Introduction

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 140 million people otherwise employed along the fisheries value chain (FAO, 2016). Fish is also one of the most traded commodities globally, most of it from the developing to the developed world (Gopal et. al., 2003; Gopal, 2010).

Fisheries and aquaculture are agri-food system with several inherent complexities. The act of harvesting the resource is one, and probably the most crucial, part of the value chain and can be either capture or culture (Fig. 1). Capture fisheries can again be classified as marine or inland depending on where the fishing is carried out. Inland fisheries are dependent on varied water bodies like rivers, lakes, reservoirs, ponds etc. (CPWF, 2013). Fishing in these waters can also vary in scale of technologies used and in the purpose for which the activity is carried out, using minimum or sophisticated technologies; artisanal or commercial; for meeting household nutritional needs or for generating incomes. Fisheries is also complex with respect to the multi-species targeted and the craft-gear combinations used for fishing. Aquaculture also has different variations depending on the type of culture resource – freshwater or brackishwater, organisms being cultured and the type of culture practiced – extensive or intensive. Fisheries also tends to be closely related to the seasonality of availability of resources being targeted. Besides the fisheries value chain has other pre and post harvest activities (Fig 2). Pre-harvest activities include arranging for supplies required for fishing and culture, fishing vessel fabrication, net making, aerators and other implements for culture etc. Post harvest activities include all activities right from the time the fish is landed to the sorting, grading, cleaning, pre-processing, processing, marketing, drying, smoking, salting and several other ancillary or supporting functions like auctioning, storage, transportation etc (FAO/ILO, 2013).

The multiplicity and informality of functions and functionaries, means that the labour in the sector is also as diverse as the sector is, and so are the issues and challenges. The wage sharing arrangements are generally based on word of mouth agreements. Underemployment in the sector is common, especially in fishing (Dhiju et. al., 2012). In the processing sector, wages are based on piece rate methods and can be exploitative.
Conditions of work in the sector are also extremely difficult and hazardous (Krishna et. al., 2002, Gopal et. al., 2009)).

Migration is another issue that is increasingly being seen in fisheries. Women migrant workers were always the backbone of the processing industry, but migration is also being observed in fishing sector, especially marine capture fisheries. Regulations are difficult to enforce and in several instances weak. Fishers and fisher communities have has traditional modes of control and regulation of access to resources. These have all but broken down and with changing technologies for fishing and change in motives of fishing these traditional structures are changing and new ones evolving (Gopal et. al., 2014). Associations are now common in marine fisheries sector and other ancillary and support services, but still largely unseen or poorly developed in inland fisheries.

![Harvest sector overview](image1)

**Fig. 1: Harvest sector- overview**

![Generic Value Chain](image2)

**Fig. 2: Generic Value Chain**

This communication looks at labour in the marine fisheries value chain. Employment in fisheries and aquaculture

Table 1 provides a picture of the employment status in world fisheries. Out of 58.3 million fishers, 21 million work in the inland, 18.4 million in the marine capture fisheries and 18.9 million in aquaculture. Of these 36% are full time, 23% apart time and 41% occasional fishers.
Table 1: Employment in fisheries and aquaculture (world)

<table>
<thead>
<tr>
<th></th>
<th>Marine capture fisheries</th>
<th>Inland water capture fisheries</th>
<th>Aquaculture</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.4 million</td>
<td>21 million</td>
<td>18.9 million</td>
<td>58.3 million</td>
</tr>
<tr>
<td></td>
<td>(32%)</td>
<td>(36%)</td>
<td>(32%)</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

*Fig. 3: Full time, part time and occasional fishers in the world (%)*

In India of a total employment of about 14 million people in the fisheries sector, 3.5 million are directly dependent. Workers in the sector can be broadly classified as people engaged in land based/ shore based activities and those that are directly involved in fishing activities. While people engaged in fishing (who are directly engaged in capturing fish) are generally called fishers, fish workers include persons engaged in all other ancillary activities that take place within harbours, in landing centres or in close proximity of the fishing villages. They activities include (but are not limited to) the following:

- boat construction and maintenance
- maintenance of engines
- net making and mending (in artisanal fisheries much of the net making and mending is done by fishers themselves)
- ice production and supply
- loading and unloading
- Sorting, grading, weighing, icing, packing
- Transporting
- Auctioning
- Traders – wholesale, retail, headload

Some of the activities also take place at markets which can be located in other places away from landing centre/ harbours:

- Ice production and supply
- loading and unloading
- Sorting, grading, weighing, icing, packing
• Transporting
• Auctioning (at several nodes depending on the length of the marketing channel)
• Traders – wholesale, retail, headload

Fish processing is another 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)

**International Covenants**

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](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](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](http://www.fao.org/3/a-i5980e.pdf)).
The four pillars of decent work are:

<table>
<thead>
<tr>
<th>Employment &amp; Enterprise</th>
<th>Social protection</th>
<th>Standards &amp; Rights at Work</th>
<th>Governance &amp; Social dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of an adequate number of productive, quality jobs, which provide income to cover at least basic needs</td>
<td>Protection from work-related injury and from lack of income due to</td>
<td>Fundamental rights: Freedom of choice &amp; equality of treatment,</td>
<td>Participation to decision-making about work conditions and</td>
</tr>
</tbody>
</table>

Source: http://www.fao.org/3/a-i5980e.pdf

Challenges and Issues

Keeping the various international covenants in mind as well as the various state specific policies and programs, the issues and challenges in the sector can be assessed.

*Fishermen on board*

While the ILO has specifically looked at conditions on board, we still find that in most cases the problems still continue to persist. Fishing is considered one of the most hazardous jobs in the world. Traditionally fishermen went with no safety equipment and depended on their knowledge of the seas to navigate and fish. Fishing has improved technologically with mechanization. However, conditions onboard continue to remain the same. Lack of safety equipment, poor onboard basic facilities for crew engaged in fishing are common. There is risk of injury considering the type of jobs to be done during fishing, including risks of cuts and injuries due to falls. States are insisting on carrying proper safety equipment onboard due to increasing frequency of disasters. However, unless it is linked with the registration process this may be difficult to implement. It is additional expenditure and vessel owners have to either be incentivized or mandated to upgrade facilities. Migrant labour is increasingly a part of fisheries and they face exploitation of other kinds, including wage related inequalities.
Fish workers in harbours/ landing centres

Landing centres and harbours are places where there is constant use of water and ice. This is the major risk with possibility of slipping and falling common. Proper protective gear, which is also essential for proper handling of the fish, is important. Other facilities for the functionaries in landing centers and harbours, like proper sanitation facilities also are important.

Fish workers in marketing

Marketing of fish is another important economic activity in fisheries value chain. Marketing can be done in harbours, in designated markets or door-to-door. Designated markets are generally poorly maintained and have all the issues that were discussed in the previous section. Wet, slippery floors, poor sanitation facilities, improper lighting and air circulation, cramped spaces are a few problems encountered by workers. Continuous squatting or standing also take a toll on health of these functionaries.

Fish processing workers (traditional)
Traditional fish processing work includes drying, curing, smoking etc. These are generally carried out outdoors. Sun burns, eye problems (especially in smoking), posture related issues due to continuous squatting or being on the feet are common. Continuous inhalation of smoke also leads to respiratory issues.

**Fish processing workers (factory based)**

Fish processing is an organised activity and it supports the export trade in fish and fishery products. The workers at the floor level work in very difficult conditions, standing for several hours in wet and cold conditions. Health checkups are mandatory for workers. There may be injuries to the palms and fingers as they are constantly in touch with water and ice. Constant standing also results in other conditions like back and other problems (Gopal et. al., 2007; Jeyanthi et. al., 2015; Gopal et. al., 2016).

**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.

**References**


FAO, 2016, Scoping study on decent work and employment in fisheries and aquaculture: Issues and actions for discussions and programming


http://www.fao.org/3/a-i5980e.pdf


https://www.ilo.org


