between these intensive periods, daily wage workers may find no employment, or just two to three hours of work. In order to facilitate such an expanding and contracting workforce, women workers engaged in primary shrimp processing are overwhelmingly hired as daily wage workers.

Daily wage workers are hired through contractors who, in turn, work with contact people in local villages. Contact people are usually women who are seafood processing workers themselves. They typically undertake this role in order to secure regular work for themselves, and may also take a nominal fee from the workers they recruit. When work is anticipated by contractors, village contact people bring groups of up to 15 workers to a factory. In this process, daily wage workers maintain no direct relationship with the factory and many do not even know the name of the factory where they are employed. They do not hold appointment letters or identity cards, have restricted access to on-site medical facilities, and do not receive festival bonuses.

On days when they are called upon by their village contact to report, daily wage workers commute in groups, reaching the factory by 8 am. If the raw shrimp has arrived, they will be hired—sometimes for extended shifts that last up to 18 hours. On other days, if the raw shrimp has not arrived, they will not be employed and forfeit their travel costs, which can be up to BDT 50 (USD .58) round trip.

## Monthly wage work

Monthly wage workers responsible for secondary processing typically undertake grading, freezing, and packaging tasks. Unlike the primary processing work of cleaning shrimp and removing their heads that must be undertaken immediately, secondary processing work is ongoing. While seafood processing factories in the area report hiring permanent workers in these secondary processing roles, the women we spoke to said that women holding positions listed as permanent are in reality hired month to month. As a result, like temporary workers, they are for the most part excluded from labour rights protections.

Notably, seafood processing factories draw from the same pool of workers to fill daily and monthly wage work. Women workers reported cycling between flexible more intensive roles as daily wage workers, and stable but more rigid roles as monthly wage workers depending upon the flexibility they require to meet household care and other responsibilities. While the work required of them is different and undertaken at distinct intensity levels, women reported similar salaries and workplace challenges.

## Permanent work

Seafood processing factories also hire workers permanently as supervisors, scale-men, inventory keepers, store-in-charge, and factory administrators. Only a small segment of the workforce is employed in these secure positions, and these positions are overwhelmingly held by male workers. Permanent workers are



entitled to protection under Bangladeshi labour law. Consistent with national standards, they reported holding documentation establishing their employment relationship with the factory, including appointment letters, factory ID cards, and—after six months—service books. They also described receiving two annual festival bonuses, regular leave, and paid medical leave.

While receiving some benefits associated with permanent employment, workers reported receiving leave entitlements that fall below national labor standards. For instance, while workers are legally entitled to weekly leave, they report receiving only two days of regular leave each month. One worker explained:

“ In our factory, we get weekly-leave for two days every month. Our leave is written down as four days a month on [factory] papers. Everything is written correctly in the official documents, but in reality we get two days. ”

Workers also reported that they do not in practice get casual leave, are occasionally but not always able to avail sick leave, and do not for the most part receive annual leave. Some workers even reported being unable to take festival leaves, although the majority of permanent workers we spoke to were able to take festival leave.

These gaps in implementing labour standards protections for permanent workers are an important site of further investigation. In particular, in further research, it will be important to document the full range of labor rights that are unenforced or partially enforced, as well as limitations in enforcement mechanisms that allow these rights violations to persist.

## Working conditions

### Management structure

For more than two decades, scholarship on gender in the global economy has documented how in varied, locally specific ways, international capital relies upon gendered ideologies and social relations to recruit and discipline workers, producing segmented labour forces within and between countries (Mills 2003). Within seafood processing factories, 80% of temporary and monthly wage workers are women, but all of the supervisors are male. In these hierarchical workplaces, macro-level gendered societal discrimination seeps into seafood processing factories, reinforcing workplace hierarchy through gendered hierarchy.

### Wages

Among the 250 women workers we engaged for this study—including both daily and monthly wage workers—80% reported earning between BDT 4,500 to BDT 6,675 (USD 52.22 - 77.46) a month—although workers who completed more specialized tasks like beheading prawns reported earning up to BDT 10,000 (USD 116.05) per month. They described these payments as far below living wages and estimated that they would require BDT 7000 to BDT 10,000 (USD 81.23- 116.05) per month, depending upon the earning profile

of others in the household, in order to meet their living expenses. As a result, most women employed in seafood processing in these areas live at a subsistence level.

Women working for daily wages reported receiving wages daily or weekly. By contrast, some women employed on a monthly basis reported regular payment cycles, while others reported receiving payments on an irregular basis.

## Hours

During shrimp season, monthly wage workers must report to work daily at 8 am and typically finish their shifts between 8 am and 10 pm. Although they work between 12 and 14 hours per day, they do not receive overtime pay. Monthly wage workers are not allotted weekly holidays and are instead given just two days of monthly leave.

Daily wage workers experience much more erratic working hours, including extended hours of forced overtime. During peak processing periods after successful harvests, workers are not only required to finish production targets, they are also prevented from leaving until primary processing is complete. These shifts routinely last from 16-20 hours. One worker explained:

“ The length of work at night depends on the supply of fish to the factory. During peak season, we often work 16-20 hours in a row, or even more. We take a short break at the factory and then keep working. ”

Workers report that during these daily wage shifts, they are neither provided food from the factory nor given breaks to purchase food from outside. They are also not allowed to sleep, although some workers described getting breaks that ranged from 10-30 minutes. Women described high levels of exhaustion during these shifts, especially among older women. Some described being so tired that they lie down in the toilet area to rest even for just a few minutes.

Since these extended shifts typically begin at 8 am, women workers describe finishing their work in the middle of the night—between 3 am and 5 am when there are no public buses, or even private rickshaws and vans available. Factories do not provide transportation home. As a result, at the end of their 18-20 hour shifts, women walk the 8-10 kilometers to their homes.

## Occupational health and safety

Women workers described a range of health impacts from working in the seafood processing industry. Daily wage workers undertaking 18-20 hours shifts without breaks or adequate nutrition described exhaustion taking days to overcome. Some women even described fainting during their shifts.

Both daily and monthly wage workers also described getting cuts on their hands from both knives and fish bones, exacerbated by the cold temperature, leading to painful sores and routine infections. In most factories, women said that basic safety equipment like gloves are entirely unavailable, unless they are



provided temporarily during food safety standards inspections. However, even when gloves are made available to women workers, they said they preferred not to wear them because gloves slowed down their ability to meet production targets and extended the length of their shifts.

Women also described health complications related to either standing for prolonged periods along steel tables in cold and wet environments; or squatting to use the *botis* (knives mounted on small blocks of wood) required to quickly remove shrimp heads. Women reported chronic coughs and back pain, and regular fevers, headaches, and eye infections.

Workers employed in Khulna and Bagerhat District seafood processing factories did, however, report access to basic health facilities within some factories. Available facilities included first aid boxes, and access to trained nurses and doctors in cases of injury. Workers also, however, reported that access to these facilities were, for the most part, reserved to monthly wage workers. During the COVID 19 pandemic, most workers reported that factories distributed masks and made arrangements for handwashing to improve workplace safety.

## Gender based violence and harassment (GBVH)

General recommendation No. 19 on violence against women, adopted by the Committee on the Elimination of Discrimination against Women (CEDAW) defines gender based violence as “violence which is directed against a woman because she is a woman or that affects women disproportionately”, and, as such, is a violation of their human rights (Article 1). Forms of gender based violence named by General recommendation No. 19 include acts that inflict physical harm, mental harm, sexual harm or suffering, threats of any of these acts, coercion, and deprivations of liberty.

This section provides examples of the spectrum of violence reported by women workers employed in seafood processing factories in Bagerhat and Khulna Districts. In this preliminary investigation, women workers did not report personal experiences of sexual violence. They did, however, report sexual harassment including unwanted touching from male workers and preferential treatment given to young women workers in return for receiving sexual advances from managers. Due to the significant stigma associated with reporting sexual harassment and violence, and common fear of retaliation for reporting, risk factors and patterns of sexual harassment and violence require further attention in subsequent research.

Women also reported forms of violence that disproportionately impact women workers because they not only comprise the majority of workers in seafood processing factories, but are also entirely excluded from supervisory and managerial roles and concentrated in subordinate roles. While we discussed the physical harms reported by women workers in the previous section on occupational health and safety, in Table 5 we link these physical harms to particular managerial and employment practices that constitute violence against women workers.

**Table 5: Spectrum of GBVH reported by women employed in seafood processing factories in Bagerhat and Khulna Districts, Bangladesh**

<b>GENDERED ASPECTS OF VIOLENCE, INCLUDING:</b>	
<p>(1) Violence against a woman because she is a woman</p> <p>(2) Violence directed against a woman that affects women disproportionately due to</p> <p>(a) high concentration of women workers in risky production departments; and</p> <p>(b) gendered barriers to seeking relief</p>	
<b>Forms of violence</b>	
<b>Acts that inflict physical harm</b>	<ul style="list-style-type: none"> <li>» Routine overwork, including 18-20 hour shifts, with low wages, resulting in exhaustion, dizziness, and in some cases, fainting on the job, gendered aspect 2(a)</li> <li>» Long hours performing repetitive manual tasks in a cold environment, leading to chronic leg and back pain, and other adverse health consequences, gendered aspect 2(a)</li> <li>» Failure to provide adequate safety equipment and training leading to routine hand cuts, sores, and infections 2(a)</li> </ul>
<b>Acts that inflict mental harm</b>	<ul style="list-style-type: none"> <li>» General verbal abuse, including bullying and verbal public humiliation, gendered aspect 2(a)</li> </ul>
<b>Acts that inflict sexual harm or suffering</b>	<ul style="list-style-type: none"> <li>» Sexual advances from management, especially targeting younger women workers, gendered aspect (1), 2(a)</li> <li>» Unwanted physical touch, including inappropriate bodily contact by managers and male co-workers, gendered aspect (1)</li> </ul>
<b>Coercion, threats, and retaliation</b>	<ul style="list-style-type: none"> <li>» Fear of retaliation, including loss of employment, for reporting rights violations, gendered aspect 2(a)</li> </ul>
<b>Deprivations of liberty</b>	<ul style="list-style-type: none"> <li>» Preventing women workers from taking breaks to eat and rest, gendered aspect 2(a)</li> <li>» Forced overtime, including requiring women to complete 18-20 hour shifts, gendered aspect 2(a)</li> <li>» Forced labour, including restricting the ability to leave the factory until production targets are met, gendered aspect (1), 2(a), and 2(b)</li> </ul>

**Note:** This approach to analyzing the spectrum of GBVH facing women workers is drawn from forgoing research on garment supply chains (Silliman Bhattacharjee 2018a-c; 2019a-b; 2020).



GBVH is rooted in risks associated with the systematic concentration of a majority woman workforce in the lower tiers of supply chain production. The 2017 study on *Violence and Harassment Against Women and Men in the World of Work: Trade Union Perspectives and Action*, released by the International Labour Office, directs attention to new and emerging risks in the workplace, including work pressures, changes in work organization, and long working hours in manufacturing and other sectors (Actrav 2017: xiii-xiv). Our research establishes that women engaged in seafood processing work in Bagerhat and Khulna Districts are exposed to many of the risk factors for violence in the world of work named by the ILO Expert Committee (Table 6).

**Table 6: Risk factors for GBVH identified in the seafood processing industries in Bagerhat and Khulna Districts, Bangladesh**

Risk Factors for GBVH
<ul style="list-style-type: none"> <li>» Workers who cannot exercise their rights to freedom of association and collective bargaining, due to the inappropriate use of contractual arrangements leading to decent work deficits . . . , are also likely to be more at risk of violence and harassment (para. 13)</li> <li>» Unrealistic production targets (para. 10)</li> <li>» Unsocial working hours (for instance, evening and night work)(para. 9)</li> <li>» Working in resource-constrained settings (inadequately equipped facilities or insufficient staffing)(para. 9)</li> <li>» Working in situations that are not properly covered or protected by labour law and social protection (para. 9)</li> <li>» Poor labour relations (para. 10)</li> </ul>

**Note:** Paragraph numbers refer to International Labour Office, *Violence and Harassment Against Women and Men in the World of Work: Trade Union Perspectives and Action* (Actrav 2017).

## Freedom of association and access to relief in cases of rights violations

Although the Bangladesh Constitution (Part III) protects the right to form associations or unions, seafood processing workers in Bangladesh face significant barriers in exercising their rights to form and join representative trade unions (Table 7). Although there is some trade union activity in seafood processing factories in Bagerhat and Khulna Districts, workers reported reluctance to participate in trade unions due to fear of retaliation from factory supervisors and managers. Notably, male workers are more likely to seek relief for workplace issues by direct contact with managers and supervisors, while women workers reported raising issues to the village-level contact people that facilitated their employment.

**Table 7: Risk factors that inhibit freedom of association identified in the seafood processing industries in Bagerhat and Khulna Districts, Bangladesh**

#### Risk Factors that Inhibit Freedom of Association

- » Retaliation for reporting workplace violations
- » Extended working hours + prevention of meetings between workers during the workday, making it difficult for workers to meet and organize
- » Temporary employment, undermining job security and increasing worker mobility between factories

## COVID 19 impacts on seafood processing factories, employment, and livelihoods

### Seafood processing factories

During the global COVID 19 pandemic, seafood processing factories in Bagerhat and Khulna Districts experienced a decline in demand from export markets. As export destination countries went into national lockdowns, restaurant closures together with significant economic impacts reduced demand for seafood products. The General Manager of a fish processing factory in the Rupsa processing area of Khulna District explained:

“Coronavirus infected those who eat shrimp and other seafood abroad—markets closed, restaurants were shut down. Who will buy our fish?”

As a result, in April, May, and June 2020, seafood processing factories reported receiving no new orders—and some factories did not receive new orders until July or even August. This period coincided with what is typically the peak season for harvest and processing in Khulna and Bagerhat Districts. When orders resumed, they were reduced by 20-30% from the previous year. The overall impacts of these drops were severe: management personnel at seafood processing factories reported steep drops in the number of containers exported, with some factories exporting at only 14% of their capacity, while those that fared well exported at 40% of their capacity when considered in relation to the previous year. Processing factories were also offered 20-30% lower rates for the containers they did export.

As in other buyer-driven value chains, moreover, seafood processing factories also reported buyers canceling orders, changing requirements, and pressuring them to accept lower prices (Silliman Bhattacharjee 2020). Some buyers even canceled orders after receiving some part of the whole order, requiring the supplier to sell the remainder at a loss. A General Manager at a seafood processing factory in Khulna District described the impact of such cancellations on the factory bottom line:



“ After sending two consignments, the buyer told us that they would not receive any more of the consignment due to reasons associated with COVID 19 health standards. They told us to sell it elsewhere. We sold the remaining consignments to another country, but we had to sell it at a lower rate. We also had to repackage and reprint the stock, requiring extra labour and materials. We suffered a huge financial loss. ”

Seafood processing factories had to sell already produced goods immediately, because without the capacity to store goods for extended periods of time, they risked loss in quality and spoilage. International buyers with significant stocking capacity took advantage of these order cancellations, using them as an opportunity to buy already produced goods at lower prices.

On the supply side, processing factories grappled with restrictions on movement within Bangladesh that disrupted supply of raw shrimp and fish to processing factories, increasing the price of raw materials—in some cases up to 20%. These supply side disruptions also had a knock-on effect on seafood cultivators. Unable to deliver shrimp and fish immediately upon harvest, raw materials segments of the value chain suffered significant financial losses. As a result, they did not have the financial resources for cultivation in the subsequent season, creating an ongoing supply shortage that lasted from 2020 to 2021.

## Impacts on employment and worker livelihoods

Due to these supply and demand pressures, together with the imposition of national lockdowns, workers reported that many factories were closed during the COVID 19 pandemic, beginning in March 2020—with some factories closed for three months, and others for up to five months (Ahmed 2021). While some workers were able to find employment in the factories that remained open, others had no work in the processing factories and experienced extreme difficulties finding alternate sources of employment.

Consistent with workforce expansion and contraction practices during the peak shrimp season, factories that continued to operate would call in daily wage workers in line with the availability of raw shrimp and whitefish for processing. One worker explained:

“ Many of us did work during the lockdown, although not regularly. When fish supplies arrived at the factory, we were informed to arrive. We faced difficulties in traveling since transportation was not available. We were afraid because the police and army were also enforcing lockdowns. ”

Permanent, monthly, and daily wage workers who were able to find employment in processing factories also reported significant delays in payments during this period, with some reporting that they did not receive wages for up to five months. During this period, they continued to report to work in hope of receiving owed wages. Systematic analysis of these and other COVID 19 related wage theft practices and their relationship

to purchasing practices of lead firms require further investigation in future stages of research.

Workers who were unable to remain in processing factory employment—including permanent workers who lost their jobs without benefits associated with termination—searched for other jobs. One worker explained:

“ We had no fixed work when processing factories closed. We did whatever work we could find, from chopping wood to loading sand into trucks. ”

Workers reported working as auto drivers, masons and construction workers, daily wage workers, agricultural workers, and within local shops. Some workers also sought employment in garment factories.

Between unemployment, underemployment, reduced wages, and delayed wage payments, 90% of the workers we engaged experienced income shortages during and after the COVID 19 pandemic. Workers depleted their savings, sold family assets, and were still unable to make ends meet. Despite this fall in income, families also reported increased health expenditures related to the COVID 19 pandemic— including purchasing personal protective equipment (PPE) and sanitizers, and paying medical expenses for themselves and family members that fell ill.

During this period, workers had very little access to emergency economic relief. While some factories provided financial support to workers in distress, this was not the norm. Some workers were able to access government food assistance, and others reported receiving humanitarian aid from local organizations. However, many workers reported receiving no support at all during this difficult period. Accordingly, on average, families with one or more workers previously employed in seafood processing borrowed around BDT 34,000 (USD 394.6) during this period—including borrowing from relatives, neighbors, local cooperatives, and NGOs providing micro-credit. Workers also reported reducing household costs by skipping one or more meals per day (Ahmed 2021).





An aerial photograph of a coastal town and harbor. The foreground shows a dense residential area with many small, light-colored buildings. A long, narrow pier or breakwater extends from the town into the water. The harbor is filled with numerous small boats, and the sea is visible in the background under a hazy sky.

**PART 3**

**Seafood  
processing in the  
Veraval-Somnath  
Gujarat Industrial  
Development  
Cluster (GIDC)**







How does the structure of seafood GVCs interact with the labour market and employment practices in Veraval-Somnath GIDC to shape working conditions for women workers? In the section that follows, we answer this question by providing background on the seafood value chain segments in Veraval-Somnath GIDC. We then situate this discussion in relation to workforce demographics, and finally, look at how employment structures interact with gender to inform working conditions for the majority female workforce in the SPI. Our discussion of working conditions focuses on wages, occupational health and safety, workplace violence, and freedom of association.

## Seafood value chains in Veraval-Somnath GIDC, Gujarat

In 1962, the Gujarat Industrial Development Corporation (GIDC) was established under the Gujarat Industrial Development Act, with the goal of accelerating industrialization in the State of Gujarat. By 2021, the GIDC had established 224 industrial estates with roads, drainage, electricity, water supply, street lights, and ready to occupy factory sheds. In Veraval-Somnath, Gujarat, an area long dominated by the fishing industry, the GIDC was established adjacent to the Veraval Port.

### Raw materials

The coastline of the Indian state of Gujarat covers approximately 1600 km—accounting for 25% of India's total coastline, and contributing about 25% of total Indian marine production. Major species processed in Veraval-Somnath GIDC include ribbon fish, crocker, cuttlefish, squid, shrimp, and lobster (TERI 2017). Most seafood processing factories in Veraval—including vertically integrated companies with their own trawlers—purchase fish from trawlers that dock at the adjacent port. Trawlers supply directly to factories and also to intermediaries. Seafood from docked trawlers is unloaded into *dhungas* [tin sheds] that line the road between the Veraval Port and the GIDC, and then transported to processing factories.

The price of seafood raw materials fluctuates, but is estimated to account for 70% of total input costs for seafood processing (TERI 2017). Prices are based upon the yield of fish caught by trawlers. Fish yield, in turn, depends upon a host of environmental factors. Heavy rains, for instance, reduce the number of catch days leading to less capture and rising costs. Accordingly, seafood processing factory owners described a new practice over the last three to four years of sourcing raw-frozen fish from Odisha, Andhra, and Tamil Nadu—areas with limited export markets. This practice emerged in line with availability of better-refrigerated transportation systems.

## Primary processing

The first seafood processing facility in Gujarat was established in Veraval in 1969 (Kumar 2019). Today, there are 99 registered seafood processing factories in the Veraval-Somnath GIDC, including large and medium facilities. Seafood processing factories in the GIDC focus nearly exclusively on primary processing of both lower and higher value fish such as ribbon fish, crocker, cuttlefish, squid, shrimp and lobster. Processing may be undertaken directly by the factory, or alternately, the factory premises may be leased to exporters. These leases are seasonal, and are revisited by factory owners and exporters on an annual basis.

Primary processing tasks are distributed along gender lines. Male workers are responsible for initial filleting and carrying seafood to production lines. Women workers—stationed along waist-high, long, stainless steel tables—are responsible for washing, cleaning, sorting, and grading seafood. Male workers then carry these processed products to walk in freezers for quick freezing. These primary processing tasks require low skill levels and can typically be completed manually.



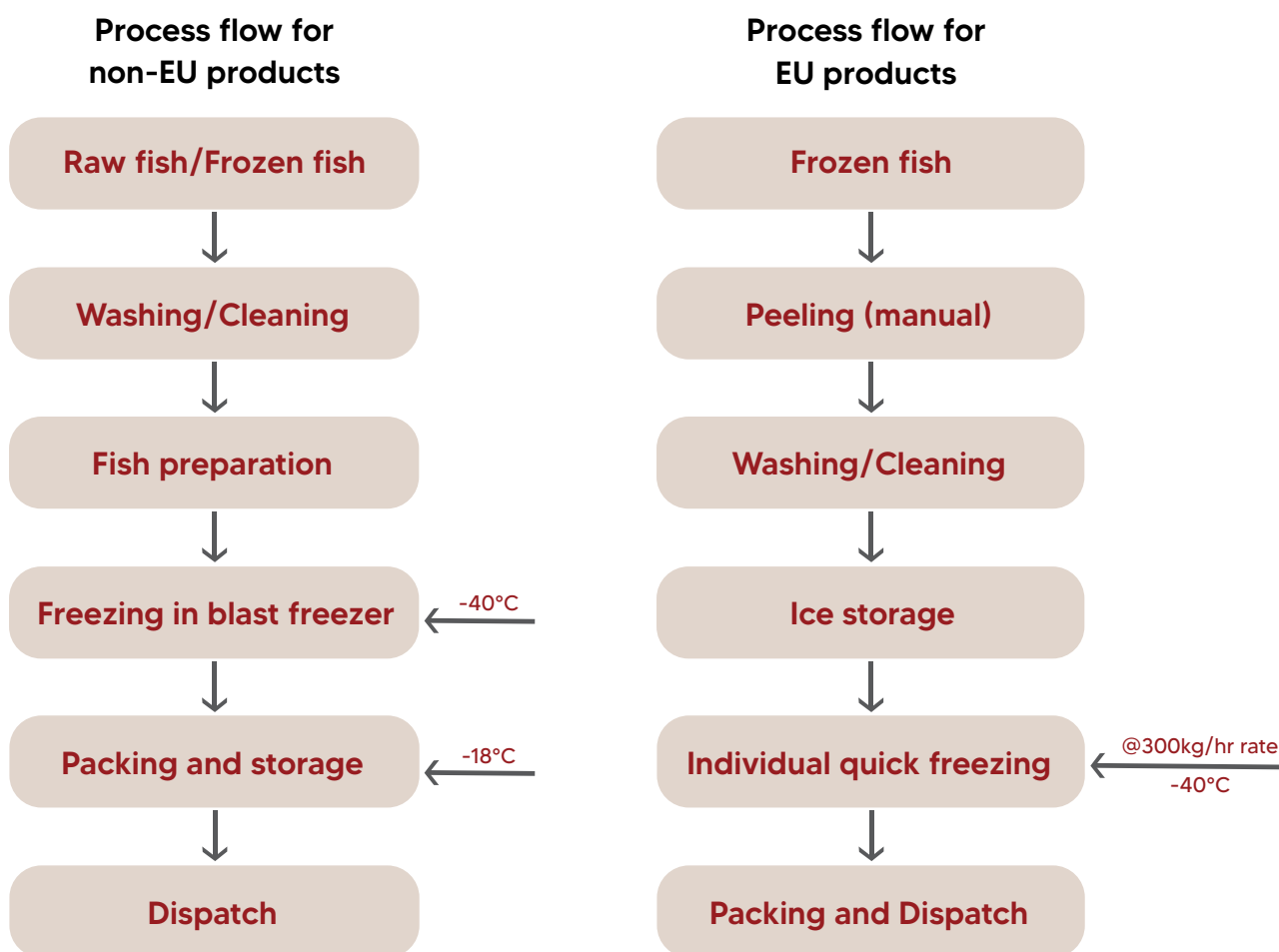


## Export destinations and fluctuating processing factory margins

In India, only registered export companies can export seafood. Registered export companies may have their own processing factories; alternately, they may lease processing factories, or outsource processing tasks to unregistered factories. After processing, seafood products are loaded from factory docks directly into shipping containers and driven to either the Mundra Port, north west of Veraval in Gujarat; or the Pipavav Ports, on the southern coast of Gujarat.

Within the Veraval-Somnath GIDC, some factories export exclusively to EU countries; while others export to non-EU countries, including China and Japan (Table 8). In 2019, out of 129 registered seafood processing plants in Gujarat, 52 (40%) were approved by the EU for export of marine products (Kumar 2019) These exclusive links with particular export markets correspond with distinct export standards and processing practices (Figure 2)

**Figure 2: Process flows for non-EU and EU products**



Source: TERI 2017

EU and US lead firms on seafood value chains that import from Veraval-Somnath include brands with their own retail outlets, and brands that conduct secondary processing and packaging for other retail companies. As one seafood processing factory owner explained, his factory in Veraval-Somnath exports processed seafood to the EU and US that is almost ready to eat in its primary processed form (gutted and cleaned), or alternatively, processed and seasoned further into ready to eat meals. According to women workers employed in these factories, superior quality produce is sent to Europe. Workers also described preferring to work in these factories due to better working conditions and higher pay.

By contrast, seafood for export to non-EU and US markets undergoes basic washing, cleaning, freezing and packing, but there is no change in the original seafood product. Unlike in the EU and US, local agents in Asian markets purchase fish by the container and sell them whole in local markets. Workers refer to the factories that supply to Asian markets as “China process,” referring to the distinct processing and safety standards requirements in these factories. According to the workers we engaged in this study, inferior quality produce is sent to China—including products that require more cleaning and washing.

Seafood exporters in Veraval-Somnath GIDC described their relationships with buyers in the EU and US as relatively stable. GVC research on product supply chains has established that stable orders from lead firms typically correspond with a higher level of bargaining power for supplier firms (Nathan and Silliman Bhattacharjee et. al. 2022). Consistent with this formulation, seafood exporters in Veraval-Somnath did describe holding significant bargaining power with lead firms on seafood GVCs headquartered in the EU and US who require a reliable supply of processed seafood to meet consumer demand. Seafood exporters described less bargaining power with non-EU agents purchasing containers of whole fish, a factor they attributed to fewer demands and processing criteria among these local agents, allowing them to source whole fish with fewer constraints.

GVC literature has also documented a relationship between increased order stability, bargaining power, and more stable margins among supplier firms. These factors may in turn correspond with more regular employment (Nathan and Silliman Bhattacharjee et. al. 2022). According to seafood exporters in Veraval-Somnath GIDC, however, this observation does not hold true in the seafood processing industry where margins fluctuate in relation to raw material access. On one hand, seafood raw material prices paid by processing and export firms fluctuate based upon environmental impacts on local seafood yield. On the other hand, high seafood yields in other parts of the world may drive down the prices paid by lead firms on seafood GVCs. In short, seafood processing margins are unpredictable, with the potential to be squeezed based upon both local and global environmental factors. As a result, seafood exporters in the Veraval Somnath GIDC described margins that have fallen by 50-60 percent over the last decade. When asked about measures that can be taken to stabilize and increase their margins, they said that this would require technical upgradation of trawlers in order to facilitate deep sea fishing and access a more stable fish stock due to diminishing coastal fish stock.



**Table 8: SPI factories and export destinations by country for Veraval-Somnath, 2019-2021**

Factory name	Export destinations 2019	Export destinations 2020	Export destinations 2021
Asha Ganga	Cameroon, China, Portugal, Thailand, and Vietnam	Cameroon, China, France, Portugal, Thailand, and UK	Cameroon, China, Dominican Republic, Italy, Malaysia, Spain, and Thailand
Blumarine Export	China and Thailand	Cameroon, China, Iraq, Malaysia, Thailand, UAE, and UK	China, Dominican Republic, Italy, Netherlands, Spain, Thailand, and UAE
Gopal Fisheries	China, Sri Lanka, Taiwan, Thailand, Tunisia, UAE, and Vietnam	Chian, Mozambique, Sri Lanka, Taiwan, Thailand, Tunisia, UAE and Vietnam	Sri Lanka, Tunisia, and Vietnam
Great Wall Exports		Bangladesh, China, Sri Lanka, Thailand, and Tunisia	Bangladesh, Cameroon, China, Sri Lanka, Thailand, and Tunisia
HLN Enterprises	China and Malaysia		
JM Marine Export	Belgium, China, Congo, Cyprus, France, Hong Kong, Italy, Netherlands, Portugal, Spain, Thailand, and Vietnam	Bangladesh, China, France, Italy, Portugal, Spain, Taiwan, Thailand, UK, and Vietnam	Cameroon, China, Cyprus, Greece, Italy, Portugal, Spain, Thailand, and UAE
Jagdish Marine Export	Belgium, Cyprus, Dominican Republic, France, Greece, Italy, Portugal, Republic of Korea, Spain, Thailand, and Vietnam	France, Greece, Italy, Netherlands, Portugal, Republic of Korea, Spain, Thailand, Tunisia, UK, and Vietnam	France, Greece, Italy, Republic of Korea, Spain, Thailand, Tunisia, and Vietnam
Jai Gayatri Export	China	China	China

Factory name	Export destinations 2019	Export destinations 2020	Export destinations 2021
Kanaiya Export	Mozambique		China
Keshodwala Foods	Algeria, Angola, Bangladesh, Belgium, Cameroon, China, Côte D' Ivoire, France, Gabon, Ghana, Greece, Guyana, Iran, Italy, Jordan, Malaysia, Netherlands, Oman, Poland, Portugal, Republic of Korea, Spain, Thailand, Tunisia, UAE, UK, and Vietnam	Bangladesh, Belgium, China, Egypt, France, Gabon, Greece, Iran, Italy, Malaysia, Poland, Senegal, Spain, Thailand, Tunisia, UAE, UK, USA, and Vietnam	Bangladesh, Belgium, Cameroon, Canada, China, France, Greece, Italy, Malaysia, Netherlands, Poland, Portugal, Spain, Sri Lanka, Thailand, Tunisia, UK, UAE, and Vietnam
Keval Exports	Bangladesh, China, Côte D' Ivoire, Malaysia, and Vietnam	Bangladesh, China, Republic of Korea, and Vietnam	Bangladesh, China, Malaysia, and Vietnam
Loyal Marine	Bangladesh, China, Jordan, Malaysia, and Thailand	Bangladesh, China, Iraq, Jordan, Thailand, and Vietnam	Cameroon, Guinea, Iraq, Jordan, Malaysia, and Thailand
Real Exports	Belgium, Canada, China, Cyprus, Dominican Republic, France, Greece, Italy, Japan, Malaysia, Netherlands, Portugal, Spain, Thailand, USA, and Vietnam	Belgium, China, France, Greece, Italy, Japan, Malaysia, Netherlands, Portugal, Republic of Korea, Slovenia, Spain, Taiwan, Thailand, UAE, USA, and Vietnam	Belgium, China, France, Greece, Italy, Libya, Portugal, Spain, Taiwan, Thailand, USA, and Vietnam
Rich marine Exports	China and Malaysia	Malaysia and Vietnam	China, Thailand, and UAE
Sabir Sea Foods	Sri Lanka	Sri Lanka	Sri Lanka



Factory name	Export destinations 2019	Export destinations 2020	Export destinations 2021
Shafi Marine	Bangladesh, Cameroon, China, Liberia, Malaysia, Oman, Portugal, Thailand, UAE, UK, and Vietnam	Bangladesh, Cameroon, Canada, China, Côte D' Ivoire, Italy, Malaysia, Netherlands, Oman, Peru, Portugal, Singapore, Spain, Sri Lanka, Taiwan, Thailand, UK, and Vietnam	Albania, Bangladesh, Cameroon, China, Congo, Cyprus, Denmark, Dominican Republic, Italy, Malaysia, Netherlands, Oman, Peru, Portugal, Republic of Korea, Spain, Thailand, UAE, UK, and Vietnam
Somnath Marine Exports	China, Dominican Republic, Guadeloupe, Netherlands, Spain, Thailand, UK, USA, and Vietnam	Italy, Spain, Thailand, and UK	Greece, Italy, Spain, and UK
Soneri Marine Foods	China, Dominican Republic, Malaysia, Peru, Republic of Korea, Thailand, and UAE	Bangladesh, Guyana, Malaysia, and Thailand	Dominican Republic
Winsor World Export	Bangladesh, Cameroon, China, Côte D' Ivoire, Malaysia, Netherlands, Republic of Korea, Sri Lanka, Thailand, Tunisia, Turkey, UAE, and Vietnam	Bangladesh, Cameroon, China, Congo, Italy, Malaysia, Netherlands, Oman, Republic of Korea, Saudi Arabia, Sri Lanka, Thailand, Tunisia, Turkey, UAE, and Vietnam	Bangladesh, Cameroon, China, Italy, Oman, Saudi Arabia, Thailand, Tunisia, and UAE

## Local market potential

Within India, demand for seafood has increased over the last 15 years, so much so that prices in India are currently higher than in Europe for certain seafood products. New markets for processed seafood in India are emerging as supermarkets, malls, and aggregators supply frozen, ready to cook products. Despite this rise in demand, however, seafood processing factory owners described significant challenges in accessing local markets. As a result, no more than 10-15 percent of seafood processed in Veraval-Somnath is sold in the local Indian market, and only one of the 99 registered seafood processing factories in the Veraval-Somnath GIDC has an Indian retail brand.

Challenges in accessing Indian markets are related to both inadequate logistics and unstable demand. India's refrigerated trucking capacity is extremely limited, and also circumscribed to India's Tier-1 cities. However, seafood processing factory owners in Veraval-Somnath explained that even though trucks can reach Tier-1 cities, it is difficult to synchronize order size and truck capacity. While demand is also rising in Tier-2 cities due to the expansion of supermarkets in these areas, they are for the most part off the grid of existing refrigerated trucking routes.

## Structure of employment in the seafood processing industry in Veraval-Somnath GIDC

Our research on seafood processing in Veraval-Somnath GIDC began in August 2019 and extended until December 2021—a period that saw the unanticipated rise of the global COVID 19 pandemic and two national lockdowns (March - August 2020, March - May 2021).

The 270 women we engaged over the course of this study worked in seafood processing factories in the Veraval-Somnath GIDC. All of these women lived in neighboring villages (Table 9). They commute from 45 minutes to up to two hours in order to reach processing factories in the GIDC, and pay INR 500-1300 (USD 6.63 - USD 17.25) per month for their commute, depending upon the distance between their village and the GIDC.

**Table 9: Village and towns where women work in seafood processing in the Veraval-Somnath GIDC**

» Kajali	» Mathasuriya
» Inaj	» Bolash
» Bhalpara	» Navagaam
» Ukadiya	» Lati
» Rampara	» Bij
» Navdra	» Sonariya
» Bhetali	» Kadvaar
» Kodidra	» Lodhva
» Harnsha	» Prasnavada
» Sutrapada	» Vadodara (zala)

## Workforce demographics

### Gender

Women make up more than 75% of the workforce in India's seafood processing sector. In Gujarat, more specifically, women workers comprise 90% of the workforce in pre-processing centres and 70% in processing units. While women workers are overwhelmingly concentrated in temporary work at the floor level, male workers tend to hold regular and permanent positions, including in administrative, quality control, and plant and floor level supervisory roles (Jeyanthi et al. 2015).

Zooming in on gendered role distribution among seafood processing workers employed on the shop floor, we documented a gendered bifurcation of tasks (Table 10). Women workers perform manual tasks, at times with knives and peelers, including cleaning, peeling, sorting, grading, and packing seafood in thermocol boxes. Male workers employed on the factory floor are involved in tasks requiring more physical strength, including lifting containers of fish onto processing tables, and loading processed fish into freezers and shipping containers.

Notably, among 100 women workers contacted in initial phases of this research, 66% reported being illiterate and the remaining 34% reported having some secondary or even post-secondary education. Some women described working in seafood processing while pursuing higher education. Regardless of their education levels, however, women workers carried out the same primary processing tasks.

**Table 10: Distribution of fish processing tasks between women and men in Veraval-Somnath GIDC, India**

Type of Work	Done by Women	Done by Men
Purchasing seafood from ports		X
Weighing seafood products		X
Carrying and lifting seafood onto work tables		X
Cleaning	X	
Peeling	X	
Sorting	X	
Grading	X	



Treating products, including chemical treatments		X
Individual Quick Freezing (IQF)		X
Building boxes for packaging	X	X
Packing in plastic wrap	X	
Packaging in thermocol boxes	X	
Labeling products	X	X
Ice store/freezing the product		X
Loading in containers for export		X

## Age

The majority of workers employed in the seafood processing industry in India are between 18 and 45 years old, with the average age of women workers coming in at 25 years old (Gopal et al.). In Veraval-Somnath GIDC, workers described a management preference for hiring younger women. According to the workers we spoke to, younger workers are preferred because they are easier to control than their older peers. These workers are routinely asked to leave the premises during inspections. Researchers also, however, spoke to 55-year-old women who were still working in processing factories.

Women reported that tasks are also distributed between women on the basis of their age. Younger women are more typically assigned to grading and sorting seafood, whereas older women tend to be assigned washing, cleaning, and packing tasks. Elder women also work as *mukadim* (recruitment intermediaries), responsible for recruiting groups of 15-20 women workers from their villages and ensuring that they report to factories in line with workforce requirements. At any given time, 4-5 recruitment intermediaries work within a particular factory.

## Workforce segmentation by social identity and migration status

Within seafood processing factories in the Veraval-Somnath GIDC, the workforce is not only segmented by gender, but also between migrant and local workers; and then further, on the basis of social identity among local workers.

## Migrant workers

Seafood processing factories in the Veraval-Somnath GIDC hire migrant workers from the Northeast and Eastern states of India, including Assam and Odisha, as well as other parts of Gujarat. These migrant women are between 17 and 30 years old. They find employment in the GIDC through recruitment intermediaries in their home states—an area for further investigation in subsequent phases of this research. Young migrant women workers provide seafood processing factories with a ready pool of workers that can be called upon to conduct primary processing at any hour of the day or night. Since they live in hostels located above processing factories, they are always accessible—regardless of when the fresh catch comes in. Accordingly, these young migrant women routinely work night shifts that last 12 or more hours.

As discussed in our methodology section, unlike local women who commute to the GIDC daily and are therefore available for engagement in their home villages, migrant women workers live in employer housing above the factories where they work. Accordingly, researchers and programme staff were unable to engage migrant women workers either in forming collectives or in sharing their experiences at work. Due to restrictions on talking within factories, the local women engaged in this study described having very little contact with migrant women. Therefore, while our research observed segmented employment practices and working conditions between local and migrant women, we were unable to get first hand information on the experiences of migrant women workers. This remains an important area for further investigation.

## Local workers

Among local workers, the workforce is further segmented by social identity—including distinct roles for workers from social groups considered upper caste, Muslim workers, and Dalit workers.

Workers from the Kharva community—originating in Rajasthan and migrating to the coastal region of Saurashtra and Kutch during the tenth century—come from a royal Rajput line. Upon migrating to the coast, they took up fishing and shipping, including imports and exports. Today, the majority of fishermen in the Veraval-Somnath area are from the Kharva community. Women from this community work in seafood processing, but they are hired with more flexible timing and reliable pay. On occasion, they also bring their children to work and leave them with supervisors while they complete their shifts. Women workers we engaged in this study report that these privileges are defended by the Kharva community: when Kharva women are required to work overtime or experience rights violations, their influential community will intervene with factory owners on their behalf.

Seafood processing factories in the Veraval-Somnath GIDC are, for the most part, owned by the Patni Jamat community—a Sunni Muslim community found in Gujarat and Maharashtra in India, and the Sindh region of Pakistan. Like the Kharva, the Patni Jamat are a trading community that has been engaged in import and export shipping since as early as the 15th and 16th centuries. The Patni Jamat are afforded reservations as Other Backward Classes (OBCs) under India's reservation system.

Dalit women, considered to be from the lowest caste, comprise the majority of workers employed in seafood processing. Unlike their Kharva counterparts, they are not exempt from overtime. Since their community is less powerful in India's caste-based social hierarchy and therefore less able to intervene on their behalf, they are subjected to less favorable working conditions, and experience routine rights violations—areas that we will cover in the sections that follow.

## Seasonal work

As in Bagerhat and Khulna Districts of Bangladesh, seafood processing in Veraval-Somnath GIDC is seasonal. The season in this area, however, is longer-lasting from approximately May to December. The lean period is from January to early April. Consistent with the seasonal nature of fishing in this area, seafood processing workers are employed for eight or nine months during the peak season. During this time, processing factories typically run two or three shifts, including overnight shifts. In the off season, however, when seafood processing factories close, women employed in seafood processing have few if any opportunities for employment.

Unlike women workers who are limited to finding employment in processing and agricultural work, male workers in the area find employment in a range of occupations during both the peak and off season for the fishing sector. During the fishing season, men find employment in fishing as well as in factories that supply ice to trawlers and packaging materials to processing factories. During the off season for fishing, opportunities for male workers include employment in other local industries, such as the tile, cement, and thread industries. Male workers also migrate for employment at other neighboring ports, and in the textile industry.

## Temporary work and recruitment intermediaries (*Mukhadim*)

As estimated 89% of women employed in seafood processing are employed as temporary or casual workers (Gopal et al.). Local women workers employed in primary processing are hired without contracts and, accordingly, have no direct employment relationships with the factories in which they work. Consistent with these temporary and informal working arrangements they receive no employment or social security benefits, and their rights are not protected under India's labour law. As described by the President of Chemical Mazdoor Panchayat, "seafood processing in Gujarat is a lawless industry."

Women workers from neighboring villages find employment in these factories through local recruitment intermediaries—more senior women workers from their village who take on the responsibility of bringing groups of women to fill seafood processing shifts. Like the workers they match with processing factory employment, recruitment intermediaries have no formal employment relationship with any particular factory. Instead, they sign on to provide workers to particular factories for a period spanning from two to eight months, depending entirely on factory requirements. One recruitment intermediary explained:

“ The agreement is for eight months, but sometimes they sack us in four or even after two months. They keep us on as long as they have raw material to process, and after that they ask us to leave. ”

Recruitment intermediaries work on commissions they receive from both women workers and factories. They take a monthly commission of 200-300 INR (USD 2.65-3.98) from each woman who they match with factory employment; and they also receive commissions commensurate with monthly processing wages from factories where they supply between 40 and 50 workers. Women who seek work in seafood processing are careful to maintain good relationships with recruitment intermediaries because they depend upon these relationships to find work in processing factories.



In addition to matching workers with employers, recruitment intermediaries act as a liability firewall between seafood processing factories and the women they hire for primary processing work. For instance, in cases of physical injury at work, recruitment intermediaries are tasked with facilitating medical care. For instance, on September 6, 2021, seven workers fainted at a factory in the Veraval-Somnath GIDC due to inhaling fumes from an ammonia gas leak in an adjacent factory. Luckily, rainfall shortly after the leak mitigated its impact. The workers, who required immediate medical attention, were taken to the Intensive Care Unit at the Ramawat Hospital. While, in this case, the factory paid for the costs of treatment, the local recruitment intermediaries who facilitated their employment were tasked with taking the seven workers to the hospital and managing their care. Notably, the recruitment intermediary provided their own name rather than the name of the factory when admitting the workers for treatment—a measure that safeguarded the factory from any liability for health consequences of the leak. While the fumes from the gas leak were visible across the Veraval-Somnath GIDC, this industrial accident was not reported in the local newspapers, a measure that further safeguarded the involved factories from liability.



### Seafood processing workers pitch in to cover costs of medical treatment for worker injured during commute to work.

In Veraval and surrounding areas, a *chhakra* refers to a rickshaw built by replacing the back wheel of a diesel-engine Royal Enfield with a two-wheel metal cart. *Chhakra* are licensed for carrying goods and are used within the GIDC and surrounding areas to transport seafood and waste products from seafood processing factories. Local workers employed in seafood processing make their daily commute from nearby villages to the GIDC by *chhakra*—often carrying as many as 15–20 workers.

In 2019, a *chhakra* carrying 15 women from Lodhva village 25 kilometers to work at the Veraval-Somnath GIDC overturned. While most of the women sustained only minor injuries, one young woman sustained serious injuries to her face that required urgent medical and cosmetic treatment that cost INR 1,45,000 (USD 1,923). Although India's Workmen's Compensation Act, 1923 requires employers to compensate workers for injuries sustained in the course of work—including during commutes—the young woman had no formal employment with the destination factory, and the factory refused to contribute to her medical expenses. In order to ensure that the injured young woman could afford adequate medical care, the other workers on the *chhakra* that day contributed INR 2000 (USD 26.53) each, paid in monthly installments, toward paying off the medical loan incurred by the family.







## Working conditions

This section focuses on how the GVC and employment structures in the Veraval-Somnath GIDC impact working conditions in seafood processing for women workers—including wages and hours, occupational health and safety, freedom of association, GBVH, and other forms of workplace violence.

### Management structure

As in Bagerhat and Khulna Districts, nearly all supervisors are men. The majority of these men are from local communities, although men from Bihar are also hired in supervisory roles.

### Wages

In the Veraval-Somnath GIDC, wages for women employed in seafood processing range from INR 8000 (USD 106.14) to 10,000 (USD 132.67) per month for a 12-hour working shift; and INR 6000 (USD 79.6) to 7000 (USD 92.87) for 8-10 hour working shifts. This salary range accounts for differences in pay between factory roles, and also pay differentials between factories. For instance, women reported receiving 500 INR more per month for grading work, when compared to packing. Moreover, workers employed in factories that export to the EU are at the higher end of this pay bracket, earning 500-1000 INR (USD 6.63- 13.27) more than workers employed in factories that export to other parts of Asia. Men engaged in heavy lifting work are typically paid more, with salaries ranging from INR 8,500 to 10,500 (USD 112.77-139.30) per month for a 12-hour working shift.

When factories reopen at the beginning of the seafood processing season in August, workers engaged through recruitment intermediaries may be offered a bonus worth 50% of their monthly salary for rejoining. This practice enables the factory to secure their labour force as processing work restarts. Workers who complete eight months in one factory also typically receive a bonus.

Workers described receiving their wages in three ways. The majority of workers are paid in cash through recruitment intermediaries, or directly by factory management. A third group of workers described receiving their wages through direct deposit into their bank accounts. From these base wages, workers pay between INR 500-1300 (USD 6.63- 17.25) for *chhakra* transportation; and monthly commissions to recruitment intermediaries—either INR 200 (USD 2.65) for employment in factories supplying to Asian markets, or INR 300 (USD 3.98) for employment in factories supplying to EU markets.

### Hours

While the working hours in factories in Veraval are recorded as 8 hours per day, women typically work 12 hours per day on shifts running from 9 am to 9 pm. Although it is common for shifts to extend to 14 hours, processing workers do not receive overtime pay. On rare occasions, women described being required to work until as late as 2 am—for the most part, however, shifts that stretch into the night are reserved for migrant workers. Some women do in fact work 8 hour shifts, but as described in the previous section, these women receive lower wages.

For the most part, women reported receiving two days of paid leave each month. During peak seafood processing season, however, some women also reported working 28 days at a stretch without receiving a



day of leave. During these peak-season, back to back shifts, women reported different factory practices related to breaks. Women reported that in some factories, they did not receive any breaks, even to use the toilet. As one worker described:

“ They don’t allow us to sit. They make us work continuously. As soon as one task is complete, they immediately assign more work. ”

In other factories, women reported receiving three breaks a day: two 5-10 minute breaks; and one hour-long lunch break. Women also reported inadequate toilet facilities—including factories where 150 women and 20 men share two toilets.

## Occupational health and safety

Seafood processing factories in the Veraval-Somnath GIDC are cold and wet, with temperatures in the processing factory kept as low as 10 degrees celsius. Accordingly, workers must physically adjust from higher outside temperatures to cold temperatures within factories each day when they arrive at work. Then, at the end of the day, they must again acclimatize to higher temperatures when they leave work.

Women spend their shifts standing at tables where they sort, grade, and process seafood products. This repetitive work in wet and cold environments contributes to a range of health problems. These include joint, leg, lower back, back, and shoulder pain; eye irritation, eyesight problems, and headaches; coughing, asthma, and other breathing problems; nausea; injuries, including cuts, rashes, bruises; and skin problems and fungal infections on their palms and feet. Compounding these issues, contact with fish juices and enzymes are associated with eczema and occupational asthma (Amaravathi et al. 2016).

Access to protective gear varies across factories in the GIDC. Processing workers in factories exporting to the EU reported receiving basic safety equipment, including coats, boots, and gloves—especially for those who work in the cold storage areas. Workers employed in factories exporting to China also reported receiving one set of gloves each month, but no access to replacement gloves. Access to company-provided footwear, on the other hand, depends entirely upon factory practices. One woman explained:

“ Some companies provide shoes, and some do not—then we work wearing our slippers. Working in slippers, you can sprain your foot at any time. It is easy to slip since we work with ice. ”

Unlike in seafood processing factories in Khulna and Bagerhat Districts in Bangladesh, factories in the Veraval-Somnath GIDC do not maintain on-site health facilities. Instead, in instances when they get cuts or bruises, workers describe being asked to tie plastic bags around their wrists and keep working. When workers fall or are injured on the job, they are not provided with sick leave. Instead, they are marked absent and forfeit their daily wages.

## GBVH

This section provides examples of the spectrum of violence reported by women workers employed in seafood processing factories in the Veraval-Somnath GIDC—including acts that inflict physical harm, mental harm, sexual harm or suffering, and coercion, threats and retaliation (Table 11). Women described GBVH from supervisors and managers as well as other male factory floor workers. For instance, they described harassment from male workers during toilet breaks, including repeated requests for their phone numbers. They also described verbal abuse from supervisors, and threats that they will lose their jobs if they resist working overtime hours. Notably, women also described factories where they were treated with respect and addressed as *behen* or *didi* (sister). In future research, it would be important to understand the factors that contribute to cultures of workplace respect.

**Table 11: Spectrum of gender based violence and harassment reported by women employed in seafood processing factories in Veraval-Somnath GIDC**

GENDERED ASPECTS OF VIOLENCE, INCLUDING:	
(1) Violence against a woman because she is a woman (2) Violence directed against a woman that affects women disproportionately due to (a) high concentration of women workers in risky production departments; and (b) gendered barriers to seeking relief	
Forms of violence	
Acts that inflict physical harm	» Long hours performing repetitive manual tasks in a cold environment, leading to chronic leg and back pain, and other adverse health consequences, gendered aspect 2(a) » Failure to provide adequate safety equipment and training leading to routine hand cuts, sores, and infections 2(a)
Acts that inflict mental harm	» General verbal abuse, including bullying and verbal public humiliation, gendered aspect 2(a)
Acts that inflict sexual harm or suffering	» Unwanted physical touch, including inappropriate bodily contact by managers and male co-workers, gendered aspect (1)
Coercion, threats, and retaliation	» Fear of retaliation, including loss of employment, for reporting rights violations, gendered aspect 2(a)
Deprivations of liberty	» Preventing women workers from taking breaks to eat and rest, gendered aspect 2(a)

As described in our discussion of GBVH in seafood processing factories in Bagerhat and Khulna Districts in Bangladesh, GBVH is rooted in risks associated with the systematic concentration of a majority woman workforce in the lower tiers of supply chain production. Our research establishes that women engaged in seafood processing at the Veraval-Somnath GIDC are exposed to many of the risk factors for violence in the world of work named by the ILO Expert Committee on Violence and Harassment Against Women and Men in the World of Work (Table 12).

**Table 12: Risk factors for GBVH identified in the seafood processing industries in Veraval-Somnath GIDC**

#### Risk Factors for GBVH

- » Workers who cannot exercise their rights to freedom of association and collective bargaining, due to the inappropriate use of contractual arrangements leading to decent work deficits . . . , are also likely to be more at risk of violence and harassment (para. 13)
- » Unrealistic production targets (para. 10)
- » Unsocial working hours (for instance, evening and night work)(para. 9)
- » Working in resource-constrained settings (inadequately equipped facilities or insufficient staffing)(para. 9)
- » Working in situations that are not properly covered or protected by labour law and social protection (para. 9)
- » Poor labour relations (para. 10)

**Note:** Paragraph numbers refer to International Labour Office, Violence and Harassment Against Women and Men in the World of Work: Trade Union Perspectives and Action (Actrav 2017).

## Freedom of association and access to relief in cases of rights violations

Seafood processing workers in Veraval-Somnath GIDC face significant barriers to unionization. These include:

- » Employment as contract workers with no formal employment relationships with seafood processing factories
- » Complete control over migrant workers, including control over working and living conditions
- » Incentives for recruitment intermediaries who are from workers communities to mediate challenges between factory management and workers and maintain a stable and compliant workforce
- » Factory practices of blacklisting workers across the Veraval-Somnath GIDC for resisting rights violations



- » Extended working hours and lack of breaks, undermining opportunities for worker engagement beyond village level groups
- » Challenges in organizing for women workers in workplaces structured by gendered hierarchies, with male workers in supervisory and management positions and women workers in subordinate positions.

In this context, workers report first approaching recruitment intermediaries to address workplace challenges. Recruitment intermediaries, in turn, approach factory management to negotiate resolutions for particular workers.

## COVID-19 Impacts on seafood processing factories, employment, and livelihoods

Unlike in Bagerhat and Khulna Districts of Bangladesh, in both 2020 and 2021, COVID 19 lockdowns and supply chain disruptions began in March, coinciding with the lean period for seafood processing in the Veraval-Somnath area. During lockdown periods that coincided with seafood processing work, factories continued to employ migrant workers residing on the premises.

Following the first wave of COVID 19 and attendant lockdowns, orders were initially slow and then picked up pace due to continued demand for processed and prepared seafood products in global export markets. Accordingly, among the 128 workers we engaged in a COVID 19 impact assessment from January to April 2021, by approximately one year after the first COVID 19 national lockdowns in India, 72% had returned to work—including in sorting, grading, setting, and packing.

The vast majority of workers who returned to work also, however, described returning to factories that had downsized their workforce by terminating workers. Workers who were terminated did not receive any formal notice from the employer and were instead informed indirectly by local recruitment intermediaries. Only one of the 26 workers who described their experience of termination received severance pay—in this case the worker received INR 8100 (USD 107.46) in severance. Workers also reported forfeiting wages for work they had already completed at the time of termination.

The impacts of COVID 19 on seafood GVCs reverberated beyond periods of national lockdown in India, with ongoing implications for workforce size and labor distribution. Women workers reported that factories running with a reduced workforce abandoned gendered distributions of work. Women described taking on loading and working in cold storage, lifting boxes as heavy as 25 kilos onto their heads and transporting them within the factory—even up stairs.

Due to COVID 19 related job loss in not only the seafood processing sector, but also in other area industries and informal sector roles, the majority of workers we engaged in our impact assessment described experiencing household level food insecurity during the pandemic. Partially addressing food insecurity among seafood processing and other workers in Veraval-Somnath, workers described receiving subsidized grants through India's Public Distribution System (PDS). They also received food packets from SLD under this program, and from local political parties.

Despite access to these food security resources, however, all of the 128 workers we engaged in the COVID 19 impact assessment described borrowing money in order to meet their family needs. Workers incurred debts ranging from INR 4000 to INR 25,000 (USD 53.07- USD 331.68). In December 2021, among the 411 workers who attended health camps under this program, 203 (49.4%) exhibited nutritional deficiency.

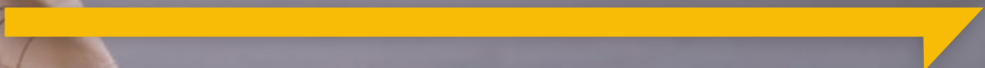






**PART 4**

**Labour rights  
on seafood  
value chains**





As laid out in Part 1, seafood GVCs are coordinated by a relatively small number of lead firms—mostly large supermarket chains and processed food companies—with well established brands, consolidated retail power, extensive processing capacity, and large buying power. These relationships—where a few lead firms hold varying degrees of monopoly on the product market, and therefore can choose between downstream suppliers within and across borders—are referred to in the literature on value chains as “global monopsony capitalism” (Nathan and Silliman Bhattacharjee et al. 2022). With dominant positions on seafood supply chains, retailers and supermarkets pursue global sourcing strategies, using their buying power to set prices, schedules, and food safety and quality standards (Gereffi and Lee 2009).

Addressing food safety risks to consumers on elongated supply chains, seafood value chains are governed by an elaborate system of regulations and international standards. These include the World Trade Organization (WTO) tariff and non-tariff regulations; UN Food and Agriculture Organization (FAO) standards; domestic regulations; and a growing number of private third party certification agencies— such as Global Aquaculture Stewardship Best Aquaculture Practices (BAP), Aquaculture Stewardship Council (ASC) and Marine Stewardship Council (MSC)(Silliman Bhattacharjee 2016). These measures include controls on product standards, sanitary measures and phytosanitary measures (SPS), import licensing, and origin and conformity assessments. Lead firms also use quality standards as a key mechanism of differentiating their products in diverse and competitive markets (Gereffi and Lee 2009).

This complex network of standards is significant to the structure of seafood value chains and, in turn, working conditions for seafood processing workers at the base of these value chains. First, as confirmed by our research in Bangladesh and India, in order to meet quality standards during processing and storage, large exporters work with a limited number of licensed exporters. Second, upholding quality standards on complex supply chains requires lead firms to coordinate closely with downstream suppliers and producers (Gereffi and Lee 2009). These factors create comparatively stable relationships between lead firms and large exporters when compared, for instance, to garment global supply chains (Nathan and Silliman Bhattacharjee et al. 2022). This somewhat improves the bargaining positions of exporters, but lead firms with varying degrees of monopoly in the product market still dominate these value chains. The power of lead firms on seafood GVCs was, for instance, particularly clear from our research on COVID-19 impacts on seafood value chains in Bangladesh and India. In this global economic crisis, lead firms were able to significantly shift the costs of COVID-19 supply chain disruptions onto downstream firms and their workers by canceling orders and refusing to pay for already produced and even partially received goods.

While relationships between lead and export firms are relatively stable, the margins earned by export firms still fluctuate significantly. As laid out in our discussions of Bagerhat and Khulna Districts in Bangladesh, and Veraval-Somnath GIDC in India, this fluctuation is closely tied to the vagaries in the markets for raw fish and seafood stocks, both locally and globally. Locally, the cost of purchasing seafood for processing firms shifts in relation to the quality of the catch or harvest: where the catch or harvest is good, prices are likely to fall; and alternatively, when it is poor, prices are likely to be higher. Globally, the costs lead firms are willing to pay is informed by the price of fish and seafood stocks in other places across the globe. For instance, a high volume harvest of a particular type of seafood in China is likely to drive down prices for that particular raw seafood across the globe. Between fluctuating costs of raw seafood inputs, and fluctuating costs of market prices in a globally integrated market, stable relationships with lead firms do not necessarily translate into stable margins. The financial risks of this instability are transferred by seafood processing factories onto their workforce, via temporary employment stints, low wages, and little investment in the health, safety, and skills upgradation of processing workers. In Bangladesh and India, where there is significant surplus labour in the overall national labour market, processing factories are able to hire women workers to fill these temporary positions despite low wages and poor working conditions.

Relatively stable business relationships do, however, provide a basic framework for addressing labor standards. On one hand, supplier firms with relatively stable demand and some negotiating power with lead firms should be able to call for higher margins, which in turn creates the scope for more stable employment and benefits, better wages, and safe workplaces. On the other hand, lead firms have the ability and the standard enforcement processes in place to include labor rights alongside food safety and quality standards. This is increasingly true with advances in traceability on seafood and other agri-food supply chains. The COVID-19 pandemic not only laid bare the vulnerability of production and logistics, but also accelerated technological integration on agri-food value chains. Leveraging technological integration to advance enforceable labor standards for seafood processing and other agri-food workers is a promising site of engagement. In particular, additional research is required on strategies for infusing product traceability aimed at consumer safety and supply chain management with enforceable labor rights protections.

## Recommendations

1. Lead firms should include labor rights alongside food safety and quality standards. In particular, they should develop strategies for infusing product traceability aimed at consumer safety and supply chain management with enforceable labor rights protections. They should reward processing factories and exporters who include the costs of living wages, 8-hour working shifts, adequate occupational health and safety measures, and social security in costing seafood products by maintaining preferred relationships with these suppliers.
2. The Governments of Bangladesh and India should extend labor rights protections to all workers, including all temporary workers, employed in seafood processing factories. This includes establishing and enforcing wage and hour protections, occupational health and safety standards, freedom of association protections, and proactive measures to end all forms of GBVH.
3. Seafood processing factories should include the costs of living wages, 8-hour working shifts, adequate occupational health and safety measures, and social security in costing seafood products.
4. Trade unions and workers organizations should continue initiatives to support seafood processing workers to form collectives engaged in identifying and addressing rights violations. These collectives should take measures to establish links with trade unions and workers organizations across global seafood value chains, including in fishing, aquaculture, transport, and retail. Worker organizing across countries and value chain segments has the potential to address lead firm practices of capturing the gains of value chains by driving down labor standards and working conditions.



**PART 5**

# **Areas for Further Research**





In each of these case studies, our research found that labor conditions for women workers are shaped by a complex interaction between global and local forces: GVC dynamics on one hand; and local labor markets and employment practices on the other, including practices of gendered workforce segmentation that circumscribe opportunities for women workers, leaving them overwhelmingly concentrated in low wage temporary positions. These complex dynamics call for sustained research and analysis in order to develop a more detailed slate of recommendations for GVC firms at local and national levels; policymakers engaged in production countries; and emerging due diligence frameworks in headquarter economies of lead firms.

Areas for further investigation across project areas and specific to particular project areas include:

- » Analysis of the regulatory landscape governing seafood processing in project areas, including area specific, national regulations, and international standards with the potential to advance labour rights accountability as well as gaps in these frameworks.
- » Strategies for infusing product traceability aimed at consumer safety and supply chain management with enforceable labor rights protections. Work in this area would prove particularly timely given the accelerated development and rollout of agri-tech to address COVID 19 supply chain and labor force disruptions—including technological advances in remotely monitoring crops, weather, and soil quality; connecting farmers and buyers across markets; streamlining supply chains; and advancing food traceability.
- » The impact of shifting environmental conditions on access to raw seafood, processing factory margins, and labor rights and working conditions in project areas.
- » Recruitment processes, working conditions, and on-site living conditions for internal migrant workers from Bangladesh and India who find employment in the seafood processing industry in project areas.
- » Analysis of COVID 19 related wage theft practices and their relationship to purchasing practices of lead firms on seafood global supply chains.
- » Further investigation of risk factors, patterns of sexual harassment and violence, and other form of GBVH in seafood processing factories in project areas.

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