

Socio-legal Issues in Seafood Industry

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Sustainability of resources and safety of products are the main areas covered under the laws regulating seafood industry. The laws relating to seafood resources aim at protection, conservation, management and sustainability. Laws regarding seafood products focus on food quality and safety from public health point of view. Fisheries sector development policies in India include regulation of fishing areas, closed or restricted fishing seasons, ban on capture of endangered species, regulation of mesh size, coastal regulated zone, sustainable aquaculture, loan and subsidy and social welfare in the fish production sector. The labour laws in capture and culture fisheries are more of conventional nature than legal. In the post-harvest sector, the thrust is on the quality of the product and is governed by Indian and International Standards. Labour laws of the state governments are largely applicable in the pre-processing and processing sector and exporting establishments. Abolition/restriction of Contract Labour Act and Interstate Migrant Workmen Act are the laws generally followed in this sector. Laws specific to seafood industry are inadequate or non-existent. Implementation of laws and regulations in seafood industry has given rise to many social issues such as inter-sectoral conflicts, ecological problems, innovation chaos, displacement of people from traditional occupations, migration and gender concerns. International policies including exim, eco-labeling and EU regulations have also brought in some socio-legal issues in the course of their implementation.

Key words : Socio-legal issues, seafood industry

Seafood industry in India consisting of fish production and fish processing is a major sector providing employment to the rural poor. It is estimated that fisheries form the main occupation for more than one crore people, of whom 40% are women. In other words, human labour forms the mainstay of seafood industry. Sustainability of resources and quality of products are the determinants of growth and development of seafood industry. Management of seafood production aims at protection, conservation and sustainability of resources and management of seafood processing and focuses on food quality and safety, from public health point of view. For

a number of reasons a necessary condition for successful seafood industry is a respected and durable legislative framework. In particular, fisheries management and economic gains associated with it cannot succeed without a system of regulations respected by people. FAO (1994) observed that framework of laws and regulations influence the seafood industry in many ways. For example foreign exchange control may limit the access of the industry to import inputs, hygienic regulations may penalize small-scale fisheries sector, and low capital investment or minimum wages legislation may limit the scope of employment in fish processing industry. Socio-legal issues arise from absence of adequate laws to address the working and living condition of the people who operate at different levels of seafood production and processing and help to bring the industry to the forefront of Indian economy.

Fisheries sector development policies at International level

The World Trade Organization (WTO) has classified fish and fish products under industrial products. Earlier they were included in the Natural Resources Group. Consequently there have been significant tariff reductions for raw materials to maintain fish processing plants causing depletion of the fish stock as explained by EU (Kurian, 2001). The multilateral trade agreement in goods that are likely to have bearing on fish exports are Agreement on Sanitary and Phytosanitary measures, Agreement on Technical Barrier in Trade, Agreement on Implementation of Anti-dumping, Agreement on Import Licensing Procedures, Agreement on Subsidies and Countervailing Measures and Agreement on Safeguards. Kurian (2001) also draws attention to some of the possible repercussions of the GATT on Indian Fisheries such as general exception relating to shrimp-turtle issue, FAO Code of Conduct for Responsible Fisheries, Convention of International Trade on Endangered Species, implications of biotechnology in aquaculture (genetically modified organisms), eco-labeling, social clause issues, investment agreements and movement of fish workers.

Policies and laws relating to fisheries in India

Indian seafood industry is a highly diversified and dynamic economic system. Fisheries enterprise includes a variety of stakeholders from the women who collect fish by hand picking from the small inland ponds, or hand-braid the fishing net, to the multinational corporate that produce, process and export fish.

Laws relating to capture fisheries

The first Indian Fisheries Act to provide for certain matters relating to fisheries in British India was enacted in 1927 'as supplemental to any other enactment being in force relating to fisheries in any part of India except Burma'. This Act prohibited the use of dynamite and other explosives, poison, lime or noxious substances to catch or destroy fish. The Act also prohibited the use of fixed engines (net, cage, trap or other contrivance), construction of wires, and dimension and kinds of the nets to be used and modes of using them. Such rules also prohibited all fishing in any specified water for a period not exceeding two years. The word 'water' included the sea within a distance of one marine league off the seacoast. In 1897, a new section on payment of rent, fees, etc., for fishing lease and licenses and prohibition of fishing of immature fish fry and fingerlings was included.

Travancore Fisheries Act, 1922, Indian Fisheries (Madras Amendments Act, 1927 and Travancore-Kochi Fisheries Act 1956 were mainly applicable to inland waters and are still continuing. Kerala Government notification issued in 1973 prohibited the operation of fixed engines during high tide, as operation of these is very destructive to incoming and migratory juvenile prawns. Rules for management and control of fisheries in Government waters (1974) are applicable to any reservoir on which fishing right is vested with the Department of Fisheries. 'Government waters' means all *puramboke* waters, including backwaters, rivers, lakes, canals, irrigation canals, reservoir and territorial waters of Kerala state. Detailed regulations were made for fixed engines including Chinese net and stake net. These regulations are so farsighted that they are still being followed in the country.

Kerala Marine Fisheries Regulation Act 1980 and its amendment in 1995 regulated and restricted the use of any prescribed fishing gear in any specified area i.e., bottom trawl, in order to maintain the law and order in the sea and to avoid the loss of human life and property and accidents in the sea during squally weather condition. Registration of fishing vessel was made compulsory under MPEDA Act 1972 and section 7 of KMFR Act. However, in 1981 (10 of 1981) of KMFR Act, Government of Kerala exempted all country crafts including those fitted with 'mechanical means of propulsion from the requirement of obtaining licenses. In 1984, KMFR Act prohibited the use of purse seine, ring seine, pelagic trawl and mid-water trawl gears for fishing in the territorial waters in the entire coastline of Kerala as the use of above mentioned gears will lead to large-scale depletion of

626 Seafood Safety

resources in the territorial water, impoverishment of traditional fishermen and law and order problem. The 1986 notification prohibited the use of bottom trawl gears from sun set to sun-rise in the specified areas. The Act also prohibited all fishing vessels fitted with mechanized means of propulsion except motorized country craft in the specified areas. The 1986 notification was amended prohibiting the use of all bottom trawls which have less than 35 mm mesh size in stretched condition for fishing in territorial waters in the sea along the entire coastline as a conservation measure. There was persistent demand from various sectors of fishing community for imposing ban on trawling on the ground that bottom trawling during the monsoon season has been adversely affecting the conservation of fish wealth and their share of earnings from fishing. Consequently, there have been clashes between fishermen belonging to traditional sector and mechanized sector leading to serious law and order problems in the sea. Government, therefore, decided to ban bottom trawling in territorial waters of the state during the monsoon for 45 days from June 15, 1995.

Ban periods ordered under KMFR Act for different years are as follows:

29 June - 31 August 1988, excepting a part of Quilon district where there was heavy concentration of Karikkadi

20 July - 31 August 1989

28 June - 30 September 1990

15 July - 16 August 1991

21 June - 3 August 1992

15 June - 15 July 1993

15 June - 29 July 1994

In 1994, restrictions were also imposed on fishing vessels less than 43 ft length that do not satisfy certain conditions from operating beyond territorial waters and ban on all kinds of trawling. The current trawl ban period is from 15 June - 29 July. A compendium of Acts and rules relating to Inland Fisheries of Kerala and KMFR Act of Kerala Fisheries is available with Directorate of Fisheries, Kerala. The Draft Fisheries Policy of Kerala Government (FIRMA, 2002) has also reiterated the necessity of ban on monsoon trawling.

Laws and regulations in aquaculture

Aquaculture is mainly practiced in private water bodies and public water bodies leased in by private or cooperative initiative and the rights of use are vested with the investor. Aquaculture developed as a commercial activity in 1980 with the development of farming and hatchery techniques. Shrimp culture attained the status of an industry during 1990s. The laws relating to prawn farming in traditional *chemmeen kettu* in Kerala followed filtration of prawn and fish based on lunar cycles. The fields were stocked in October soon after the harvest of paddy, and filtration completed on 15 April. The field was then left open to the locals for collection of remaining fish.

Laws relating to aquaculture include:

- i. Environmental protection Act 1986
- ii. 1955 Amendment to Land Reform Act 1974 making land leasing for aquaculture an exception
- iii. 1997 Court Directive to establish at a Coastal Zone Management Authority to enforce the principle of 'precaution' and 'polluter pays'
- iv. Constitution of Aquaculture Authority to issue license for traditional and improved traditional aquaculture within Coastal Regulated Zone (CRZ) 1997
- v. Restriction on use of certain chemicals, antibiotics, pesticides and explosives, GOI notification 2002

Under the Environmental Protection Act 1986, the Government of India issued directions for constituting an Aquaculture Authority to implement the regulatory mechanism. The Coastal Regulated Zone Act regulated all aquaculture industry excepting traditional and improved traditional types.

Laws relating to processing industry

Indian Seafood Industry has experienced rapid strides with the liberalized international policies. The importance of introducing quality management and upgradation system has become a necessity not only for the safety of food but also for catching up with the global markets. WTO under its agreement on Sanitary and Phytosanitary measures has recognized the Codex Standards as reference specification for settlement of disputes on quality of food. One of the most important elements recently introduced by Codex Alimentarius Commission is the Hazard Analysis and Critical

Control Point (HACCP) to ensure foolproof quality and safety standards. Indian and international standards, USFDA Regulation (Food, Drugs and Cosmetics Act, Public Health Service Act, Radiation Control for Health and Safety Act and Import Milk Act), Current Good Manufacturing Practice Regulation and FDA food standards including health safe guards, economic safe guards, labeling, sanitation, plant construction design and layout, defect action level, food additive and ware housing and Indian standards and Standards of International Standards Organization are the laws mainly governing the product safety in the seafood processing industry.

Labour laws in seafood industry

Capture fisheries is still a labour oriented activity and the conventional system of sharing the catch among the owner, craft, gear and the labour continues in marine and inland fisheries, particularly in Kerala. From the time the fish is landed the sharing system gives way to cash transactions. In the non-mechanized sector the middleman holds the rein of business in the landing center. The craft owners to a large extent are obliged to sell the catch to the middlemen who continuously finance the fishermen for fishing operations and other difficult times.

In the seafood processing sector the laws cover:

- i. Fundamental rights
- ii. Directive principles
- iii. International Concern for Women workers
- iv. International Labour Standards which includes equal remuneration, prohibition of discrimination, collective bargaining, maternity protection and restriction for night work for women

There are specific laws relating to migrant fish processing workers, the important one being the Interstate Migrant Workmen (regulation of employment and conditions of service) Act 1979 and the Contract Labour (regulation and abolition) Act 1970. The Interstate Migrant Workmen Act has specified regulation on registration, licensing, displacement allowance, travel fare, regular payment of wages, residential accommodation, medical facilities, protective clothing, safe drinking water, latrine, urinal, restroom and canteen.

Rules and regulations generally followed in fish processing factories are:

- i. Minimum Wages Act, 1948
- ii. Factories Act, 1948
- iii. Employees State Insurance Act, 1948
- iv. Employees Provident Fund and Miscellaneous Provision Act, 1952
- v. Maternity Benefit Act, 1961
- vi. Payment of Bonus Act, 1965
- vii. Payment of Gratuity Act, 1972

Despite constitutional and legal provisions inequalities and irregularities persist in the implementation of the laws. These provisions are rarely implemented in the pre-processing sector that continues to work in the unorganized sector. Most of the fish processing units maintain production activities from August–April and therefore fish-processing industry is classified as a seasonal industry (Ministry of Labour, 2001).

Socio-legal issues in seafood industry

Coastal zone management is an issue driven process with political implications (Clark, 2000). Capture fisheries consisting of marine and inland fishing forms the livelihood of coastal rural communities. Fish processing industry is an employer of rural work force consisting mainly of women.

Issues involved in Exim policies

Fish being an important source of protein has high demand both in domestic and export market. One of the criticisms arising out of Exim policy is that adequate care is not given to protect the socio-economic interest of domestic market. Some of the issues pointed out by different sections of stake holders are:

- i. No quality check for products imported into the country
- ii. WTO rules do not provide for enforcement of food quality standards which are not available in the importing countries
- iii. Proposed import of fishing vessels including used ones that may encourage displacement of domestic manpower.
- iv. Fish caught from all areas may not be eligible for eco-labeling

630 Seafood Safety

- v. Prevention of child labour, exploitation of women and rights of workers, if not carefully examined, may interfere with the social and economic security of rural communities
- vi. Eco-tourism has direct impact on the society and must be decided in consultation with the local fishing communities

Innovation chaos

Diffusion of innovation is a social process. Technology transfer system should be able to shape the environment rather than passively react to changes. In a centralized diffusion system, key decision about which innovation to be diffused, how to diffuse or diffuse to whom, are decided by a central agency. In a decentralized diffusion system, the user system is capable of managing its own diffusion process. In this system, innovation comes from experimentation of non-experts who often are users, created by locally perceived needs and problems (Rogers, 1995). In fisheries, unlike in agriculture, technology diffusion has been through decentralized channels that have paved way for the emergence of large number of local technologies and counter technologies. Each person actively engaged in fishing or fish farming is an innovator on his own accord, so to say. As a result, we have a variety of practices in use in fish production creating waste of resources and confusion in the selection of technologies and implementation of regulatory measures. This can be termed as 'innovation chaos'. Innovation chaos leads to faulty use of fishing and fish farming practices resulting in excess competition, high profit motive, overcapitalization and overexploitation of resources. This system lacks proper guidance and direction for use of the innovation in Indian fisheries. Some of the chaos created by decentralized diffusion in fisheries are:

- i. Enormous increase in the size of craft, gear and engine power in the motorized sector
- ii. Trawling by motorised sector
- iii. Mechanization of country crafts
- iv. Capture of juveniles for farming and processing
- v. Lack of proper sea safety measures
- vi. Degeneration and regeneration of fishing groups
- vii. Inter-sectoral and interstate conflicts

- viii. Overstocking and overfeeding in fish farms
- ix. Use of infected seed and outdated feed
- x. Supply of infertile stock for breeding and farming of aquarium fish
- xi. Use of drugs
- xii. Lack of serious disease monitoring by farmers

A typical fish landing center like Kalamukku or Munambam in Cochin presents a variety of innovations such as vessels fully equipped for deep sea fishing, country crafts made of steel fitted with diesel engines and or modified for pair trawling, mechanized country crafts having up to eight carrier crafts, ring seine measuring up to 600 m, and country crafts using cell phones and negotiating landing center prices. Decentralized innovations supported by commercial non-fisheries sector have revolutionised the seafood industry without paying much attention to optimum gains and sustainability.

Cultured fish has come up as an alternative support for seafood processing and export industry. Here the chaos results from abuse of inputs, mushrooming consultants and financial risk posed by disease. Confusion is also created by different scales of farming practices implemented and absence of fine-tuning of technologies to suit locations and farmers' needs (Srinath, 2000). Shrimp farming vs. paddy farming and scientific shrimp farming vs. traditional shrimp farming give rise to conflict between paddy and shrimp farmers and shrimp farmers and the labourers in capture fisheries (Srinath, 1997).

Gender issues

Excepting fishing in the sea, women participate in all fish production activities. Fishing in canals and small water bodies by hand picking, collection of shells and seaweeds, helping the men in the operation of cast net and Chinese net, sorting, grading and processing both at household levels and pre-processing centers and processing plants, handling of stake net catch, small scale retail sales in fish markets and vending and hand braiding of fishing nets. The major work force in the post-harvest sector is women.

Women due to economic compulsions and those from female-headed households are mostly found to participate in fisheries related activities such

as processing and vending. Poverty and hunger are the common socio-economic features of fishermen households who depend upon only fish catching for livelihood.

Women from Kerala and other neighbouring states reach the processing plants all over India through interstate migration. Even though labour laws and regulations to be followed in processing establishments are specified, subcontracting the jobs from procurement to packing makes the regulation of conditions of work difficult. Strict enforcement of working facilities and standards of hygiene led to closing down of a number of processing units and reduced employment opportunities for women. Occupational diseases such as allergies, infection, scabies, back ache and needles and pins sensation, ventilation and temperature problems in dormitories and limited messing facilities are some of the constraints faced by women in fish processing sector. Trade unionism is found to be getting strong which may help to increase the bargaining power of the workers. The stories of sexual abuse and exploitation are still being reported. There is no provision for trade unions in the pre-processing sector, which continues to be an unorganized activity where there is no fixed number of persons or timings for doing the job.

Fisheries development in India is beset with many problems and yet has received increasing importance in the country's economy. The constraints involved in the optimum growth of the economy are of two kinds, one relating to the resources and products and the other relating to the people, who operate at different levels of the industry. People's participation and provision for livelihood security in formulation of policies and regulation, quality improvement at grassroots, human resource development and empowerment through education and right technology, strengthening of group activities and government supported extension work will help to tighten the loopholes and reduce malpractices in order to ensure dignified lives for people.

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