

Labour Challenges in Fisheries Processing Industries

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FAO observes that fish was one of the most traded food items in the world and an estimated 35% of all fish produced in the world, about 60 million tonnes worth about USD 143 billion, entered international trade in 2016 (FAO, 2018). The average per capita annual fish consumption was to the tune of 24.9 kg in developed countries, 20.5 kg in other developing countries, 12.6 in LDCs and 7.7 kg in low-income food-deficit countries (Table). This shows the key role fish plays in nutritional security of the world.

Total and per capita apparent fish consumption by region and economic grouping

Region/ economic Grouping	Total food fish consumption (million tonnes live weight equivalent)	Per capita food fish consumption (kg/year)
World	148.8	20.2
World (excluding China)	92.9	15.5
Africa	11.7	9.9
North America	7.7	21.6
Latin America and the Caribbean	6.2	9.8
Asia	105.6	24.0
Europe	16.6	22.5
Oceania	1.0	25.0
Developed countries	31.4	24.9
Least-developed countries	12.0	12.6
Other developing countries	105.4	20.5
Low-income food-deficit countries	20.8	7.7

Source: FAO, 2018

More than 50% of trade in seafood is from the developing to the developed world and the net trade income was valued at US\$ 37 billion in 2016 (UNCTAD, 2018). Trade is essential for meeting demand from consumers along with economic expectations of countries. The increase in trade has been driven by globalization and liberalization of trade barriers and facilitation of

freer trade between countries. Seafood is a major foreign exchange earner for several developing countries, and provides employment and income to millions of people. Fish is traded in different forms from live to value added and even or non-food uses; and is supported by a processing sector, which can be vary in scale from small to very large. The processing industry itself has undergone tremendous changes from traditional methods of processing to more advanced and sophisticated processing technologies, including increasing machine based processing in developed countries. The harvest, processing and consumption of fish can be in different countries. Almost 45% of fish is consumed in fresh, live or chilled form followed by frozen (31%), preserved (12%), cured – salted, smoked or dried (12%) forms (FAO, 2018). Also almost 56 % of consumption in developing countries is catered to mostly in frozen or prepared forms, which is the major market for processed seafood from the developing countries.

World fisheries and aquaculture production and utilization

	2012	2013	2014	2015	2016	2026
Production (million tons)						
Capture						
Inland	11.2	11.2	11.2	11.4	11.6	
Marine	78.4	79.4	79.9	81.2	79.3	
Total Capture	89.5	90.6	91.2	92.7	90.9	91.7
Aquaculture						
Inland	42.0	44.8	46.9	48.6	51.4	
Marine	24.4	25.4	26.8	27.5	28.7	
Total aquaculture	66.5	70.3	73.8	76.6	79.5	102.1
Total world fisheries and aquaculture	157.8	162.9	167.2	169.2	170.3	193.9
Utilization (in million tons)						
Human consumption	136.9	141.5	146.3	148.8	150.9	177.4
Non-food uses	20.9	21.4	20.9	20.3	19.4	16.3

Population (billions)	7.1	7.2	7.3	7.3	7.4	8.1
Per capita food fish supply (Kg)	19.3	19.7	20.1	20.3	20.4	21.6

Sourced from UNCTAD, 2018

Original Source: OECD-FAO (2017), FAO, (2018). Source of population figures: United Nations, 2015.

Labour in the Sector

Fisheries and aquaculture have important roles in providing employment to millions of people in the world. FAO estimates that about 10-12% of the world's population may be employed in these sectors and 60 million people are directly and about 200 million people otherwise employed along the fisheries value chain (FAO, 2016), in activities as diverse as land based work in harbours, in processing facilities; and in other services.

Fish processing is a major post harvest activity and will involve multiple activities:

- Gutting and cleaning (for domestic markets)
- Pre-processing (for further processing)
- Processing (in factories for export)
- Drying, salting curing, smoking (largely traditional, catering to domestic markets)

Seafood exports from India

With a production of 35,99,693 tonnes in 2016 from marine and 14,62,063 tonnes from inland capture and 57,00,000 tonnes from aquaculture, India is one of the largest producers of fish in the world (FAO, 2018). It is also one of the top exporters of seafood with 5546 million USD and a share of 3.9% during the same year, with an annual average growth rate of 12.1% during 2006-16.

This seafood export is supported by a strong processing sector that has established itself over the past few decades. There are 551 processing plants with an installed capacity of 27813.81 MT, of which 313 plants are EU approved plants (<http://mpeda.gov.in>). Besides, there is a total storage capacity of 366315 MT, which included cold storage, chilled storage, dry fish storage and other storage.

Employment in the organised fish processing sector at various levels depending on the activity profiles of the industry, includes, the shop floor workers where the actual processing work takes place; the middle level and top level management; the loading/unloading workers at the shop floor; the supervisors (at the shop floor); the quality control professionals etc. In unorganized and traditional processing there is more informality in employment. The total workforce in seafood processing is not readily available, but several region or country based assessments are available (<https://www.tsic.org.au>; <http://www.fpsc-ctac.com> <http://www.iuf.org>).

Labour related policies in fisheries

While there are no specific policies related to fish processing workers, several international and national policies cover the workforce in the industry. Some of the international covenants available are given below:

Access to decent forms and conditions of employment are enshrined in the Sustainable Development Goals. SDG8 is on 'Decent work and economic growth'. This was, among other things, necessitated because of '.....widening inequalities, and not enough jobs to keep up with a growing labour force.' The targets specifically mentions 'decent job creation' and '.... achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value' (<http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-8-decent-work-and-economic-growth.html>).

The ILO has set out the core labour standards (<https://www.ilo.org>) that are applicable in all employment situations. They are as follows:

- Freedom of association and the effective recognition of the right to collective bargaining (Convention No. 87 & No. 98)
- The elimination of all forms of forced and compulsory labour (Convention No. 29 & No. 105)
- The effective abolition of child labour (Convention No. 138 & No. 182)
- The elimination of discrimination in respect of employment and occupation (Convention No. 100 & No. 111)

With special reference to fisheries, concerned specifically with work on board fishing vessels is the Work in Fishing Convention, 2007 (No. 188). The Committee on Fisheries (COFI) of the FAO has also in its various Sessions decided on '.....legally mandated rights to decent working conditions.....' and '.....give priority to ensure decent working and living conditions in small scale fisheries.....' (<http://www.fao.org/3/a-i5980e.pdf>).

The four pillars of decent work are:

<p>Employment & Enterprise Development Availability of an adequate number of productive, quality jobs, which provide income to cover at least basic needs</p>	<p>Social protection Protection from work-related injury and from lack of income due to unemployment, illness or age</p>	<p>Standards & Rights at Work Fundamental rights: Freedom of choice & equality of treatment, freedom of association & opportunity at work</p>	<p>Governance & Social dialogue Participation to decision-making about work conditions and representation of interests in negotiations</p>
<p>Source:http://www.fao.org/3/a-i5980e.pdf</p>			

While the international covenants give the broad framework for developing specific policies, countries have their own policies to regulate work in industries, including fish processing industries. The Ministry of Labour & Employment of the Government of India looks into policy making on labour and employment. An important national policy relates to **Safety, Health and Environment at Work Place**. Policy making is guided by provisions under the Constitution as well in line with international instruments (<https://labour.gov.in/policies/safety-health-and-environment-work-place>). In the goals of the policy mention is made of 'providing a statutory framework on Occupational Safety and Health in respect of all sectors of industrial activities....' and in objectives '.....continuous reduction in the incidence of work related injuries, fatalities, diseases, disasters and loss of national assets'. Several acts support policy and some of them that are general in nature are applicable to the fish processing sector as well, like 'those related to compensation, wages, insurance and provident fund, maternity, contract labour (regulation), inter-state migrant workers, unorganized workers etc. which are enacted under various sections like Industrial Relations, Industrial Safety & Health, Child & Women Labour, Social Security, Wages, Labour Welfare, Employment, Labour Reforms etc.

The EU has a Common Fisheries Policy ([https://eige.europa.eu/..](https://eige.europa.eu/)) that looks at employment in the sector, including Fisheries, Aquaculture and Processing. Individual states have their own bills and regulations for the sector. Several other international guidelines are also formulated like the Environmental, Health, and Safety Guidelines for Fish Processing by the World Bank Group (<https://www.ifc.org/wps/wcm/.....>).

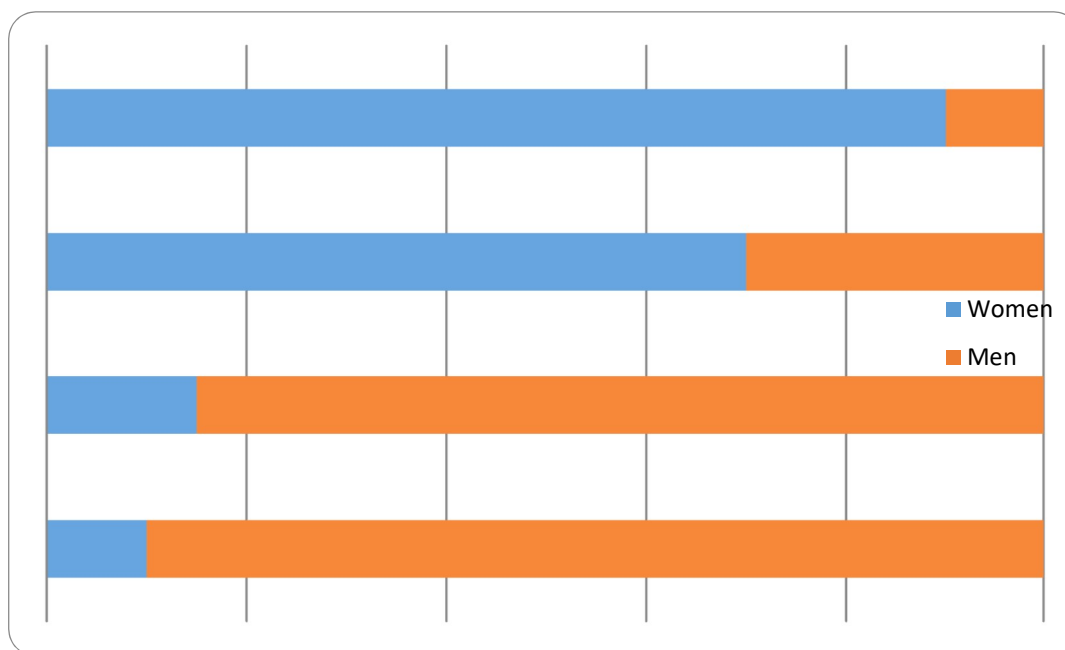
Work in the seafood processing sector

Work in the processing sector can be in organised processing plants or in the unorganized sector where traditional processing activities are carried out.

Traditional processing activities are curing –salting, smoking or drying. These activities are generally small scale and are community or homestead based. They are also mainly carried out by women. The major issues that arise in these activities are in relation to the repetitive nature as well as the conditions of work. Smoking results in release of gases that may be harmful to the persons involved. Sun drying exposes the women and men to harsh weather conditions and possibilities of sun burns. Excessive handling of salt and water also results in injuries to the palms.



Organized processing work involves primary processing like grading, peeling, cutting, gutting, washing of fish and shell fish or may involve other processing steps like brining, cooking, freezing, canning etc. Other jobs like handling, loading and unloading are also carried out. More than 80% of the workforce in seafood processing is women. (Monfort, 2015; World Bank 2010; Siason et. al. 2002; Jeebhay et al. 2004, Gopal et. al., 2009; Gopal et. al., 2007, De Silva, 2011; FAO, 2012; Ancy, 2016).. The processed product is then set into marketable forms or sizes before being frozen. Frozen products are once again packed by the women workers. The characteristics feature of this job is the need for dexterity and skill, but the work is repetitive and involves drudgery. The skill and dexterity that the women possess as well as the patience and ability to bear drudgery are the precise reasons for the domination of women in the sector. Montford (2015), in her summary of various studies observes that the women are preferred because they 'are perceived to be trustworthy, dedicated, meticulous, flexible, compliant, quality minded and cheaper than men.' However, sadly, they are still categorized as semi or unskilled in many countries.



1 WSI Article 2018 <https://wsi-asso.org/media/>

2 FAO. World Bank 0%

The International Organisation for Women in the Seafood Industry (WSI) conducted a 'Gender on the Agenda' online survey from September to December 2017. Complete results are available at : <https://wsi-asso.org/wsireports/>

The work environment is generally cold as a very perishable commodity is being processed. This leads to exposure problems for most of the women involved in this job. Also slippery floors may cause slips and falls and injuries thereof. Constant standing or squatting leads to musculoskeletal disorders and repetitive strain injuries ((Gopal et. al., 2007; Jeyanthi et. al., 2015; Gopal et. al., 2016; Garcia and de Castro, 2017). Use of sharp tools may

also lead to injuries. Constant exposure of the hands to ice, cold water and the raw material which could harbour pathogens also leads to infections of the palms.

Jobs can be repetitive and this can lead to fatigue and drudgery. Infrastructure may not always be adequate to meet personal hygiene requirements and women develop bladder related issues. Since work is related to availability of raw material and wages piece rate, there is practically no break time for the women workers. Work is generally done individually and spaces are confined with little interaction among workers. Shifts during the night may also lead to sleep disorders.

India

Most factories have a health check-up done before the start of the season. In all the processing plants surveyed, visiting doctor provision has been made usually on a monthly interval for check-ups. A few factories also reimburse the employees' medical bills. However, it is observed that they do not undergo any regular or periodic medical check-ups. The only source of information and entertainment is television and newspapers. However, all the workers possess mobile phones.

There is also a risk of exposure to chemicals. The industry is increasingly catered to by migrant labour and this brings in its wake issues of cultural differences.

To minimize occupational health and safety issues proper guidelines are available, implementation of which can reduce the risks associated (<https://www.ifc.org/wps/wcm/.....>) like following sector-specific recommendations for accident prevention, including providing workers with training in the proper use and maintenance of cutting equipment and personal protective equipment. Plants should be so designed that process flows smoothly. Several guidelines like provision of hand rails, separate transport corridors, enclosed conveyer belts, etc. will ensure safe work environments. Use of gloves to prevent cold bites and infections from pathogens is also recommended. Proper ventilation, protective clothing, lighting, temperature control, workspace design to minimize ergonomic distress can be ensured.

Conclusion

The issues associated with labour working in the different nodes of the fisheries value chain have been existent since the time fishing has been an avocation. While there are several international and national laws addressing labour issues, the on the sector level policy formulation and program implementation need to be strengthened to ensure safe and decent work and working conditions for fishers and fish workers.

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