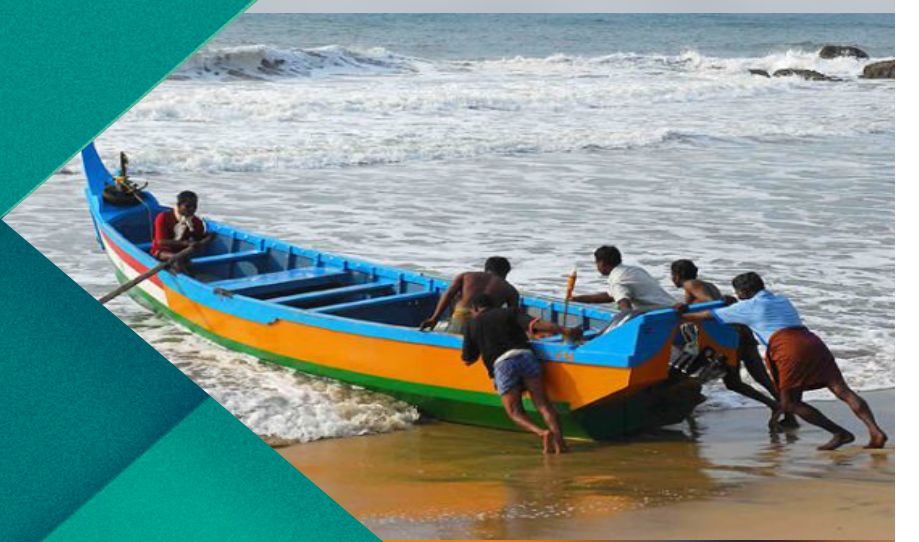
The Coasts, the Fish Resources and the Fishworkers' Movement



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NATIONAL HUMAN RIGHTS COMMISSION
INDIA

The Coasts, the Fish Resources and the Fishworkers' Movement

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Revised by
Devendra Kumar

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THE COASTS, THE FISH RESOURCES AND THE FISHWORKERS' MOVEMENT

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Foreword

The National Human Rights Commission ever since its inception is working for the protection and promotion of Human Rights of the people of the country. For full development as human beings, exercise and enjoyment of Human Rights by all the people is necessary. Historically, education has been an instrument of development and an important factor for change. Human Rights Education should be an essential part of education for all and especially of young minds.

On 10th December 2004, the General Assembly of the United Nations proclaimed the World Programme for Human Rights Education to advance the implementation of human rights education programmes in all sectors. Building on the foundation laid during the United Nations Decade for Human Rights Education (1995-2004), the new initiative reflects the international community's increasing recognition that human rights education and literacy promotes respect for inherent human dignity and equality.

The foremost objective of this dossier is to generate interest, shape opinions and enlighten students on human rights issues. Human rights education should aim at begetting attitudinal change in human behavior such that human rights for all become the spirit of living. I hope that this dossier proves to be useful for creating awareness among students, academia and the stakeholders.

(Justice Arun Kumar Mishra)

Preface

Human Rights and fundamental freedoms help us to develop our intrinsic qualities and intelligence. The recognition of the Right to Education is essential for the realization of the right to development of every individual and nation. Of late, it is recognized as a Human Right in itself. The knowledge of the rights and freedoms, of oneself as much as of the others, is considered as a fundamental tool to guarantee the respect of all human rights of each and every person as guaranteed in the Preamble to the Constitution of India.

Human Rights Education acts as a linkage between education in the classroom and developments in a society. Human Rights Education makes people aware of the inherent dignity of all. The study of Human Rights should be made an essential part of curriculum in schools, colleges and universities across India. Under the Right to Education Act, 2009, it is mandated that free education should be provided to all children in the age group of 6-14 years.

In the year 2006, the Karnataka Women's Information and Resource Centre was involved in developing reference material for human rights education in universities. The dossier, "The Coasts, the Fish Resources and the Fishworkers' Movement" was developed by Nalini Nayak and A. J. Vijayan. A need was felt to keep the dossier in sync with the relevant amendments, changes in laws. The present, updated version of the dossier is prepared by Mr. Devendra Kumar, Special Rapporteur, National Human Rights Commission.

The Commission is grateful to the authors of this dossier.

17/9/21

(Bimbadhar Pradhan, IAS)
Secretary General, NHRC

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Introduction

For most people who live on the land, the ocean is an unknown realm. Yet 70% of the planet earth is covered with water, with the ocean occupying the largest part. Quite a few million people not only live on the coast but gain almost their entire livelihood from the ocean's resources. This is a very specific zone between the land and the sea. While coasts can be of different natures, they form a living ecosystem with an intricate dynamics sustaining vegetation and both animal and human populations. While the oceans provide humans with their sustenance, their lives are also at their mercy, as it is extremely difficult to tame the waters as they have their own dynamics with equal and opposite reactions. In this dossier, we look at the ocean as a source of resources on which particular communities have depended and their rights in safeguarding their access to these resources.

Worldwide, over 58 million people, men, and women are estimated to be engaged in the primary sector of capture fisheries and aquaculture in 2018, more than double the numbers employed in the sector in 1990. This includes 37 per cent engaged full time, 23 per cent engaged part-time, and the rest working as either occasional fishers or of unspecified status. Over 15 million work full-time on fishing vessels. Overall, 10 percent of the world's population depends on fisheries for their livelihoods, and 4.3 billion people are reliant on fish for 15 percent of their animal protein intake.[1]

This dossier deals with the human rights of a community, a group, as opposed to the human rights of an individual – the rights of the coastal community to the resources of the oceans. Why is it necessary to make this distinction?

1. Food and Agriculture Organization of the United Nations, The state of world fisheries and aquaculture 2014. Rome, 2014.

Fishery Dependent Livelihoods Worldwide

It is estimated by FAO that 59.5 million people worldwide were engaged in the primary sector of fisheries and aquaculture in 2018. While fishing in marine and inland waters accounted for 66% of the total number of workers, aquaculture provided employment for the remaining 34%.

The highest number of fishers and aquaculture workers are in Asia (85%), followed by Africa (9%). Due to various reasons like seasonal resource availability, fishing regulations like closed seasons, limits and quotas on catching fish etc., fishing in marine and inland waters is often a part-time occupation (almost 60% of the total). According to FAO, "In many developing countries, which have the largest number of fishers, the spouses and families of fishers are occupied in coastal artisanal fisheries and associated activities. Reliable estimates of the number of people engaging in fishing on a part-time or occasional basis, or undertaking rural aquaculture as unpaid family workers, are difficult to obtain. As a consequence, the socio-economic importance of these activities is more difficult to measure, although their contribution to production and income, and to food security for coastal and rural communities, is substantial."

(Source: FAO 2020, The State of World Fisheries and Aquaculture 2020, Food and Agriculture Organization of the United Nations, Rome)

In formulating the Declaration of Human Rights, the Western nations were primarily concerned about the civil and political rights of individuals and groups. Though civil and political rights are invaluable because, without them, freedom and democracy cannot survive, they do not exist for the vast majority of people in the developing countries who suffer from poverty. Only if social, economic, and cultural rights are ensured to these large masses of people will they be able to enjoy civil and political rights. Thus, the International Human Rights Conference in 1968 declared: "Since human rights and fundamental freedom are indivisible, the full realization of civil and political rights without the enjoyment of social, economic and cultural rights are impossible." In India, the Human Rights Commission has clearly stated that it will examine violations of social, economic, and cultural rights. At the same time, it will also pay heed to the rights to development as a human right.

According to Justice P.N.Bhagwati, "The right to development

is one of the most important basic human rights, and it constitutes the culminating point of the evolution of the concept of human rights. This super-right, transcending the differentiation of civil and political rights and socio-economic rights into the future dimension, has been termed a 'human right of the third generation'. It has been recognized as an individual as well as a collective right in several resolutions of the Human Rights Commission of ECOSOC. It has also been made a subject of research by various expert committees and several international bodies, such as the International Commission of Jurists who have started developing and elaborating its various constituent elements."[2]

The right to development includes within its ambit both civil and political rights, as well as social and economic rights. It contains within it the right to food, health, and basic necessities of life. It is basically a 'right to life'. The right to life as a basic human right is intended to be a legal safeguard not only against violent aggression but also against the encroachment on vital conditions of life, conditions without which it is impossible to survive as a human being. Article 25 of the Universal Declaration of Human Rights provided: "Everyone has the right to a standard of living adequate for the health and well being of himself and of his family, including food, clothing, housing and medical care".

The Supreme Court of India, interpreting Article 21 of the Constitution, which enshrines the right to life, deduced the right to minimum conditions of living with human dignity from the right to life. In one of its striking judgments, the case of the Pavement Dwellers', it stated, "We think that the right to life includes the right to live with basic human dignity and all that goes along with it, namely the bare necessities of life such as adequate nutrition, clothing and shelter over the head and facilities for reading, writing and expressing oneself in diverse forms."[3]

India has a written Constitution. According to Justice Bhagwati, "I believe it is one of the longest Constitutions in the world. It has a Preamble which encapsulates the basic objective of the constitution-makers namely, to build a new socio-economic order where there will be social, economic and political justice for

2. Justice Bhagwati, P.N., Dimensions of Human Rights, Society for Community Organisation Trust, Madurai, 1987
3. Eviction of the Pavement and Slum Dwellers, Petition No 4610/4612 of 1981, Olga Tellis and ORS VS Bombay Municipal Corporation and Petition No 5068/5079 of 1981, Vayyapuri Kuppuswamy and Ors VS State of Maharashtra.

everyone and equality of status and opportunity for all. This basic objective of the Constitution mandates every organ of the State to strive to realize and it is concretized in the Fundamental Rights and the Directive Principles of State Policy embodied in the Constitution. The former are enforceable in a court of law, while the latter are directives. The task of enforcing the Fundamental Rights has been assigned by the Constitution to the Supreme Court and the right to move the Supreme Court for enforcement of the Fundamental Rights has itself been elevated to the status of a fundamental right. The Supreme Court has thus been invested with the power of judicial review and it is a larger power that is intended to keep every organ of the state within the limits laid down by the Constitution and the laws. It is in the exercise of this power of judicial review – a power which is also possessed by the High Courts in India, that the strategy of public interest litigation has been developed by the Supreme Court."[4]

In this context, this essay will further elaborate on the rights of the coastal communities in general and the fishworkers in particular. For these people, the only source of livelihood over generations has been the fish resources of the oceans. Most of them have no other skills than those related to catching, processing, or distributing fish. Years of 'development,' while benefiting a few, have marginalized several others. In their struggle to survive, they have organized to fight for their right to life and livelihood.

The Ocean Commons

From a biological point of view, most of the planet's massive area of the sea is the equivalent of the deserts on land. Like terrestrial deserts, most of the open sea supports only a small number of highly specialized plants and animals. Unlike the narrow band of coastal waters, which contain large numbers and great varieties of fish, the open ocean is generally unproductive, and oceanic fish, such as tuna, are generally restricted to particular areas which are unusually rich in nutrients. Almost half of all species of animals with backbones (vertebrates) are fish. There are over 21,000 different species of fish distributed in environments from high mountain pools to the deepest parts of the ocean and from warm tropical waters to cold polar waters. Demersal fish live near the sea floor,

4. Ibid, pg. 9

whereas the pelagics are surface water fish. In the temperate waters of the northern hemisphere, fish are typically found in big shoals but with few species diversity than the tropical water, where fish have a greater species diversity but may not be found in as large shoals. This has a bearing on the manner in which they are harvested. A fishery exists in a milieu of a complex set of interactions between the environment, the target species, and the people involved in the fishing, handling the catch, and managing the resources.

All over the world, numerous coastal communities have fished the rich oceans for food from time immemorial. Nature's bounty and the rich interface between land and sea has provided a rich diversity of aquatic life to humankind, from seaweeds and grasses to crustaceans, cephalopods, and varieties of fish. In the past, fishing was more a gathering activity in which the main players were women. Resources were plentiful, and the population demands small. The collection of fish for food, which meant only mature fish, did not impact the regeneration of resources. But the human population and its demands for seafood have grown. Fishing became a male profession based on hunting and navigational skills and experiential knowledge of hydrology and astronomy. Gradually, with the introduction of more efficient technology, fishing has grown beyond that which the finite resources of the oceans can support. The dilemma is that as demand for fishery resources is increasing, the ability of the marine environment to sustain them is decreasing.

Fish is a renewable resource that is not produced but extensively harvested, as a rule, freely harvested. The specificity of a renewable resource is that it has its own regeneration cycles, which requires a specific environment which in turn is interlinked with other cycles – in this case, the currents, water temperature, salinity, etc. Major changes in either the environment or the cycles can have a detrimental effect on the food chain and, subsequently, the fish resource.

In India, access to this resource is free. This is referred to as 'open access fisheries'. The oceans in which this resource exists are therefore treated as 'commons.' The term 'commons' is derived from the shared grazing systems on the village greens of feudal England. It refers to an important form of resource management involving land and natural resources held communally. These pose a special economic problem, in that the natural resources are a form of *public good,* subject to degradation or even destruction from

overuse. In the example of common grazing, if there is no local regulatory authority, individuals will tend to maximize self-interest by putting more sheep on the commons, leading to overgrazing and the degradation of the quality of the commons for all (Henderson, 1995). This has come to be known as 'the tragedy of the commons' (Hardin, 1968).

In the case of a common resource, whether it is fish in the high seas or upriver sources of freshwater, it is seldom in the short-term self-interest of any harvester or consumer (or firm or country in the modern world) voluntarily to limit their consumption. Therefore, i t is very difficult to stop overexploitation of the commons in the absence of an effective regulatory structure.

We can distinguish three types of commons:

Global Commons: those outside national territorial limits, such as the high seas, the atmosphere, and Antarctica, with rights invested (in theory) in all countries, but more commonly in those with the opportunity and technology to exploit resources on this scale;

Regional Commons: watersheds and basins and other ecosystems crossing national borders and under the potential control and management of a group of nation-states.

National Commons: local resources within the territory of a nation-state, such as fish stocks in lakes, almost all agricultural genetic diversity, soil stocks, or rain or temperate forests under the control of nation-states or sub-national governments.[5]

In the past, many coastal areas and resources have been managed within a framework of traditional knowledge accumulated over many hundreds of years. Community groups such as villages, coastal communities, or tribal communities typically had customary or traditional rights to exploit resources and fish in adjacent coastal areas, including lagoons and coral reefs. People in such local community groups were mindful of customary methods of conserving the coastal environment and stocks of fish while at the same time making use of these resources for their food and shelter. They were aware of the fact that their livelihoods depended on these resources, and so they used them judiciously. Although there were no written laws, there were regulatory norms, and life in the group meant abiding by the norms. These norms were based on the seasons, thereby respecting the cycle of time and life. In

5. Governance for a Sustainable Future: A Report by the World Humanity Trust–2000, Russell Press Ltd. Nottingham, U.K.

parts of the Fiji Islands, a particular word 'kaiwai' is used to describe coastal or sea-going people who keep and use the marine environment wisely.

The growth of the modern state has impacted the customary practices that communities followed in fishing. The modern state not only changed the form of collective life, local governance but also introduced new ideas and technology that disregarded the natural cycles and thereby disregarded traditional norms. Very few states have been able to substitute such norms effectively, and as a result, traditional management methods are being eroded - more so with increased population dependence on the coastal resources and the trend towards money-based economies and commercial fishing. Without communitarian controls, access to the coastal resources is now open to all, and the marine resources are considered common property.

Many fish stocks are now over-exploited. A fish stock is a population of fish that is harvested. A fish stock may be regarded as over-exploited when the numbers of fish are reduced to such an extent that the remaining adults are unable to produce enough young fish to maintain the stock. The Antarctic baleen whale, the Peruvian anchovita, the North Sea herring and mackerel, and the Australian southern school shark have been dramatically overexploited. Some particularly vulnerable species, such as the giant clam, have been driven to extinction in several areas.[6]

Some Key Fishing Information

The nature of the fishery is determined by where it is exercised. For instance, terms like coastal or inshore fishery generally refer to the fishing within the 50 metre depth, the mid-shore is from the 50 to 100-meter depth, and the offshore is beyond.

A fishing operation may be a simple one, such as a hand collection of sea snails on a reef or a much more complicated one, such as catching tuna by a large fishing vessel.

Species of fish found at the sea bed are called demersal, and those in the mid and upper columns are called pelagic.

The post-harvest handling of the catch may range from basic treatment, such as the storage of fish with ice, salting, and drying, to the technologically more sophisticated procedure of canning.

6. The Oceans and Coastal Areas and their Resources, Environmental Education Module, UNESCO-UNEP, 1995

Marketing may refer simply to the sale of fish from a local market by fish vendors in several countries, overseas sales, and securing foreign markets utilizing modern transporting facilities.

Fishing craft and gear vary in each fishery. The craft is the boat used and can be anything from logs tied together as catamarans or dugouts from one log of wood or planks glued or stitched together as plank boats to the larger wooden or metal boats. Fishing gear is the means employed to harvest/catch the fish, and these vary according to the species targeted. Techniques range from elementary techniques, such as the hand collection or gleaning to the use of traps and then a variety of nets or hooks, and then the more complex and expensive operations such as trawls or purse seines that are mechanically operated. Some of the fishing gear techniques, such as traps and gill nets, are regarded as passive, that is, the gear remains stationary and relies on fish moving to the gear. Fishing gear regarded as active, such as seine nets and trawl nets, are designed to be dragged or towed to catch fish. The distinction between the two types is important when considering fishing costs and ecological acceptability. Because they do not require towing, passive gears are relatively inexpensive to operate and have less potential to cause damage to the seafloor. However, active fishing gear, particularly trawl and purse seine nets, account for a significant part of the world's catch but are highly efficient and, if not strictly managed, deplete the resources, and trawling even destroys the fish habitat.

In the broadest sense, all fishing is environmentally damaging to a greater or lesser degree. Many fishing gears are unselective with respect to both size and species in the catch, while some others are called selective gear, used to target only mature fish. Compared with gill nets, for example, trammel nets are unselective in that they catch a wide range of individuals and catch a much larger number of different species. Particular types of active fishing gear, such as trawl nets with heavy ground chains, are known to be highly destructive to the seafloor and its marine life. In many fisheries, steps are being taken to replace destructive gears with less environmentally damaging. Even when more selective fishing gear is used, food chains and predator-prey relationships are almost certainly affected by the removal of a particular target species from the environment.

In some countries, the use of explosives and poisons to disable and capture fish represents a serious threat to marine ecosystems

and the long-term viability of fisheries. The challenge is to devise fishing gear and methods which do not threaten the environment and catch the target species in the most economically efficient manner.

Fisheries are often divided into non-commercial and commercial sectors. The non-commercial or subsistence sector involves the catching of fish to eat rather than to sell. When fishers fish for a livelihood, their womenfolk also sell the fish. This is referred to as the artisanal sector as fishing is a traditional occupation, both men and women are involved either in the harvesting or pre and post-harvesting activity, and this is their only source of livelihood. The commercial fishery is more a business operation where the investors are not the actual fishers. The operations may be medium or large-scale harvesting fish either for direct consumption or for industrial purposes like big cannaries or the production of fish meal and surimi.

Global Fish production and consumption

Globally, the capture fisheries and aquaculture together produced 179 million tonnes of fish in 2018. However, only 87 percent of this (156 million tonnes) was used for direct human consumption and the remaining 13 percent (22 million tonnes) was used mainly for the manufacture of fish meal and oil. The availability of food fish in 2018 worked out to a per capita supply of 20.5 kg per year. Overall, fish provided more than 3.3 billion people with at least 20 percent of their average animal protein intake. World capture fisheries production was 96.4 million tonnes (84.4 million tonnes marine and 12 million tonnes inland) and aquaculture fish production was 82.1 million tonnes in 2018.

Seafood is a major food item in many countries. Where subsistence fishing is common, the catching of fish to eat rather than to sell results in a total catch that is often several times larger than that from commercial fishing. In coastal regions of southeastern Asia and tropical islands, for example, seafood consumption is often over 50 kg per person each year (compared with a mean of about 20.5 kg per person for the world), and in low-lying coral islands, where soils are too poor to support intensive agriculture, seafood consumption is often over 150 kg per person per year. Today not only is seafood considered a sought-after delicacy, but it is also becoming more popular as a healthy source of animal proteins and fatty acids. The dilemma is that as demand for fisheries

resources is increasing, the ability of the marine environment to sustain them may be decreasing. The freedom to catch fish or to use the marine environment without control is now more likely to be at the expense of someone else's freedom to do the same thing. Some of these freedoms must be sacrificed to allow the continuing use of the marine environment and its resources by present and future generations. The use of natural marine resources such as the coastal vegetation or mangroves or the harvesting of fish requires careful control to avoid overexploitation. The renewal ability of natural resources depends on our ability to see that too many marine animals and plants are not harvested and that the environment on which they depend does not deteriorate. This implies that fishing has to be regulated and the marine environment protected. The attitudes of most governments, that the fish of the open sea can be fished without restraint and that the sea is a convenient dumping area of the wastes of society, have to be changed. Fisheries have, therefore, to be managed if they have to be sustained.

Fish has traditionally been considered as a source of high-quality animal protein, supplying approximately 6% of the world's protein requirements and 16% of total animal protein. Today it is recognized that fish is probably more important as a source of micronutrients, minerals, and essential fatty acids than for their energy or protein value.

In the context that around 60 million people make a living from fishing, most of them have no access to any other means of livelihood, safeguarding their right to a livelihood is of utmost importance. Article 21 of the Indian Constitution guarantees the right to life and livelihood, and the Indian State is, therefore, duty-bound to protect the rights of the fisher people.

In India, 22 km (12 nautical miles) from the shoreline falls within the jurisdiction of the state government, and that of the national government is from 22 km to 200 nautical miles.

International Instruments to Manage Fisheries

Despite the fact that several varieties of fish had already faced depletion by the turn of the 20th century, for the most part, fisheries were left unregulated because many of the richest fishing grounds were outside national jurisdiction, which at that time was usually three nautical miles from the coast. After World War II, there was a tendency to expand national fishing zones and even territorial

limits at sea. Following the Truman Proclamation of 1945, several Latin American countries began claiming national sovereignty over water covering the continental shelf. In 1950 the U.N. General Assembly instructed the International Law Commission to prepare draft articles and conventions on the law of the sea. Four conventions were drafted, the Territorial Sea Convention, the High Seas Convention, the Continental Shelf Convention, the Fishing and Conservation and Living Resources of the High Seas Convention, which were adopted, entered into, and remained in force. While all the Conventions address rights issues, only the Conservation Convention imposes any obligation to conserve marine living resources.

This was followed by the United Nations Convention on the Law of the Sea, UNCLOS I and II in 1958 and 1960, both of which failed to adopt a settled definition regarding the breadth of the territorial sea or a definition of the continental shelf mainly because of the concept of a 'preferential right' to coastal states vis-à-vis other states.

The Latin American states argued that if meaningful conservation of fisheries is to materialize, "the food situation of the human population living nearest the resources must be the first to benefit from it, since otherwise the whole programme of conservation would be doomed to failure". The Philippines and Vietnam argued that this preferential right may be applied when an element of acute dependence upon such fisheries exists. Their submission stated that "if the inhabitants of a coastal state who engage in fishing do so mainly on the coasts of that State, and derive their subsistence as well as that of other inhabitants largely from such fishing, they shall have a preferential right to fish in any areas". Iceland also backed the position of those coastal states with overwhelming dependence of fishery resources.

Though neither of the conferences adopted any of these proposals in toto, in the 1960 Conference, the concept of preferential rights was established. This was followed by a spate of declarations by the Latin American and the Caribbean countries unilaterally expanding their sovereign rights beyond the territorial sea into what they called the 'patrimonial sea'. Under the concept, the main emphasis was again placed on the notion of 'sovereign rights' and 'economic jurisdiction'. This led to UNCLOS III, which began in 1973 and ended nine years later with two of the most far-reaching

concepts which have a bearing on property rights: the exclusive economic zone (EEZ) and shared heritage of humankind. Under UNCLOS III, the oceans and seas of our planet have been demarcated into a mosaic of state property regimes – the EEZs – and a large open-access regime – the high seas. With this, it is estimated that as much as 60% of the potential yield of the oceans is now well within the sovereign rights of developing countries.[7]

Since 1997, international organizations and legal instruments to manage fisheries have been established. The 1982 U.N. Convention on the Law of the Sea was supplemented in 1995 by the U.N. Agreement on Highly Migratory and Straddling Stocks to improve the international framework for managing fisheries. Although the high seas (the sea areas beyond the EEZs), according to UNCLOS, were open to all States, the rights to fish were subject to their duty to cooperate in the conservation and management of living resources. Several problems were identified in high seas fisheries, especially straddling stocks and highly migratory fish stocks. Straddling stocks are those fish that live both within and beyond areas under national jurisdiction, the best known being the Atlantic cod in Canada. Unregulated fishing, overexploitation, excessive fleet size, re-flagging of vessels to evade controls, use of non-selective gear, unreliable databases, lack of cooperation between States are the main problems in high seas fisheries. In 1992, several disputes prompted the U.N. Conference on Environment and Development to discuss these issues, and in 1995 a broad consensus was arrived at regarding the managing of the high seas resulting in the Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks.

Also, in 1995, the non-binding Code of Conduct for Responsible Fisheries and Aquaculture was agreed by the FAO member nations that are based on a "precautionary approach" to fisheries management. Other recent initiatives of the FAO towards ensuring sustainable fisheries and securing fishers' rights include 'Voluntary Guidelines on the Responsible Governance of Tenure of the Land, Fisheries and Forests in the Context of National Food Security' (Tenure Guidelines), 2012 and 'Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security

7. John Kurien, Property Rights, Resource Management and Governance, SIFFS-CDS, 1999

and Poverty Eradication' (SSF Guidelines), 2015. Nevertheless, some fisheries still lack a legal framework for management. More importantly, even where a legal framework exists, fisheries management generally remains inadequate for achieving the full potential of fisheries. In fact, the extension of jurisdiction after 1977 encouraged many countries to promote the development of their fisheries, often with subsidies, without necessarily managing them to prevent over-fishing.

Within their own waters, several countries developed their own fisheries management regulations to conserve stocks. In the more advanced countries, all fishers are licensed, and entry is no longer open. Quotas for each species caught are fixed, the duration of the season is stipulated, and the gear monitored. In the southern or developing world, though regulations exist, they are not implemented merely because of the massive nature of the task, as there are millions of fishers operating from all parts of the coastline. Such monitoring is an expensive task, and poorer countries cannot afford this. Moreover, it is only the actual fishers that can recreate their legislation and monitor the fishery.

Some Concepts Relevant to Fisheries Management

Maximum Sustainable Yield: The maximum permitted catch of a particular species which will permit rejuvenation so that the productivity stock can be sustained.

Open Access: Access to the fishery is open. A person who fishes does not require any license to fish.

Limited Access: Access to the fishery is restricted. A person requires a license to fish.

Quota: is a limit to the amount of fish that can be caught in a particular year or a fishing season. Once this quota, or maximum catch, has been reached, the fishery is closed. Alternatively, each fisher may be allocated an individual quota now referred to as Individual Transferable Quotas (ITQs). There are also community quotas allotted to specific communities.

Size Restrictions: preventing the capture of small fish may allow them to grow to more valuable market size. In some cases, it may also allow individuals to reach a size where they can reproduce before capture. The capture of small fish may be prevented by mechanisms such as enforcing the use of nets with a large mesh size. Where fish are not harmed by the catching method, in trap

fishing, for example, fishers can be forced to return small individuals to the sea.

Controls on Fishing Gear and Methods: Highly destructive methods of fishing, such as the use of chemicals, bleaches, or explosives, are illegal in most countries. Highly efficient fishing methods may also be controlled to allow more people to share the resource. Controls may include banning or reducing the efficiency of particular fishing methods or fishing gear by stipulating the size of the mesh.

Closed Seasons and Areas: Fishing may be banned either at particular times of the year or in particular places. Closures during particular seasons, for example, may allow small fish to grow to a more marketable size or may allow adults to breed without interference.

Globalization, the State and Governance of the Commons

The New International Order has radically changed the concept of national sovereignty. While the concept of the nation-state still exists, for all practical purposes, its autonomy is being gradually eroded. With the institution of the World Trade Organisation (WTO), it is the market that begins to reign supreme, and the state tends to protect the right of capital rather than those of the people. The thrust of the globalized world is towards greater privatization, and with this, all responsibilities that the modern state usurped from traditional communities are shed in favour of private enterprise. Capital has no nation, no culture, and hence no identity.

This current international 'order' and the development paradigm that it fosters does not support the rational use of global common resources – oceans, freshwater, fisheries, and the atmosphere. The process of 'globalization' today reinforces the unrestricted, irrational use of essential resources by individual enterprises, and without coordination – undermines the complementarities of resources needed to sustain the integrity of the whole. 'Good global governance' implies not only good governance at the multilateral level but good governance at the national and local levels as well. It is unlikely that sustainable management of the global commons, such as the high seas, could occur in conditions where national commons, such as coastal and fresh water resources, are being mismanaged or destroyed.

According to the World Humanity Action Trust Commission Report (WHAT) on 'Governance for a Sustainable Future',

Governance is not the same as 'government.' Good governance requires cooperation between government and civil society. Equally important is the network of links between civil society and economic systems, consumers and business. Governance can then be understood as referring to national political relations and their functioning in relation to law, public administration, and the democratic participation of key stakeholders and the public at large. It is the interaction between institutions in all sectors that must set goals and cooperate in achieving them and creating an orderly framework for action.[8] The concept of civil society may not always include the people's movements that are generally out of the mainstream society and trying to carve a space for themselves. Taking the opinions and demands of these groups seriously is of utmost importance too. By distinguishing between 'governance' and 'government' in this way, it must be emphasized that the state's role should not be sidetracked. The state has a responsibility to safeguard the needs of its citizens and those that are the least privileged. The rights of the 'stakeholders' need careful consideration as the playing field are not equal, and some stakeholders are more powerful than others.

While the governance of fisheries within the legal framework provided by extended jurisdiction is a relatively new endeavour, traditional and informal governance systems existed historically for many fisheries. As stated earlier, these informal governance systems were local and vested in coastal communities or village institutions. Communities and local leaders controlled who could fish and how. In this way, they moderated the race for the fish. These locally based governance systems were particularly important in many developing countries. However, much lost effectiveness when they (a) were not legally recognized, (b) could not cope with the introduction of modern technology, (c) could not exercise governance over the full range of fishery resources or gear types (such as industrial-scale trawling), (d) lacked community backing or cohesion and/or (e) were powerless to exclude or control new entrants. Despite these factors, arrangements at the local level are potentially important building blocks for the effective management of fisheries.[9]

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8. Governance for a Sustainable Future, A Report of the World Humanity Trust– 2000, Russel Press, Nottingham, U.K.
9. Ibid

The key to an effective governance system is to eliminate the incentives to race for shares of fisheries. To do this effectively, the governance system must control fishing activity over the entire range of the fishery resource and must assign rights and shares to the fishery. These rights should be secured in such a way that the benefits to the rights holders are linked to the productivity and value of the resource. With rights to a share in the fishery, the incentive is to maximize economic benefits by reducing the cost of using one's right and/or by increasing the value of the right: for example, by producing a higher quality of the fish product. Rights that are secure in the long term facilitate the acceptance of short-term sacrifice for long-term gains.

Governance systems that assign rights to shares of a fishery are specified by the nature of the claims in the fishery, the type of entities that hold rights, and rules about transferability and enforceability of rights. The rights holder can be an individual, community, collective, or nominated representative of a group. It will be appropriate to vest these rights in the local community of which the active fish harvesters and fishworkers are members in many parts of the world. This community then takes responsibility for further allocation and monitoring of the use of the resources.

The type of entities assigned rights is important in determining the rights' effectiveness in ending the race for the fish. When individuals have a secure share of a fishery, they no longer have an incentive to race since they will not be allowed more than their share. Communities or other groupings may be cohesive enough or have internal governance mechanisms, to prevent individuals within the community from racing among themselves for the community's share.[10]

Wars are being waged in several countries today to establish rights over specific resources, and wars are waged between governments to affirm a state's rights over a particular resource. Simultaneously, local communities struggle to conserve their traditional/customary rights to the resources as the privatization bug expands. One of the interesting cases that has made history is the Maori Fisheries Settlement. As the indigenous people of New Zealand, the Maori held customary fishing rights under British common law. The Treaty of Waitangi guaranteed these rights in 1840. Customary fishing was exempted from the rules and

10. Ibid, pg. 21

regulations in fisheries legislation made after the signing of the Treaty, but the nature of these rights was never defined. As a result, Maori fishing rights were slowly negated, and the Treaty of Waitangi was regarded as a legal nullity until the 1980s when the New Zealand government moved to introduce a quota management system based on individual transferable quotas for major commercial fish stocks. It was this move to create an artificial property right to take fish and then allocate that right to existing commercial fisheries that drove the Maori to seek an injunction against the government, saying that their customary fishing rights had not been taken into account. In an important case in 1986, a Maori individual was found not guilty of taking undersized shellfish on the grounds that he was exercising a customary fishing right. Subsequently, the High Court placed an injunction on the Crown, preventing it from proceeding with the introduction of the ITQ system. An interim settlement of Maori fisheries claims was negotiated in 1989, and full and final settlement signed and legislated for in 1992.[11] More recently in the news is the case of the First Nations in Canada in which the native people demanded their customary fishing rights to be restored and succeeded in getting them restored in the famous Marshall Judgment.

It is clear, therefore, that mere international institutional arrangements cannot alone decide on the rights to the fish resources. Effective management systems alone do not settle the dichotomy between private, community, and state-owned resources. The role of the nation-state in defending the rights to life of its citizens is paramount in the reallocation of access rights.

The fish workers of India have waged a continuous battle for their rights to the fish resources, and below follows a case study giving the highlights of this struggle.

11. Maori Power: Article by Mathew Hooper, Samudra Report No.26, ICSF, Chennai, 2000

Indian Fisheries and the Fishworkers' Movement

A Brief Background to Indian Fisheries

India has a coastline of 8118 km with around 3,288 marine fishing villages. Although each of the nine maritime states is a different cultural region speaking a different language, there are similarities in the fishery depending on the physical geography. According to A.J. Vijayan[12], one of the founder members of the Fishworkers' Movement in India, "towards the end of the 70s, there were about 6.5 million people who depended on fishing and allied activities for a livelihood. This represented about one percent of the Indian population. Of these, about 3.5 million depended on marine resources, while the rest lived along the rivers, lakes, and backwaters. Of the sea-going fishermen, near 90% were artisanal fishermen operating small traditional craft and gear. It was estimated that they owned about 1.94 lakh fishing craft and 7 lakh gear and tackle." According to the CMFRI, in 2016, the marine fishermen population in the country was 3.99 million[13]. The National Policy on Marine Fisheries of Government of India, 2017, states that one million people are engaged directly in marine fishing and another 0.7 million engaged in post-harvesting operations.

The marine fishery resources of the country's EEZ stand assessed at 5.31 million metric tonnes as per the latest update of 2018. This resource is distributed in mainland (94%), oceanic waters (3.1%), and - island ecosystem (2.9%) waters. The major share of this resource in the mainland (0-500 m depth zone) is pelagic (2.63 million tonnes), followed by 2.29 million tonnes of demersal and 0.91 million tonnes of mixed resources[14].

12. A.J.Vijayan, Need for Conservation in Struggle to Survive, NFF, 1987
13. Marine Fisheries Census 2010, ICAR-Central Marine Fisheries Research Institute and Department of Fisheries, Government of India.
14. Report of the Expert Committee for Revalidation of the Potential Yield of Fishery Resources in the Indian EEZ, 2018, Ministry of Agriculture, Government of India.

Marine products exports from India exploded from a meager 31,695 tonnes in 1969-70 to 75,583 tonnes in 1980-81 and now to 1.39 million tonnes in 2018-19. The export earnings from this sector have also set an ever time record of 6.73 billion US$ (Rs. 46,589 crores) in 2018-19. One important trend observed is the declining share of frozen shrimp in terms of quantity exported, from 57 percent in 1988-89 to 43 percent in 2018-19 and the increasing share of frozen fin fish from a mere 11 percent to 24 percent during the same period. However, in terms of value, frozen shrimps continue to dominate (68.3%) with frozen fin fish in second place with a mere 10.2 percent. This indicates that the prices that fin fish exports fetch are not substantial and could fetch as high a price in the domestic market.

Another interesting development is the emergence of Southeast Asia in 2018-19 as the largest market for Indian marine products in terms of quantity with 32 percent share followed by US (20%), China (16.2%), European Union (11.9%) and Japan (6%). But in terms of rupee value, US has emerged as the largest export market with 34.7 percent share, followed by Southeast Asia (22.7%), European Union (13.3%), China (12.0%), and Japan (6.3%). All this also means that India is exporting lower value species much more than in the past and how far it is impacting the food security of coastal and poor populations needs to be assessed. (Data source: MPEDA).

According to the Ministry of Agriculture, Government of India, in 2018-19, the total fish production in the country was 13.4 million tonnes, increasing from 4.2 million tonnes in 1991-92. But the major contribution to this increase came from the inland sector (including aquaculture) with increasing its share from 41 percent in 1991-92 to 72 percent in 2018-19. In fact, the total marine fish landings itself shows a slightly declining trend over the past few years after peaking at 3.9 million tonnes in 2012. According to CMFRI, the marine fish landings in the country (excluding the island territories) was 3.56 million tonnes in 2019. (Data source: Department of Animal Husbandry, Dairying, and Fisheries, Ministry of Agriculture, Government of India, 2019 and CMFRI)

The Artisanal Fishery

As mentioned earlier, fishing is the mainstay of several coastal communities in India. The distinguishing feature of this artisanal fishery was its heterogeneity, conditioned by the physical geography

of the coast and by the nature of the resource base. India being a tropical region, is characterized by multi, species of fish but in smaller shoals than the temperate water resources. Until the late 1960s, fishermen generally used dug-out canoes on the west coast because of the extended continental shelf and calmer waters and catamarans on the south and south east coast because of the narrower continental shelf and high surf conditions. The crafts grew larger further up the east and west coasts because of the extended continental shelf. Traditionally, large beach seines were in use along with most parts of the west coast and southeast coast, but for the most part, there were a variety of significant drift and gill nets that targeted different species.

Hooks and lines were used mainly in the southern areas, and these catamaran fishermen of the southwest coast have been considered the most skilled on the globe. A significant feature of this fishery was that it was decentralized, labour intensive, and adopted a sexual division of labour, which is complementary, the men involved in fishing, and the women involved inthe post-harvest activity. The division of surplus has always been on a sharing basis, one share going to the craft and gear after deduction of expenses.

The complementary sexual division of labour in artisanal fisheries implies that men fish and women do the shore jobs. This means that women are active participants in the fishery as they generally attend to all the land-based aspects of the fishery both in the pre and post-harvest work. The making of fishing nets was traditionally the work of women, and in some areas, they bait the hooks for line fishing too. It is they who take hold of the catch of their husbands or other fishers once it is landed as they market the fish and convert it into other food and money for the sustenance of the family. Marketing the fish in several areas is an uphill task as women travel several miles under challenging circumstances to reach markets. Initially, women also processed fish, salting and drying it as there were no other conservation measures. Moreover, like in all other communities, women are responsible to nurture the entire family and keeping the home fires burning. The artisanal or small-scale fishery exhibited this complementarity in the sexual division of labour which also gave it the resilience to survive heavy odds, like bad seasons and indebtedness.

Until the end of the 60s, none of these traditional crafts were mechanised, and the navigational skills of the small-scale Indian

fishermen, who in some areas made week-long voyages, are acknowledged the world over. Like small-scale fishers worldwide, the Indian fishermen over the years adopted fishing techniques that they came across during migration or through contact with foreign traders. Adaptation was always tested over time, and the evolution was, therefore, gradual and calculated.

The fishermen used a variety of gear for different species in different seasons. Fish was landed in the home village whence the women took the fish to market, always keeping the best for home consumption.

According to Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, there are 1,547 traditional fish landing centres, 55 minor fishing harbours, and 7 major fishing harbours which serve as bases for about 65,876 traditional non-motorized crafts, 1,36,920 small scale beach-landing crafts fitted mainly with outboard motors, 66,198 mechanized crafts (mainly bottom trawlers and purse-seiners) and 53 deep sea fishing vessels[15].

Modernisation of the Fishery

The modernisation of the fishery and the rapid changes thereof commenced with the developments in industrialisation in the post-independence period. It was the Indo Norwegian Project (INP) that gave an impetus to this from 1953. The first phase of this project extended from 1953-63. Various locations around the coast were selected for modernization interventions.

In Quilon in Kerala, this intervention went alongside a social development plan that had the following stated objectives:

- to raise the productivity of the fishermen and to increase their returns
- to develop an efficient distribution of fresh fish and improvement of fish products
- to improve the health and sanitary conditions of the fishing population
- to raise the general standard of living of the fishing population

This initiated modern fisheries development in India. Within a decade, the developments that took place had unintended effects.

John Kurien, in the mid-1970s, wrote: "Although the Norwegians intended initially to improve the affectivity of the

15. Handbook on Fisheries Statistics, 2018. The fishing crafts data is based on registration status in ReAL Craft portal.

local craft, they failed to do this and the introduction of a smaller flat-keeled boat designed in Norway was an easier alternative." By 1958, goaded on by the successes of private exporters of shrimp that existed in the Kerala waters, they introduced the trawl and purse seine gear onto small mechanised crafts. This introduction got a boost with the growing demand for shrimp in the U.S. and Japanese markets and private investors were lured into the fishing industry. The INP provided the infrastructural facilities like ice plants, freezing and processing technology to cope with the increased production and thus further develop the export market. Within six years, the trawl boats increased to 700 and its share of the shrimp catch rose from nil to 90%. The Indo-Norwegian Project strayed far from its brief as it was further pressurised by the interest of the private interests and this was supported by the Government allocations of the Second Plan which grew from .27million to Rs. 6 million.

In the period 1967-75, there was a marked rise in fish production and the peak of 420,000 tonnes was reached in 1971, 73-75. This was close to the MSY in the Kerala waters. The major share of this increase was from the demersal species, especially penaeid prawns. During this period, the share of the mechanised sector increased to 16% of the state's fish production. It must be pointed out nevertheless, even in this period of the rapid introduction of new technology, 84% of the fish landing in Kerala was still from the traditional sector. Fish prices also increased rapidly from Rs. 290 a tonne in 1967 to Rs. 1,760 per tonne in 1975. The total value of output rose from Rs. 105 million to Rs. 740 million in the same period.

From the early 1960s, all attention focussed on the penaeid prawns. From an export turnover of a little under 500 tonnes of frozen prawns at the end of the 1950s, by 1961 the figure had reached 1,462 tonnes with an export value realisation of over Rs. 4,000 per tonne compared to the internal fresh fish shore price of Rs 150 a tonne. In 1962, having lost their access rights to Mexican waters, the Japanese paid Rs. 8,900 per tonne for prawns from India. The phenomenal export earnings of shrimp made both the Indo-Norwegian Project and the fisheries administration of Kerala devote their undivided attention to the pursuit of prawn harvesting.

By 1963, the most notable structural change in the project area consequent to the introduction of the new technology of fish harvesting and processing was the creation of a new class of non-

operating entrepreneurs or capitalists who owned the means of production and through this opened up avenues for a large migrant labour force recruited from outside the INP area. The change in the technology and labour process in the realm of fish harvesting and processing taken together with the entry of this new segment of the merchant class interests into the fish economy was the death knell of the fisheries development policy in Kerala, which commenced with the stated objectives of providing cheap protein for local consumption, ensuring a more decentralised mode of functioning and greater spread effects with regard to employment generation. A sector that was relatively outside the mainstream of the economic and social processes of Kerala society, was suddenly transformed into a respectable avenue for investment and involvement. The possibilities of a 'modernised' fishery emerged quickly breaking down traditional barriers of entry into the sector. The export oriented thrust that began to get engrained in the sector was blessed by the country's own attempt to boost foreign exchange earnings.[16]

Subsequently, there were rapid changes in the fishery. In Kerala between 1976-1980, despite the continued rapid introduction of new trawlers and purse-seiners, there was an all-around decline in fish production. Overall, fish landings dropped to 332,000 tonnes. The pelagic catches declined to 220,000 tonnes. The demersal catch was more or less steady at 112,000 tonnes, and the prawn catch dropped marginally to 40,000 tonnes. Interestingly, the only increase in this period was in the catch of the mechanised sector, nearly doubling its output from 61,000 to 120,000 tonnes. The most catastrophic decline was experienced in the landings of the traditional fishermen whose production fell to 230,000 tonnes. This was below what they were catching between 1956 and 1959. Nevertheless, prices continued to increase and despite the fact that fish production was as low as 279,000 ton s in 1980, the prices peaked at Rs. 2,970 per tonne. On the export front, the same was experienced. Although the quantum of exports between 1975-76 and 1979-80 remained around 31,000 tonnes, the value realised shot up from Rs. 680 million to Rs. 1,040 million.

The cumulative deterioration in the conditions of the majority of the fishermen in Kerala became more apparent following an official socio-economic census survey conducted by the Department

16. J. Kurien, Norwegian Intervention, in Struggle to Survive, NFF, 1987

of Fisheries in 1979. Only 2% had qualifications of SSLC and above. Housing conditions were poor, 48% had shabby huts, and only 16% had pucca houses. Fishing villages were marked by their excessive crowding along narrow strips of coastline. Access to drinking water was meager, and sanitary and lighting facilities were abysmal.

The decades from the 1980s onwards saw rapid changes in the artisanal sector in Kerala, both in terms of motorization of the craft and changes in the gear. The more able and adventurous traditional fisherman joined the race to chase the fish as their survival was at stake. This was encouraged by the Department of Fisheries that had realized its error in subsidizing the trawl sector in the previous decade. Kalawar, A.G. et al. in 1985[17] reported 6,934 motorised units in Kerala. They had recommended an ideal craft mix of 1,145 trawling boats, 2,690 motorised units, and 20,000 non-motorized units for optimal exploitation of the demersal and pelagic resources of the state. Achari[18] writes, in 1984/85, the process of motorization started spiraling. Larger craft or more than one craft, multiple engines, and a large quantity of gear constituted one fishing unit called the ring–seine. Big encircling nets on the model of the purse seine became popular with the fishermen. In the popularisation of this gear, the Matsyafed[19] played a dominant role and distributed 395 craft, 819 engines, and an average of 160 kg of the net until March 1991. Hence, substantial changes subsequently took place in the nature, characteristics, and capacity of the marine fishing fleet of Kerala in both the traditional and mechanized sectors.

SIFFS conducted a census of the artisanal marine fishing fleet of Kerala in 1991 and 1998, which gives an idea of the changes in the sector. According to these censuses, the overall craft population in the State actually declined from 30,459 in 1991 to 28,198 in 1998. But this is mainly due to the sharp decline in the number of smaller non-motorized crafts from 20,545 to 14,979 during the period. At the same time, motorized crafts increased from 9,914

17. Kalavar, AG, et al., 'Report of the Expert Committee on Fisheries in Kerala, Bombay, 1985
18. Achari, T.R. Thankappan; 'Impact of Motorization of Traditional Craft on Coastal Fishing and the Fishermen Community in Kerala', presented at the National Workshop on Development of Marine Fisheries for Higher Productivity and Export, June 1992 at Cochin
19. Government created cooperative network in the state.

to 13,219 in the same period. While the catamarans declined sharply from 15,090 to 9,170 in this period, the plywood crafts increased from 1,878 to 5,701. The total number of artisanal fishing gears (nets, seines, hooks, etc.) also increased from 49,899 to 55,712. The increase was more witnessed with a different type of nets like gill nets (32,365 to 36,552) and min-trawls (1,648 to 4,351), but with the hook and line gear, there was a decline from 6,089 to 4,295. The total number of Out-board Motors (OBMs) in use in the marine fisheries of the state also increased during this period from 11,621 to 16,466. Actually, the increase was substantial in the higher horse power (H.P.) categories than the lower ones. The increase in the number of 40 H.P. motors was from 88 to 1,400,25 HP motors from 1,335 to 3,208 and 9.9 HP from 930 to 6,041. At the same time, the number of OBMs of 8 H.P. and below category went down from 8,016 to 4,339 during this period. More recent censuses carried out by CMFRI suggest that the number of non-motorized fishing crafts in Kerala declined from 9522 in 2005 to 5884 in 2010 and further down to 4016 by 2016. However, contrary to earlier trends, the number of motorized vessels first declined from 14,151 to 11,175 between 2005 and 2010, before rising further to 13,868 by 2016. All this points to the fact that the fishing capacity and effort, the competition between the fishers and the use of non-renewable energy fuel in the traditional marine fishing sector of Kerala have gone up in general over time except for a moderate reverse trend in later years, while at thesame time the total fish landings is either stagnant or on the decline.

The story is not very different from the mechanized marine fishing boats of the state also. Census data is available on the number of marine mechanized fishing boats in the state during 1982 and 2003, though conducted by two different agencies, the Department of Fisheries (1982) and Central Institute of Fisheries Technology – CIFT (2003). These data show that the total number of mechanized boats increased from 2,961 in 1982 to 3,823 in 2003. This data does not include boats from neighbouring states which use fishery harbours of the state as the base. Trawling boats have dominated the mechanized boats in the state during both 1982 (84%) and 2003 (97%). However, as noted in outboard motor fishing crafts, the number of mechanized vessels experienced a marginal decline from 5,504 to 4,722 between 2005 and 2010 and further down to 3800 by 2016 as per the respective rounds of Marine Fisheries Census. Another critical aspect noted during the period

is the change in the size of the boats. 91 percent (2,906) of the mechanized boats were below 40 ft size, and only 9 percent (55) were between 40-48 ft size. But in the year 2003, only 39 percent (1,498) were below 40 ft size, 24 percent (912) were 40-48 ft size, and 37 percent (1,413) were above 48 ft size. So there is a substantial increase in the capacity of the mechanized boats over the period, and there is no commensurate increase in the fish landings in the state during the period. Also, new types of trawl nets were introduced in this period for catching fish in different sea columns, and data on this is not available.

Marine fish landings of Kerala state increased from 0.13 million tonnes in the 1951- 55 period to 0.61 million tonnes in 2004 and is presently at about 0.41 million tonnes in 2017-18. However, the landings went through wide fluctuations in the last three decades, and it has more or less stabilized in the last five years (2013-2018), hovering around 0.5 million tonnes. Massive changes in the species composition of catch and the disappearance of previously important species with an increase in low-value or small-sized species is the hallmark of fish landings in the state during the last two decades. It is evident that the highly productive inshore area (0-50 m depth), with an estimated maximum sustainable yield (MSY) of 0.4 million tonnes, is now being intensively exploited.

Motorization has added additional capital investment to the artisanal/small-scale units. Where the mechanical propulsion tends to increase productivity more than commensurately, the additional investment would be productive. But in respect of the motorization of small craft, when there is no increase in productivity, the investment for motorization can be disastrous. In 1980/81 the investment in the small scale sector was between Rs.15,000-30,000. In 1988/89, this was between Rs. 36,000- Rs. 274,000 on average – a substantial increase of 5-10 fold. By the middle of the decade of 2000, the cost of motorized units (OBMs) increased to around Rs. 300,000 in south Kerala to Rs. 500,000 in north Kerala and for inboard units goes upto even Rs. 20,00,000. Presently, OBM units can cost around 10,00,000 to 15,00,000 and the investment on inboard units vary between 30,00,000 to 50,00,000.

As a result of motorization, the income disparities among the fishers widened over the decade. Yet despite the high investments, the average earnings of a fisherman were lower than that of a mason as the household earning of a fishing household was around Rs. 2,717 as against Rs. 3,451 for others at the state level in 1990.

The workforce in the fishing industry steadily increased. From about 74,000 in 1961-62, it increased to 131,000 in 1980 and 150,000 by 1981. (*This calculation was made for Kerala by Dr. John Kurien for the Task force on Labour in Fisheries, and no update has been made on the workforce data subsequently*.)

By 1998, as a result of rapid motorization, there was a reduction in non-motorized fishing craft, and this was mainly in the kattamarans in Trivandrum, which dropped from 15,000 to 9,000, and the non-motorized dugout canoes also declined from 3,700 to 3,300. The number of motorized craft increased from 9,900 to 13,200, mainly in the plank canoes and the plywood crafts. The motorized dugout canoes also declined from 4,750 to 3,625. But the stock of outboard motors (OBM) increased from around 11,560 in 1991 to 16,000 in 1998. Although the OBM numbers increased only by about 40%, the total horsepower capacity of these engines increased nearly 100% from 1.30 lakh H.P. in 1991 to 2.54 lakh H.P. in 1998.

There was also a change in the fishing gear. Between 1991 and 1998, the number of mini-trawls and transom craft needed to operate them also increased substantially. Mini trawls increased from 1648 to 4351, which means that the catch capability increased by 160%. The adverse impact of any trawling operation on a tropical ecosystem is too well known. The coastal people involved in this suicidal activity signified the desperation they were in with no other diversification possible and no other job opportunities.

The trend in the number of non-motorized crafts in Kerala over the the second half of the previous century is noteworthy. Between the 22-year period from 1957 to 1980, the numbers increased by 30% (from 20,337 to 26,271). However, with the onset of motorization after 1980, the number decreased in 18 years by 43% (from 26,271 to 14,965). Despite this fast fall in the number of craft, it is interesting to note that the number of fishing villages in Kerala without any non-motorized craft first increased from 0 in 1980 to 28 in 1991 and then actually decreased between 1991 and 1998 to 11 (John Kurien).[20] As noted above, the number of non-motorized crafts experienced a further decline in the ensuing period, sliding down to 4016 by 2016, constituting only 18% of the total crafts in operation. Most fishers using motorized fishing craft these days are talking about the increasing burden of indebtedness which they are facing.

20. Kurien, John, 'Capacity, Costs and Output Changes in the Small-Scale Fisheries Sector of Kerala State', 2000

The 1990s saw an overall transformation of the small-scale fisheries sector since the creation of the state of Kerala. The energy intensity had increased. The main mode of propulsion changed from total dependence on renewable energy to total dependence on non-renewable energy. The diversity in the fishing gear reduced, and capital investment increased threefold. Fuel consumption doubled. Local fishing norms were forgotten, and destructive fishing gear grew rapidly, and in some areas, destructive fishing practices like the use of dynamite were introduced. No longer did the family consume the best fish caught, but it went to the export market. Women also lost out in the process.

It is in this framework that the fishworkers movement grew in India. All the changes in the fishery, which were basically market induced, had an impact on the coastal people. As some grew richer, a large number grew poorer. Being an open access system, there was migration into the fishery in some areas and out-migration in others. The problem was that wealth in one section grew at the cost of another after a certain production level was reached, as there was competition for the same resource. This meant that sustaining such development in the fisheries was not possible. Wherever these conflicts were pronounced, polarization grew, and the small-scale fishers demanded state intervention. When catches from the oceans began to decline, the government sought to meet the growing demand through the introduction of aquaculture. This again met with a hue and cry from the coastal people, as will be seen in the struggle documented below.

The Fishworkers' Movement in India

In the pages that follow is a brief historical overview of the fish workers movement in India. Writing a short essay on the movement, which spans over two decades, is not an easy task. It has its roots in organizational efforts that commenced in the mid-sixties and is not one singular process. It has been the result of a conjuncture of several things; it has grown from one issue to the next, from one part of the country to another, and also has an international dimension. Such an essay will, therefore, only touch those aspects of the movement that highlight the constant struggle between the fisher people and the State to sustain their right to life and livelihood.

A few clarifications may be in place before entering the narrative.

The movement as it is referred to here is a matrix of processes

interacting/ converging at a particular historical juncture – in this case, the post-independence period entering the globalization (WTO) phase, from 1970 to 2020.

Among these processes set in the context of the evolution of the modern Indian State are the parts played by modern science and technology and the academic arena, the growth and evolution of the trade union movement linked to the political party process, the emergence of non-party trade unions or social movement unions and non-party political formations, the growing NGO space and an all invasive media. The reason for focusing on this complex social dynamic is to emphasize the fact that the demand for the right to livelihood that has surfaced in the country has arisen mainly from the unorganized sector in which 80% of the Indian working class still ekes out a livelihood. Whereas it is only the upsurge of this section of the working class that can demand its rightful place in the economy, it is also vulnerable to all kinds of disruption and marginalisation. So much so, all through the process of consolidation, it has needed the support of various kinds to sustain the struggle against imperialism. In this consolidation phase, even leadership in this upsurge has often fallen on the shoulders of people who do not earn their livelihood from the trade, while leadership from within the class has gradually grown to take over in the long run.

The following narrative will certainly not be able to highlight all these processes. Hopefully, the reader will understand the different roles played by the various actors, but the focus is certainly on today's National Fishworkers' Forum, which in itself is a wholly independent and autonomous trade union.

The Socio-Political Context

After Independence in 1948, India launched into a phase of industrialization heavily subsidized by the state. The new democratic constitution attempted to shatter the old feudal structure. But the deep-rooted caste system continued to play a significant social role even amidst the emerging industrial class society. There was a rapid growth of industrialization and urbanization. Yet, the majority of the Indian population continued to live in the rural areas, as only a tiny percentage of the people were absorbed in the process of industrialization. Even at the turn of the century, only a meager 10% of the labour force was involved in the organized sector. India continued to be largely a rural economy, with over

70% of the population eking out a livelihood from agriculture, artisanal trades, or natural resources held largely as community property. With the creation of the nation-state, and formalization of local governance, tentacles of the state became all-pervasive, and the process of erosion of the rights of local communities over their resources was initiated. Caught in the dilemma of a fast-growing population and the demands of a democratic process, the state adopted a line of modernization to 'enhance' production and created an infrastructure of social development. A natural result of this logic was the development of a small and wealthy elite, an ambitious and aspiring middle class, and over half of the population remaining around or below the poverty line. Modernization became only the cover of an otherwise communal society in which religion and caste affinities continued to provide elements of social cohesion. Always in debt, the state was not able to develop wide enough social security nets, with the result that the post-independent period has been one of continuous social unrest.

The indigenous people – Adivasis – fought for their autonomy and rights of self-rule. They presently inhabit the rich forest areas in which also lie the large underground deposits of minerals and oil. The 'out castes' – Dalits – continued to fight social oppression and ostracism. As they mobilize to confront discrimination, they met with even greater ostracism and violence. The agricultural worker's movements have fought exploitative landlordism in various parts of the country. The organization of displaced people – displaced because of the construction of large dams, expansion of the urban centers, has challenged the course of ongoing development. The fish workers, living on the margins of society, also took up cudgels against the state in an effort to protect their right to marine resources.

All these 'new social movements,' or workers struggles, have been very different from the trade union struggles of the organized working class in which mainstream political parties have been the stimulants, the ideologues, or the organizers. Most of these movements have been independent of political parties, not asking for a bigger share of the cake but struggling to defend the right to life and livelihood of thousands of people whom the state ignores and does not hold itself responsible for. Today, these people have called attention to their existence mainly because they have organized under extremely difficult conditions and articulated their

demands and dreams of a society that will provide space and livelihood for all. In several ways, these struggles question the foundations of 'growth-oriented' development and the logic of modern science.

The Fishworkers' Struggle: The Beginnings

The spontaneous outbursts of the artisanal/ fishers[21] occurred all over south India against the trawl boats that fished increasingly in the inshore waters. Sporadic protests were the hallmark in Tamilnadu. The first big reported clash between the coastal fishermen and the trawlers occurred near Chennai in May 1977, when a few artisanal fishermen also lost their lives. This was a period when Tamil Nadu was under President's Rule, and no serious action was taken despite the fact that the Government of Tamil Nadu, as early as 1964, had issued an order giving exclusive rights to the artisanal fishermen within three miles from the coast. Another major revolt followed in Tuticorin where, by the end of 1978, the fishermen had destroyed 11 trawlers in the course of which 16 fishermen had lost their lives.

In order to control and study the reasons for the violence at sea, the Central Government appointed the Majumdar Committee that submitted its report in 1978. The main proposal was that the Parliament should create consolidated legislation called the Marine Fishing Regulation so that fishing could be regulated. Under the pretext that the territorial waters (22 km from the coast) came under the jurisdiction of the state governments, instead of this being discussed in the Parliament, the draft bill was sent to the State Governments with instructions that each state formulates its own Act. The dichotomy between the territorial waters and the EEZ in general remained. It took a while for the state governments to get their act together, until which time the protests continued.

These protests took on the form of organized collective action first in the state of Goa in 1977. There the artisanal fishworkers were involved in hauling shore seines – *rampons* as they were locally called. These bag-like nets, sometimes a kilometre long, were cast out from large wooden outrigger boats, and each unit consisted of around 70–100 people. When the operations of this

21. These are people who have been fishing by tradition, who have perfected their skills over generations, and for whom the fish resources are the only source of livelihood.

sector were hampered by the trawl boats fishing for prawns that were to be exported out of Goa, the rampon owners (*ramponkars*) mooted an agitation under the leadership of — Mathany Saldanha — a school teacher cum environmentalist. As an environmentalist, he was waging a battle with others to stop the pollution of the ocean by the Zuari Chemicals and the take over of the beaches for tourism. The environmentalists saw the fisherfolk as allies and therefore took their struggle on board. He was able to rally support from the public by raising the slogan, 'Fish for Goa,' 'Save Goa, save our beaches.' The struggles of the ramponkars took the state of Goa by surprise. With no former history of the organization, the ramponkars were able to get large numbers of workers on the streets, as they held command over them, and they got the support of the local people because fish – an indispensable component in the Goan diet – was either becoming scarce or very expensive. This made news all over the country. Not only fishers but also large groups of the population, nature lovers and conscious citizens, came out on the streets demanding a ban on trawl fishing.

In the very beginning, the mobilization of the fish workers was not only a protest against modern technology that was destroying the fishery and, therefore, their livelihood but was linked up to conserving the 'Goan way of life and conserving the beaches. But these were new demands, and to whom should these demands be addressed. Unable to find any framework or legal basis to oppose trawl fishing, the Goenchar Ramponkarancho Ekvott (GRE) realised that they had first to wage a struggle for a Marine Regulation, and this would have to be done at the national level. The GRE would therefore have to find other allies around the country and work out a strategy to pressurize the Indian Parliament to frame a marine regulation. At the national level, this would be a herculean task. There were no parliamentarians who hailed from coastal fishing villages. Those that came from the big coastal cities did not consider fishing an important sector of the economy. Parliament house was located far from any ocean, and the generally vegetarian population in the north of the country would not understand the implications of such a demand.

Activists from Goa (including one Christian priest, Xavier Pinto) then took the initiative to contact other fish workers organizations along the coast and invited them to a meeting in Chennai. There were finally about 30 participants from 13 fishing organizations, and all echoed the same issues of conflict between

the artisanal and trawl sector and the diminishing catches. They decided that they should create a national organization and make a representation to the Prime Minister. They thus created the National Forum of Catamaran and Country Boat Fishermen's Rights and Marine Wealth. Mathany Saldanha from Goa was elected Chairman of this National Forum.

What followed was a long legislative process that was pursued only because it was accompanied by people's uprisings and protests all over the country. Getting a Bill passed in the Indian Parliament is no easy task. There was some support from the Left parties, and there were finally about 18 parliamentarians that were willing to support the cause. After a 'sit-in' before the house of the Minister of Agriculture on July 28, 1978, the National Forum was assured that their demands for a Marine Regulation and some welfare measures for fishermen would be seriously looked into.

In 1979, fishermen's organizations in different states initiated fasts and conducted other public actions to pressure the government to enact the legislation in Goa. The fishermen's relay fasted for 367 days. In 1980, the National Forum presented the Central Ministry of Agriculture with a model copy of a Marine Regulation. The Minister agreed that he would act on it without delay and circulated a draft to the state governments. From 1980 onwards, because of the pressure from the fish workers, some states began to formulate and pass Marine Regulation Acts, but the boat owner associations that were more powerful and better organized instantly opposed this. This started a long process of litigation between the State and the fish workers, and these struggles and litigation experiences became the schooling ground for the fish workers and their leaders.

Structuring the Organization

Structuring the fish workers' organization was the next step. In this phase and for the decade of the 1980s, it was the state of Kerala that took the lead. The fish worker's protests had already commenced in the 1970s when one fisherman in a plank canoe was killed by a trawl boat in Alleppey. This resulted in the mobilization of the fisherfolk under the leadership of Fr. Paul Arackal around Alleppey. Subsequently, the struggle moved southwards. In the southern part of the state, where the struggle gained momentum, the main fishing craft was the *katamaram* (a log raft) fishery, which was much diversified and engaged thousands of fishermen. In labour terms, this was a small operation consisting

of two to four fishermen with very traditional and efficient skills using hooks and a variety of nets, sails, and, in some areas, going out for two to three days at a time. Women too were very involved in the post-harvest fishery, drying, processing, and distributing head loads of fish. This is one state in India where fish is an integral part of the populations diet, like in Goa. The majority of the fishworkers in this southern region were Christian.

In 1978, there was a raging battle between the coastal fishermen and the government on the corruption in the Anchuthengu Refinance Scheme through which the government advanced loans to help the coastal fishermen to have access to trawl boats. Unable to repay the loans, the boats were confiscated. In order to protest, the fishermen had come together under the banner of the Anchuthengu Boat Workers Union with Joyachan Anthony as president and started a hunger fast supported by a team of religious priests including Thomas Kocherry and religious sisters in Poothura, Trivandrum. As a result, the government was forced to return the boats and order an enquiry into the corruption in the scheme.

There was also a decade and more of NGO history in the coastal communities on this southern coast. Participatory processes in new cooperatives, initiated by the people of the fishing village of Marianad to control the sale of their fish and free themselves from the moneylenders and merchants, had brought significant appreciation to this community that was otherwise considered backward and despised. This process and the data that was generated on the artisanal fishery provided the base for contesting the new modernization logic of the state and valorizing the artisanal fishery. It had also revealed the subjugation of the poor fishers to the authority of the Catholic Church from which the Church had material gains while the community continued to live in squalor. A process of creating people's organizations had commenced. These processes and the growth of local community leadership succeeded in projecting the artisanal fishery as a viable sector. Youth from the community had begun to take leadership and challenge the oppressive structures. The fisherwomen had started to create their own local organizations of fish vendors, called the Theera Desha Mahila Vedi, and there was a growing awareness in the community that rights could be gained only by struggle. The South India Federation of Fishermen's Societies (SIFFS), an apex body of the fishermen's societies of the contiguous districts of Trivandrum,

Quilon, and Kanyakumari, was already in place at the turn of the 1970s.

With the creation of these people's organizations, which were probably among the first of their kind in the country, the fish workers, for the first time, did not have to depend on either the political parties or the Church to give them leadership. The active functioning of their organizations also brought them credibility. The fact that they were able to defend themselves and their positions with facts and figures meant that they were taken seriously. SIFFS particularly went into all kinds of R&D for more cost-effective craft design and post-harvest technologies. In 1978, SIFFS conducted a statewide seminar on depleting fish resources. The fish workers were already aware of the problem in facing the crunch. But it was hard for both the officials of the Fisheries Department and the scientists to accept this. They viewed the decline as a passing cyclical phenomenon. So when the outbursts started in Goa, Kerala followed suit, and it was clear to the emerging local leaders and the supporters that the struggle would have to be taken forward through mobilization and creation of an organization of a political nature.

The Women Organise

As mentioned earlier, the women in this region were very involved in the post-harvest activity and the sale of fish. They faced several problems in the market by extortionist male traders and problems to sell fresh fish viably as iced fish from the mechanized sector got dumped in the market. Women, therefore, began to mobilize from 1978 to defend their rights in the market, especially against the tax collectors, and their first success was in Cheriyinkizh, Trivandrum, in 1980, when the panchayat had to accept to collect the stipulated market taxes directly from the vendors and not through the contracted collectors.

They also organized to demand the right to travel on public transport with their fish, as they, otherwise, had to walk from 8-12 km to and from the market with the fish loads on their heads. They were thus at a disadvantage reaching the market late compared to the men merchants who got there faster on their bicycles and thus were disadvantaged regarding the prices they got for their fish. They would, therefore, not get the best prices for their labour. So when women did organize, this kind of organized protest caught the public eye. Here were people not asking for a dole from the

government but a basic right to travel on public transport, like other citizens. Achieving such a demand was not easy, and it took two years of constant protest and a lot of groundwork until the government finally created the Fishermen's Welfare Corporation and ran special buses for women fish vendors.

The Response of the State in the Initial Phase

Following the recommendations of the Majumdar Committee, the Central Government directed the States to enact a Marine Fishing Regulation Act. Responding to the demands of the fishermen at the state level, the Kerala Government issued an Ordinance (No. 12 of November 1980) which gave the State government powers to restrict, regulate or prohibit fishing in territorial waters to conserve fish resources and maintain law and order. Using this power, the government made rules and issued orders prohibiting the use of purse-seine, ring-seine, pelagic trawl, and mid-water trawl gears in the territorial waters along the entire coastline of the State. Later this Ordinance became an Act (Act 10 of 1981 called the Kerala Marine Fishing Regulation Act). Through this Act, it became mandatory for even the traditional fishing crafts, except catamarans, to register with the State Fisheries Department.

Immediately later, the State also demarcated coastal zones where mechanized boats were prohibited from doing fishing. These zones were specified in each area, depending on the difference in-depth and the extent of the continental shelf. Even though officers were appointed to implement these measures and reprimand the violators, due to the vastness of the sea and lack of sea patrolling vessels and manpower, these rules remained on paper and were not put into practice. In many places, with the support of the movement, the fishermen themselves collectively began to take action based on the legislation. But this only further aggravated the conflicts as the state remained withdrawn.

The Controversial Trawl Ban

In 1981, the Kerala Government ordered a seasonal ban on trawling under the KMFRI Act, but the ban was withdrawn within three days. This set the fishermen on fire as they sensed the political tussle in the government, and they launched a long struggle when Fr. Thomas Kocherry and Mr. Joyachan Anthony, a fisherman, went on a fast. This was a major mobilization when both men and women in the southern districts of Kerala took to the streets, making

a demand to reinstall the ban in June, July, and August, the monsoon months. As the protest was consistent, but the pressure on the opposite side was also substantial, the government's response was to look into the matter and, hence, instituted a Committee to make recommendations. In fact, this was the beginning of a series of struggles and the creation of expert committees by the government to look into the question of whether a seasonal ban of trawling during the monsoon months is required or not. There was the Babu Paul Committee in 1981, the A.G. Kalavar Committee in 1984, and the Balakrishnan Nair Committee in 1988, and again in 1989, which finally proposed a three-month ban that could be reviewed after three years.

First, it was on June 29, 1988, that the government issued a G.O to prohibit trawling for three months throughout the territorial waters along the entire coastline of the State but exempted the Quilon region where a good number of trawl boats were based. The movement stepped up its protest, and on July 2nd, 1988, the ban was extented to Quilon too. Hence, it was effective for 61 days. But this did not imply that this was a prohibition for years to come as well. Therefore, the prohibitory orders had to be issued each year, and that too only after the fish workers protested and demanded it. The periods of the ban were not uniform either. In 1989, the ban period was only 43 days, in 1990 only 23 days, and in 1991 only 33 days. There were litigations filed by the boat owners every year in the High Court of Kerala, and the verdicts favoured the boat owners. Later, it was the Supreme Court that upheld the powers of the state to prohibit mechanized boats from entering the sea during the ban period (for details, see the section 'Legal tug of War'). However, the seasonal ban period became 45 days, though the demand of the movement was for 90 days, and the order was issued every year thereafter. It was more a compromise by the government to appease the trawl boat owners. It must be mentioned here that many other states in India like Goa, Karnataka, Tamilnadu, Maharashtra imposed seasonal bans on mechanized fishing as a conservation measure, but, for a more extended period than in Kerala. While in other coastal states on the west coast, the ban is for mechanized and motorized fishing, in Kerala, the ban is applied only to trawl and purse seine boats.

The A.G. Kalavar Committee had made detailed suggestions for fisheries management which included mesh size regulation and limiting the number of crafts according to the resource potential.

The government subsequently in March 1986 issued many GOs, which included no new licenses for trawl boats, no trawl fishing in territorial waters from sun set to sun rise, and minimum mesh sizes for mid-water and bottom trawl nets. Again these regulations did not hold water, as the marine products exports development authority (MPEDA) also had the authority to issue fishing boat licenses, and so entry of new boats could not be controlled by any particular state. There was also no way to monitor whether the boats were using nets with smaller mesh sizes or fishing during the night.

Consolidating the Base

These years saw the creation of the fish workers' trade union in this sector, which itself was the first of its kind. The state of Kerala had a tradition of Left politics, and workers in all sectors were organised. Although Kerala was not an industrialized state, the left parties organized all workers even in traditional industry wherever the wage system was in existence. They were more wary of the sectors that were self-employed, seeing them more as a petty-bourgeois class. Hence the traditional fish workers were excluded from their purview, as they followed a sharing system even in the owner-operator category. So whereas there was the political space for the mobilization of fish workers, sustaining an artisanal or traditional sector was not within left consciousness. It was inevitable that such a sector should give way to a more modern work organization of ownership and wage labour. So, this was another significant breakthrough when accurate data from the sector, compiled by the Programme for Community Organisation, an NGO with origins in the Marianad village, could prove that the artisanal fishery was more viable than the modern fishery on all economic and social counts. Hence, it was imperative that this fishery had to be sustained if livelihood had to be safeguarded.

The process of structuring a political organization was greatly debated. By this time, as a result of the first spontaneous outburst of struggles and the involvement of a section of the conscious church personnel, including priests and nuns, the movement took root in local areas. While it was clear that the political organization of the fisher people should be independent and free from all party affiliations, the bone of contention was whether it should be a class-based organization including fisher people from all coastal communities or a community-based organization including only

Latin Catholic fisher people, as the majority of fisher folk in the southern districts of Kerala are Latin Catholic (as different from the Syrian Catholics). This was the first big rupture in the process. What finally took off was the mobilization of the fish workers on a class basis that was gradually registered as a trade union. Those priests who supported such a process remained in the trade union and, in fact, the first president of the Kerala Swatantra Matsya Thozilali Federation (KSMTF) was a diocesan priest, Fr. Jose Kaleekal and Joyachan Anthony, a young fisherman, the general secretary. The Latin Catholic group grew initially, but its hold gradually weakened, although the issue of 'caste' also became an important feature in the KSMTF two decades later. This happened mainly to discredit the non-community people associated with the mobilization of the fishers when the union began to be recognised in the political arena and leaders from the community came of their own.

Registering an owner-operator (self-employed) fishing sector as a trade union was indeed something new. However, it gave the fish workers an identity as workers who had rights to a livelihood. Building up a trade union consciousness in a sector that was until then considered a vote bank for the right-wing Congress party was a new step. But, in Kerala, the left tradition made the trade union concept easily acceptable. This, in fact, put the fish workers on par with other workers as a sector that the government had now to take seriously. This indeed was no automatic process. The union had to prove its strength, and this was achieved through the large and persistent struggles – hunger strikes and ingenious mass protests every monsoon season from 1981 to 1989. The major demand of the union was transport facilities to the market for the women, reduction of market taxes, and a ban on trawl fishing in the months of June, July, and August. The protests made the government take note and sit up. Though uncomfortable to negotiate with a union that had no political affiliation and the political parties being caught on the rebound on seeing the massive turn out of people in the demonstrations, negotiations took place with the union at a round table with all other parties 'unions' participating. These were unions only in name. Right from the first struggle, the KSMTF realized that the other political unions would appropriate the gains of its struggle. But in the process, the party unions that generally blindly followed a party-line were forced to take positions on crucial issues in the lines of the KSMTF.

Nevertheless, these unions were unwilling and unable to rally the full support of their parties on these crucial issues.

The Government Responds with Social Security Measures

Instead of putting in place institutions that implemented the recommendations of the Kalavar Committee or empowering the existing ones to do so, the government tried to appease the union by sanctioning all kinds of welfare measures. Hence there was no serious attempt to manage the fishery. The Government passed the Welfare Fund Act in 1985. Although this was a spill-out of the larger struggle for the monsoon ban of trawl fishing, the creation of a Fisherman's Welfare Fund and subsequently the Bill to register all fish workers, and the creation of the Matsyafed – a chain of fishing cooperatives on the Marianad model, were important successes of the struggle. These were innovative structures that not only put artisanal fisheries and the fish workers on the national map and an important component of the Ministry of Agriculture but also later inspired other states in the country to develop their welfare programmes for the fish workers. These welfare measures included insurances for the working fishers, recompense for disaster, housing grants, educational grants, and pensions. Money for this had to be allocated.

The Legal Tug of War at the Kerala State Level

The two areas in which there was a legal tug of war were in the case of the Welfare fund and in the fishing regulations.

1. Welfare Fund: The most significant aspect of the Kerala Fishermen Welfare Fund Act was the stipulation that all those engaged in fish trade should contribute 1% of his/her sales proceeds to the Welfare Fund. In 1987, the exporters approached the court about their contribution that they are not traders or dealers. In 1990, they closed their plants, and the government then deducted their contribution to 0.9% and demanded that they pay for the first three years. Later the exporters went to the high court on appeal. The court then issued an order that the Welfare Fund Board should consider and state whether the exporters come under the category of dealers or traders. Against this observation, the Welfare Fund Board went to the Supreme Court. First, the divisional Bench of the Supreme Court ruled in 1995 that they had to be treated as traders and must pay their arrears. But one trader gave a civil appeal to the Supreme Court in 1996 on the grounds that the

Constitutional validity of the Act was not justified by the court. Before his petition was admitted, this exporter was asked to make his tax payment to the Welfare Fund Board, which amounted to Rs. 14 lakhs. Only after he paid the arrears, this petition went to the Constitutional Bench of the Supreme Court with a sitting Chief Justice and 4 judges. The petitioner pleaded that as an exporter, he did not employ the fishermen and was therefore not responsible for meeting his welfare contributions. On Feb.1, 2002, the Supreme Court announced its judgment stating that "the state cannot, in an Act under Entry 23 of List III, place the burden of an impost by way of contribution for giving effect to the Act and the scheme made there under for the social security and social welfare of a section of society upon a person who is not a member of such section of society nor an employer of a person who is a member of such section of society. The burden of the impost may be placed only when there exists the relationship of employer and employee between the contributor and the beneficiary of the provisions of the Act and the scheme made thereunder." In this case, the question before the court was whether exporters of fish meat, carrying on the business of buying processed fish and exporting the same, fell within the meaning of 'dealer' under the Act. The court defined the fishers as 'catchers and sellers' and the processors as 'purchasers,' and under such a relationship, the view of the court was that an exporter could not be burdened with the impost of levy under that Act, which was outside the ambit of the Constitution.

Subsequently, on 25th January 2006, the Kerala state issued an Ordinance to levy and collect cess on the sale proceeds of fish and fish products from dealers, including commission agents and non-resident dealers or their agents. The preamble stated that the cess is levied with a view of augmenting resources of the Kerala Fishermen's Welfare Fund for the welfare of fishers and allied workers of the fishery industry in the state. The cess of half per cent of total sale proceeds of a dealer in a financial year. The Director of Fisheries would be the competent authority to administer, supervise and enforce provisions. Every dealer is expected to furnish returns on the sale proceeds of the previous financial year before the designated assessing officer. These officers would have the same powers vested in a civil court under the Code of Civil Procedure. The Ordinance in Section 5 stated that inquiries conducted by assessing officers would be deemed to be judicial proceedings under sections 193 and 228 of the Indian Penal Code.

The Ordinance also has penal provisions in case of non-payment of cess.

2. Fishing Regulations: Despite the fact that the pressure built up by the struggles of the fish workers did force the state to enact legislation in their favour, there were always the lobbies of the powerful, in this case, the boat owners and the fish exporters who challenged the state in the courts. In 1981 itself, the mechanized boat owners challenged the Marine Fishing Regulation Act and prohibition on purse seining and pelagic trawl fishing on the grounds that this was a violation of their fundamental right to work. However, the High Court upheld the Act and powers of the state to enforce reasonable restrictions on fishing. Then again, in 1989, the trawl boat owners went to the High Court against the seasonal ban order, arguing that they were capable of fishing beyond the territorial waters and should be allowed to pass through the territorial waters during the ban period. Therefore the closure of the harbours in the monsoon months was illegal, as it amounted to restricting their passage to their fishing grounds. The court then appointed a Commission, at the cost of the boat owners, to verify the fishing capacity of their boats beyond the territorial waters, as the KSMTF alleged that their small trawl boats were not capable of trawling beyond 22 k.m. This Commission included scientists from the Central Institute of Fisheries Technology, officials from the Fisheries Department, and representatives from the KSMTF. Despite the fact that some fish were caught, though not by a bottom trawl net, the High Court ruled that the crafts were capable to fish beyond the 22 k.m. limit and that the harbours should be opened to them.

In June 1993, a Supreme Court judgment was passed in support of the Kerala Government's ban on bottom trawling during the monsoon months, which nullified the earlier High Court judgment in favour of the Kerala Trawler Boat Operators Association, as there was then no way to monitor the actual fishing operations. In this judgment, the court wrote: "Public interest cannot be determined only by looking at the quantum of fish caught in the year. The government is under obligation to protect the economic interests of the traditional fishermen and to ensure that they are not deprived of their slender means of livelihood."[22] Interestingly, the

22. The Supreme Court of India, Judgement 1993, KSMTF and others Appellants vs. Kerala Trawl net Boat Operators Association and Others Respondents.

neighbouring states developed the practice of closing their harbours for the monsoon months, and this was not contested by any stakeholder all through the 1990s.

Subsequently, based on a complaint, in June 2000, the High Court at Panaji put its foot down on violations of its trawl ban order. It suspended the licenses of all trawlers registered with the Fisheries Department of the Goa government, sealed the use of the seven official jetties by the trawlers for unloading their fish catch, and directed the government of Goa to publicise its order in the newspapers so that the public is made aware that there exists a ban on all mechanized fishing activities till August 15. This action of the High Court was based on a letter written by a local citizen, which was then converted into a Public Litigation in which the Director of Fisheries and the National Institute of Oceanography were asked to file affidavits.

In 2003, at a State Ministerial Conference in Delhi, the states recommended that both conservation measures be taken for the fishery and that sea safety measures be extended to the fishers. It was decided to have a uniform fishing ban on the western coast from 10th June to 15th August and from 15th April to 31st May on the east coast. They also decided that, since the ban would affect the poor fishers, the welfare measures should be strengthened, especially for the women who were engaged in the fish processing industry. Despite this common decision, while implementing this order, Kerala exempted the OBMs sector and even wanted to exclude the new inboard engine crafts. This was under pressure of the KSMTF that was taken by surprise by this total ban of mechanically propelled fishing. A union that had for two decades been advocating a ban on ecologically destructive fishing in the monsoon months had to defend its base that was also modernized, had become highly capital intensive, and used aggressive fishing gear like mini and midwater trawls and ring seines. As a result, only Kerala did not implement the ban orders in 2003 but gave assurance that it would be implemented in the following year. Subsequently, a new committee was created at the national level with CMFRI Director, Commissioner of Gujarat, and scientists, that submitted their report in 2006, asking for a uniform ban on the west coast for 65 days for all crafts with mechanical propulsion of more than 10 HP.

Nevertheless, the Kerala government has again said that the ban would apply only to trawlers and be supported by the KSMTF. The Kerala government subsequently appointed an expert

committee with the Secretary of Fisheries as Chairman to look into the matter. This committee submitted its report in 2007 with a recommendation to continue the ban and restricting the same to 47 days, starting from 15th June of the respective year[23]. With the persistence of concerns regarding the sustainability of the fishery, the Government of Kerala appointed another committee under the chairmanship of the Additional Director of Fisheries to evaluate the fish wealth and impact of the trawl ban along the Kerala coast in October 2012. The committee that submitted its report in 2014 recommended an extension of the trawl ban from 47 days to 60 days in two periods (one in June-July and another in October-November of 30 days each).

Almost in parallel, the Union Government appointed a committee in May 2013 under the Chairmanship of Director, CMFRI, to suggest a uniform closure period for India's EEZ considering significant disparities in trawl ban periods across states leading to frequent conflicts among fishers. The committee, based on scientific facts on spawning periods and other relevant details, as well as stakeholder consultations across states, recommended a seasonal closure for 61 days[24]. Based on this, the government fixed the ban period from April 15 till June 14 on East Coast and from June 1 to July 31 on the West Coast since 2015. However, within their territorial waters, the States reserve the right to decide on the fishing ban 'period' and its applicability on 'type of boats.' This recommendation was implemented in all the states except Kerala, where the ban period continued for 47 days. In 2020, the Kerala government raised the ban period to 52 days without much resistance from the fishermen community.

The Indian Mobilization Initiative Stimulates an International Debate

In 1984, the FAO[25] organized the World Conference on Fisheries Management and Development. This conference focused on the management of the 200-mile Exclusive Economic Zone, as the UN Convention on Law of the Seas (UNCLOS) had been finally ratified

23. Sankaran, T. M. 'Fisheries Sector of Kerala-A Brief Review', Trivandrum, 2010
24. "Report of the Technical Committee to Review the Duration of the Ban Period and to Suggest Further Measures to Strengthen the Conservation and Management Aspects". Ministry of Agriculture, Government of India, New Delhi, 2014
25. Food and Agriculture Organisation

and became binding in 1982. The fish workers had gathered under a separate roof – a hundred fish workers and their supporters from 34 countries. As the FAO did not pay heed to the existence of the artisanal fishers, this was their way of making their presence felt.

The initiative to organize this conference actually came from India, when friends in Rome, who were aware of the fishworkers struggles in India, sent news about the FAO conference and suggested that the NFF should participate. Not being recognized as a national trade union, permission was not granted, and hence the Indians decided that the presence of the artisanal fishers should be made visible in other ways. Spontaneously, friends from various NGOs from all over the world rallied together, and it was decided to organize a parallel conference of fish workers and their supporters in Rome with John Kurien as the organizing secretary.

The open letter to the delegates of the FAO conference read: "You gather here under the auspices of the FAO to formulate and endorse policies which will affect the lives of millions of fish workers. Much of this takes place without their participation. We meet to assert our rights to share the experiences of our life and struggles and to expound our perceptions of fisheries development, and to build new links of solidarity and cooperation. The world over, and particularly in third world countries, fish workers do not receive a fair share of the wealth they create. They are victims of development and in response have begun to organize to demand their rights."[26]

Besides creating a forum for the first time for the fish workers from the coastal fishery of several countries to interact with each other, this conference also made two very significant contributions to the international discourse in fisheries. It, first of all, spoke about fish workers, not fishermen. In this way, it highlighted the reality of the southern world in which fisheries were still a family occupation in which men, women, and children were involved in different aspects of the fishery and where any development of the fishery had to take the development of the whole community at heart. It was clear that the involvement of women in the coastal fishery is what also made it viable and sustainable. Their contribution and spaces had to be recognized and safeguarded. The second important aspect that was highlighted was the viability of the small-scale artisanal fishery as opposed to the capital-intensive

26. International Conference of Fishworkers and their Supporters, Rome, 1984

modern fishery. This essentially meant a fishery as a means of livelihood to thousands of coastal people, a fishery that is diversified, environmentally friendly, and not only export-oriented. Another important aspect was that the fishworkers saw the potential of the organization and struggle as a means of obtaining their rights, and this stimulated the growth of fish worker organizations in the southern countries.

The important fact was that these positions were taken at a time when the whole world was trying to convince itself that there were large fish resources in the deep sea that the developing countries had no means to exploit and that industrial fisheries and joint ventures were the answer. History revealed that this was a bluff, and the same FAO that gave leadership to this thinking at that time, changed its position entirely a decade later (in 1994) and then tried to lobby for a Code of Conduct of Responsible Fisheries, inculcating many of the positions of the fish workers conference of 1984.

One of the crucial spill-outs of the Rome Conference was the creation of the International Collective in Support of Fishworkers (ICSF) in 1986. This was in response to the suggestions of the fish workers in Rome, who realized that building up their national organizations was imperative for any impact on policymaking at the national level. For this, they would need support, and this should be the task of the supporter group. The initiative to call a meeting of supporters was taken jointly by the Centre for Development Studies and the South Indian Federation of Fishermen Societies in Trivandrum. Support to the fish worker organizations could be conceived in various ways, but in the ICSF, it boils down to involvement in those issues that national movements think are out of their ability to tackle single-handed and for which an international network would be necessary. This essentially has been the role that the ICSF has played from its inception. Initially a voluntary endeavour of committed individuals, it created a full-time secretariat in India in 1991 with a liaison office in Brussels. Without speaking in the name of the fish workers, the ICSF also succeeded in seeing that the artisanal fish workers' issues would find a place on the agenda of international forums.

The Famous Kanya Kumari March

Towards the end of the decade of the 1980s, after a sufficiently long period of action in the southern states, the National Fishermen's

Forum decided to push for a nationwide mobilization campaign, as fisheries is a national issue and to build up its profile, as a national trade union. By this time, the old National Forum for Catamaran and Country boat Fishermen's Rights and Marine Wealth had been registered as a national trade union under the name of the National Fishermen's Forum, and Fr. Thomas Kocherry had taken over as Chairman. The name was later changed to National Fishworkers Forum, following the nomenclature of Rome. The year 1989 witnessed a significant mobilization of the coastal communities through the Coastal March. With the slogan, 'Protect Waters, Protect Life,' two groups of people travelled along the east and west coasts of the country, southwards to the tip of India, meeting up in Kanya Kumari on May 1st, 1989. This was not only an eye-opener to the general public on fisheries issues but was a major milestone in the history of the NFF, as the slogan struck deep and rallied thousands of men, women, and children whose lives depended on the water resources.

As it was later called the Kanya Kumari March, projected the NFF as a worker's movement with wider ecological demands. While the demand for a Marine Regulation was also essentially an ecological demand, the KK March widened the ecological concern as the water resources and coastal communities were being threatened in diverse ways, like industrial pollution, destruction of fish habitats, and industrial development of the coastal zone. What also made the news was thousands of women from a coastal community threatened by the proposal to construct a nuclear power plant joining the rally and insisting on the NFF taking up the anti-nuclear issue as well. This was politically a very sensitive issue and caused the State to sit up and direct its guns on the movement.

The final gathering of the KK March was ruthlessly disrupted and ended with a police firing for no reason.

This mobilization carried the fisheries issues to the inland areas as well, and with it, there was a new spate of dynamics and voluntary action created in the movement. From then on, the NFF, with more contacts along the northern Indian east and west coasts, moved into a decade of national struggles.

In 1989 there was a change of government at the national level. The newly elected government was a non-Congress government and promised to be more people-oriented, and several people in power had sympathies with the people's movement. The Planning Commission particularly proclaimed that it would focus

on programmes of fuller employment, and it asked the movements to make their suggestions in writing. The NFF used this occasion to make a proposal for the 8th Five Year Plan based on a perspective of sustainable development and fuller employment. This gave the NFF the opportunity to provide a platform at the national level to all those who had serious contributions to make in this field and to think in more macro terms underlying the kind of development that it sought. Unfortunately, that government did not last very long, but this exercise did provide some openings for discussion with parliamentarians and bureaucrats. At this time, a discussion for a Coastal Zone Regulation was mooted, and compartments on trains were allotted for women fish vendors on certain routes.

The Feminist Perspective

All through the 1980s, the feminist movement that was growing in India also influenced the NFF. Thousands of women in the coastal communities were active participants, mainly in post-harvest fisheries. But no significance was generally attributed to this work of women when 'fisheries development' was talked about. Valorizing their contributions to the community and making visible and protecting their spaces in the fishery was considered an essential demand in the movement. This was initially done by taking up the issues that women faced as workers: their right to travel on public transport with their produce, their right to vending space in the markets, protection from exorbitant vending taxes, etc. Later, national struggles were waged to see that women were accepted as workers in the welfare programmes of the government. These struggles certainly gave women a consciousness of their own rights and the fact that by not asserting them, they could be easily marginalized in the development process.

Several women who supported the fish workers movement were active in the feminist movement too. In this process, they not only stimulated the participation of women in the fish workers movement but also brought new dimensions to the macro analysis, through what was called a 'feminist perspective on fisheries' and a feminist critique of development. This presence of feminists in the movement was not without its difficulties. Initially influenced by the positions of the 'autonomous women's movement', some of the feminists pushed for the autonomy of the women in the organization. But others felt that it should be one movement of

men and women in which women's issues find their place on the agenda. This proved the right decision in the long run, although there were several hiccups. What can be said is that the efforts made in mobilizing women in India had far-reaching ripples in the fish workers' movement internationally too.

It was the feminist perspective that highlighted the need to focus on the nurture perspective in the fisheries and introduced this perspective in the movement. Besides focusing on making women's work in the fishery visible and protecting their existing spaces in the fishery, this nurture perspective pushed the union to take up issues related to daily life issues in the community - water, health facilities, education child care, etc. It also opened the thinking and action to conserving the fish habitat, the mangrove vegetation, the estuarine niches, and recreating the destroyed habitat through artificial reefs. The feminist perspective also challenged the fact that technology and modern science are neutral. These have evolved in contexts of male dominance and the subjugation of women and nature, thereby destroying the organic interrelationships in nature and society. This paradigm of development is not life-centered and, thus, inherently disregards the labour of women and labour for subsistence.

From 1990 till the mid-90s, the NFF organized formal training programmes for cadre development. NGO support made it financially possible. This commenced with a three-day programme, but in 1991 in a ten day programme, representatives from member organizations from all over the Indian coast took part. This meant that they had necessarily to be multi-lingual, and the NFF developed procedural skills in this line as most of the sessions had simultaneous whispering translations in at least five languages. These programmes included a variety of inputs on fisheries development, organizational strategies, and trade union consciousness. Although they were participatory, they were more formally structured. In 1995, another experiment was tried, as the General Secretary, Hare Krishna Debnath, who came from West Bengal, wanted a more personalized approach relating the theoretical understanding also to people's lives, their convictions, and the personal conflicts they developed because of their involvements. It was a two-week living together experiment, where the activists and leaders came with their marriage partners and all engaged in the housekeeping chores while also learning. This was a very meaningful and enriching session and did contribute enormously to the building up of the union in West

Bengal. Unfortunately, and probably because of the high quality of that session, no further training was undertaken.

One important input in the sessions was the discussion on patriarchy and a feminist perspective of fisheries development, which gradually began to impact the consciousness of the participants. In 1993, this led to a specific 'women in fisheries programme' in the NFF. This was part of a more extensive programme undertaken in different fish workers' organizations in other parts of the world sponsored by the ICSF. This programme, which consisted of creating a core group of women leaders, taking up specific issues of women in the union, and seeing how women's spaces in the fishery could be safeguarded, was a critical work indeed. It helped to bring some theoretical clarity by tracing the links between the development of technology and the destruction of the natural resource base, and the marginalisation of women in the fishery. Besides organizing specific input programmes, for the core group of women, a serious attempt was also made to collect data on women's involvement in fisheries. Although this is not exhaustive, it is the only document of its kind that exists.

This women's core group also studied and took up the issue of the injustice done to migrant women workers in the fish processing plants. Under the auspices of the NFF, they organized a Public Hearing on 'Women's Struggles for Survival in Fisheries'.[27] Live testimonies of women workers in the fish processing plants convinced the jury that serious consideration should be given to protect the rights of these migrant women workers and the spaces of women in the fishery. Subsequently, the NFF was successfully able to intervene and see that the Department of Labour took the plight of these women seriously and insisted that the processing industry treat these women on par with other contract and migrant labour as per the legal stipulations. Although some states did respond positively, the problem was not resolved.

Despite the fact that all these attempts were made to create gender awareness in the movement, there continued to be a resistance to the more vocal and able women leaders that were emerging. The women of the core group were consistently chided, and by the end of the 1990s, most of them either withdrew or left. Nevertheless, the male leaders in the union, either because

27. Public Hearing on the Struggles of Women Workers in the Fish Processing Industry in India, Samudra Dossier, Women in Fisheries Series, No.1, ICSF, Chennai, 1995

they were convinced about gender equity or because by this time, the general ethos of recognizing women's participation was more accepted, took upon themselves to see that women's issues would remain on the agenda. Here again, the men seemed more secure when they talked about women's issues than when the women spoke about them. Some state unions resisted accepting an all women's union as a member of the NFF. The requirement was that the women's unions should be part of the State Federation under the State Federation in order to be accepted. But this was changed subsequently in 2000, and some states did accept women's unions as members.

In 1999, the NFF took up a large national struggle, demanding that women be nationally considered fish workers and get the welfare benefits that fishermen get from the government. In some states, like in Orissa and West Bengal, the mobilization around this issue challenged the accepted norm that fisheries were a male domain, and it appeared to take the Legislators by surprise. In response to the mobilization, the state had to accept that women also earned their livelihood from fish-related activities. So, as such, the NFF has succeeded in projecting this fact at the national level.

Growing into the Stature of a National Trade Union– the Period till 2000

At the turn of the 1980s, there was stagnation, and even a decline in marine fish catches at the world level, but the demand for fish was still high. There was tremendous overcapacity in the northern fishing fleets. This fleet was also heavily subsidized and was therefore in search of new fishing grounds and targeted the southern waters. As the southern countries had no stringent fisheries management regulations, these foreign vessels poached the southern waters with ease causing greater hardship to the Indian fishers who were also beginning to fish in more distant waters. With diesel costs being on the rise and fishing gear getting more expensive, the capital requirements for the Indian fishers were also on the rise. Under the pretext that fish catches were falling on the one hand and that there were resources in the deep sea that the Indian fleet could not access, two things happened in India at this time: aquaculture[28] was proposed to raise shrimp production, and joint

28. Aquaculture or fish farming, the growing of fish in protected water bodies or tanks.

ventures with foreign companies for deep-sea fishing were the new lines taken up. The tie-up between aquaculture and industrial fisheries, the combination intended to meet the foreign resource crunch in India, was the next big battle that the NFF had to wage to protect the coastal fishers and the livelihood of the fish workers.

Already in the latter part of the 1980s, the NFF sought alliances with other worker unions that were being challenged by similar processes. The textile workers in Central India were on a long strike to get their rightful compensation in the event of the modernization of the textile industry. These unions that represented workers both in the formal and informal sectors created a national platform called the Platform of Militant Trade Unions. This process did not last long as the textile workers faced a stifling defeat, shortly after which their trade union leader was killed, and the reign of terror grew in the political arena. In the early 1990s an attempt was forged by several of the independent unions and movements in the unorganized sector to create a national union of the unorganized sector workers with the initiative called the National Centre for Labour, but this did not make much headway. Yet, the interaction with the other unions did pave the way for the future national struggles of the NFF.

Simultaneously, the NFF played a vital role in creating the National Alliance of People's Movements, which was a more lasting alliance of all movements opposing the ongoing development that led to the displacement of masses of people and erosion of the natural resources. All these experiences of work in a more broad-based framework not only gave the NFF wider reach but helped it also to take up larger national struggles.

While it is not possible to give the details of all the struggles that the NFF led and the issues it highlighted, we will refer in detail to four major issues.

1. The Case of Aquaculture

In the mid-1980s, with a US$425 million loan from the World Bank, the Indian government went into subsidizing business investors to set up commercial shrimp farms geared primarily for export. The stated objectives were to boost the country's export earnings, increase food production and generate employment and earnings for communities along the coast. Rising consumer demand for shrimp at the global level required large-scale production facilitated

by the use of chemical agents and the flushing of ponds daily with huge quantities of seawater. Thus intensive aquaculture in India was set in motion by global market forces.

With the ushering in of the 1990s, the Indian government had announced its New Economic Policy. The privatization and liberalization programme was high on the agenda, and politically the process of decentralization commenced. This period also saw a phenomenal rise in the cost of inputs in fisheries because of the devaluation of the rupee and the new import policy.

In 1991, the Chilika Bachao Andolan led the first protest against the privatization of the Chilika Lake in Orissa for shrimp aquaculture. The privatisation of this lake, the largest in the country, would mean losing access to the waters for thousands of small fishers in the region. It would also lead to pollution of the water and several other problems for the fishery in the wild, as the lake flowed into the sea. Coastal communities, lovers of the environment and students rose up in arms. This struggle was led by a veteran freedom fighter Bankar Bihari Das. This raised the alarm all over the country when 21 MPs signed a memorandum and appealed to the Prime Minister to stop the project on environmental grounds. This was a long struggle in which the court verdict was in favour of the people, and the Tatas, one of the country's most prominent business houses, withdrew.

Efforts continued all over the country to privatize the water bodies, and as the government had all kinds of schemes to introduce more input-intensive aquaculture in the coastal rice tracts, the farmers were eager to take it up as prices of paddy were very low and the costs of cultivation on the increase. Traditional aquaculture was nothing new in India. This was practiced in several coastal areas using the natural ebb and flow of the water systems and the rich wetland ecosystems. Numerous communities made a living from these practices, which were not only integrated into the cycle of food production – intercropping shrimp and paddy, but also sustaining the social interactions as local communities evolved their own ways of appropriating and sharing the production.

When intensive modern aquaculture was introduced in India, other Asian countries had already seen the boom and bust of this industry. In 1987, Taiwan was producing 21% of Asia's cultured shrimp, which was the highest output in the Asian region. But viruses and bacteria then hit the crop, and production began to fall drastically. The entire rich mangrove ecosystem was also

destroyed in this process, and the shrimp lands could no longer be used for anything. China then took over to produce 21.6% of Asia's production. Utilizing a more cautious approach, they continued to maintain high rates of production until they too were hit by disease in 1991. The Philippines and Thailand followed suit.[29]

By 1992-93, the protests of the coastal people in Tamil Nadu against the growing menace of aquaculture intensified. The rice belt of this area was being destroyed by salinity and takeover by investors, and the Gandhians Shri Jagannathan and his wife Krishnamal, who had worked long years with the agricultural workers, took up cudgels aganst the shrimp farms. They were joined by the coastal communities of Andhra, where the bulldozers and huge pumping stations and pipelines began to invade the coastal lands. Within a short spell of time, the coastal people had started to feel the impact of this on their freshwater sources and their access to hitherto common lands. Andhra earlier had no history of traditional aquaculture. The initial investors were from Kerala. They were actually shrimp exporters, who probably moved there to avoid tax payments in Kerala and, seeing lucrative avenues, they had gone in for aquaculture moving their establishments from the west coast to the east coast of the country. Seeing this as a revolution that brought such fast returns and supported by the scientists who were keen to experiment with the new technologies, the government of Andhra Pradesh and Tamil Nadu leased out vast expanses of the coastal lands to investors for little or no money. With absolutely no concern for the environment, many investors went into it, like any other industry using huge machines to create the tanks and then constructing long canals or pipelines to pump the saline water into the tanks. They sunk bore wells to pump in freshwater to maintain the required salinity levels in the tanks and then pumped out the used polluted water into the neighboring canals, thus polluting them. The small food farmers near the canals then also saw aquaculture as a faster means of making a profit and also went in for it, thereby salinating good agricultural land.

By the mid-1990s, fish was increasingly being diverted into the fishmeal[30] industry, as there was an increasing quantum of

29. The Environmental and Social Costs of Developing Coastal Shrimp Aquaculture in Asia, Ian Baird, Earth Island Institute, 1993

30. Fishmeal or crushed fish is a major component in fertilizers and animal feed. This is a fish that is caught undersized and which would otherwise be used for human consumption.

by-catch[31] from the trawl sector, and fishmeal was an important ingredient in aquaculture. The fish consumers who depended on the cheaper varieties of fish were increasingly deprived of fish for food. There were also other problems. As the initial spurt of demand for shrimp fingerlings grew, the marine fishing communities turned to catch fingerlings with minuscule mesh-sized nets, thereby also impacting the rest of the juveniles and the fish production as a whole.

Already in the early 1990s, the dreaded EUS[32] disease had hit the inland waters of many parts of the country. This disease was said to have originated in East Asia and travelled across Asia through the transfer of fish fingerlings for aquaculture. Although this disease generally appeared in the closed aquaculture ponds, this raised a hue and cry in Kerala as it occurred in the backwaters, a water system that is interconnected. Thousands of inland fisherfolk live off the resources of the inland waters.

In an attempt to increase fish production in the inland waters, the Kerala Fisheries Department actually encouraged the introduction of modern techniques of aquaculture. This first of all necessitated the privatization of inland water bodies. This was the first big obstacle, as inland fishing communities had established their customary access rights to these waters and were against the privatisation of the water bodies. With the breaking out of the EUS, all were taken by surprise because of the massive loss of fish life. The KSMTF, particularly the women, led a long struggle demanding compensation from the government. Although the compensation was small, this was the first time that fish workers were treated on par with agricultural workers, who have gained compensation in times of crop failure due to natural disasters.

The struggle against intensive coastal shrimp aquaculture saw the small farmers, fish workers, and environmental groups get together and wage war demanding a ban on intensive aquaculture. Many of these struggles took place outside the confines of the NFF, as there were several NGOs working on the east coast and who responded to the spontaneous upheaval of the people providing wider platforms for discussion and entering a legal battle with the state. The issue was taken to court by S. Jagannathan of the

31. This is a fish that is not targeted but is caught by nets that are not selective. The trawl nets and purseine nets generally produce a large proportion of by-catch.
32. Epizootic Ulcerative Syndrome

Gram Swaraj Movement, and the Campaign Against the Shrimp Industry (CASI) and People Against the Shrimp Industry (PASI) supported him. Together with support from Vandana Shiva of the Third World Network and some of the better investigating journalists, all these forums succeeded to draw public attention to this problem. The Supreme Court delivered its landmark judgment[33] in 1996 to close all commercial aquaculture operations within 500 meters of the high tide line and of those that had converted agricultural land into shrimp farms. Invoking the Polluter Pays principle, it also instructed the industry to bear all the costs of rehabilitating the coastal environment and to compensate all persons affected by damage to the coastal zone. The precedent-setting Supreme Court decision was based on a cost-benefit analysis by the National Environment Engineering Research Institute (NEERI) that concluded that "the costs of ecological and social damage far exceed the benefits that accrue out of coastal aquaculture activities."[34] This was a sure victory for the coastal communities. If the conditions and criteria outlined by the Supreme Court were adhered to, then all aquaculture activities along the coast would have to be closed down by March 1997. However, the victory was short-lived, as the powerful forces that backed the industry were quick to respond, and they lobbied to push through an Act of Parliament that would nullify the decision. This Bill was tabled in the Rajya Sabha on the 19th March 1997 and passed in great haste at the next sitting on the 20th March 1997. The members obviously did not even get an opportunity to read the bill carefully. If they had done so, it would have been obvious that what they had before them was actually a Shrimp Aquaculture Industry Promotion Bill and that the intent of the Bill was actually to undermine the judgment of the Supreme Court. Subsequently, based on protests from the fishing communities and fish worker organizations, a review committee was set up, but this again was politically manipulated. The entire saga is well revealed in a representation made to the Standing Committee by the Chairperson of the National Fishworkers Forum. (see Annexure I)

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33. Judgment of the Honorable Supreme Court of India in the Case Related to Aquaculture: Ref. Writ Petition (civil) No. 561/1994, S. Jaganathan vs. Union of India, 11.12.1996
34. In Defence of Land and Livelihood, Coastal Communities and Shrimp Industry in Asia, Consumers Association of Penang, 1997

As this issue gained national importance, the NFF then took up the struggle creating the National Action Committee Against Industrial Aquaculture (NACAIA), and two jathras were organized, one from Porbandar and one from Calcutta (now Kolkata), making people aware of the contradictions in the legislation and opposing the stand of the Central and State governments. According to Harekrishna Debnath, the Chairperson of the NFF "the Aquaculture Authority Bill is one of the most anti-people legislations ever introduced in the Indian Parliament. It is contrary to the Environmental Protection Act and to the Environment Policy of the Central government reflected in the CRZ Notification. It is also contrary to the welfare of the rural population living in coastal areas. It is an act of gross injustice, as it seeks to protect the documented, judicially recognized, ecologically disruptive effects of present day shrimp culture pursued by the industry."[35]

At the larger level, India is probably the only country in the world where the development of intensive aquaculture was challenged in this way and where the Supreme Court took a stand in favour of the people understanding the damage that this industry was causing to the livelihood of people through the destruction of the environment.

2. The Coastal Regulation Zone

The coastal resources are of utmost importance for world food security, as mentioned earlier. Article 207 of the UN Convention on the Law of the Sea (UNCLOS), signed in 1982 and ratified in 1994, stated that "States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from the land based sources, including rivers, estuaries, pipelines and out fall structures, taking into account internally agreed rules, standards and recommended practices and procedures" thus highlighting the need for regulatory measures in relation to the protection of the marine environment. Article 10 talks about the role of the state in the integration of fisheries in coastal area management and states that, "States should ensure that an appropriate policy, legal and institutional framework is adopted to achieve the sustainable and integrated use of the resources, taking into account the fragility of coastal ecosystems and the finite nature of their natural resources and the needs of coastal communities."

35. NFF Annual Report, 1997

In the light of the broader debates and with a dual motive of national security on the one hand and the intention to preserve these precious coastal stretches on the other, the then Prime Minister Indira Gandhi, in 1981, directed the Chief Ministers of all coastal states that beaches be kept clear of all activities within 500 m of the high tide line "to ensure that they remained unsullied." To follow this up, the Union Government set up a working group to lay down environmental guidelines for beach development. The coastal states were then asked to prepare status reports and Coastal Zone Management Plans identifying those areas earmarked for development and those for conservation. In February 1991, a Coastal Zone Regulation Notification was finally issued with a classification of zones, which prohibited certain activities and regulated certain other activities. Prohibited areas included setting up of industries or fish processing units, dumping of untreated industrial effluents and waste materials, land reclamation, mining land/rock, as well as a total ban on any construction in the inter-tidal zone or altering the natural landscape. For all other activities, clearance from MoEF was required. These included construction activities related to defense requirements, ports, thermal power plants, or any other activity with investment exceeding Rupees five crore.

In 1992, the UN Conference on Environment and Development (UNCED) acknowledged, in its Agenda 21, the need for an increased awareness of the socio-economic importance of the coastal marine environment. Agenda 21 recognised that the coastal environment as an essential component of the global life support system and a positive asset that presents opportunities for sustainable development. Agenda 21 set forth rights and obligations of states and provided the international basis upon which to pursue the protection and sustainable development of marine and coastal areas at the national, sub-regional, and global levels. By this time, the coasts were being increasingly targeted by investors as the global plan was evolving. There were, therefore, appeals to reduce the CRZ limits.

When Rajiv Gandhi was PM, it was decided that the 500 m limit on the beach for construction be relaxed to 200m in four specific cases, Goa, Puri, Madras (now Chennai), and Trivandrum, to foster tourism. Following this, the B.B.Vohra Committee was set up by a notification dated January 9, 1992, by the MoEF to review its policy under the 1991 Notification as per the relevant provisions of Sub-rule 3 of Rule of Environment Protection Rules,

1986 on the construction of beach hotels and resorts. The expert committee ruled that a No Development Zone (NDS) should remain at 200 m of the HTL on the comparatively fragile beaches. However, a case-to-case relaxation was possible. Building relaxations could also be made after carrying out necessary clarifications of limits to which the control would apply since, in some areas, tidal ingress could go up to 50 k.m. from the coastline. Accepting the recommendations of the Vohra Committee, the MoEF amended the earlier notification in 1994. It relaxed the 100-meter limits from the rivers, backwaters, and creeks to 50 meters.

But environmentalists and members of the fishing communities took the matter to court because of the need to conserve the fragile sand dunes along the coast. The fishing community was also demanding their customary right to live along the coast and asked for an exemption for the construction of their houses. On December 12, 1994, the Supreme Court ordered that all construction activities within 500 meters of the HTL be stopped. As per the Supreme Court requirements, each State Government with a coastline was expected to draw up a Coastal Zone Management Plan, which had to be sent to the MoEF for approval. Most governments got approval with conditions for changes and modifications in 1996. It was clear that the liberalization plans of governments would be badly hit if this regulation was taken seriously as there were numerous schemes in the pipeline for the 'development' of the coastal zone and the tourism industry. No state government, therefore, took action under the directives of the Supreme Court. Instead, the governments of the coastal states, together with several interested parties, filed petitions in the Supreme Court against the judgment and asked for a Stay Order. Also, the National Coastal Zone Management Authority (NCZMA) and the State Coastal Zone Management Authorities (SCZMA) were constituted in August 1998 following the Supreme Court Verdict. However, even before the SCZMA was constituted, the Government of Tamil Nadu initiated a process through District Collectors for reclassification of the CRZ, which basically amounted to dilution of the CRZ and permitting industrial and commercial interests to exploit and destroy the coast.

As a requirement of the enforcement of Coastal Regulation Zone Notification 1991 issued by MoEF, the High Tide Line the Coastal Regulation Zone was to be marked. The Amendment dated 29 December 1998 recognized a few institutions to mark the HTL/

LTL. But many governments have still not marked these lines, except for Kerala, which has marked the HTL. Meanwhile, the 1991 Notification was further diluted by the two amendments in 1997, heeding to the pressure of the industrial lobby, and the CRZ was therefore divided into three areas CRZ I, II, and III, and the specific activities in each area were defined. Today, most of the states have demarcated these areas.

The coastal zone was therefore only defined as the land adjacent to the sea and so had only the landward component. So right from the start, this management plan was viewed more as a 'development' rather than a 'coastal management' plan, which should have both a landward and seaward component regulating activity in both areas to sustain the sensitive ecosystem.

Meanwhile, the Indian council of Enviro-Legal Action filed a writ petition in 1993 before the Supreme Court contending that the notification dated 19-12-1991 of the MoEF had not been implemented or reinforced by the coastal states. On 12.12.94, the Supreme Court granted time to all the respondent states and passed an interim order directing the respondent states not to permit the setting up of any industry or construction of any type of building in the area at least up to 500 meters from the high tide line. The above conditional order was modified on 09.03.95, and it directed that all the restrictions regarding construction and setting up of industry contained in the CRZ notification should be meticulously followed by all the state governments.

The NFF mapped all the violations of the coastal zone along almost the entire coast of this country. This document was later used in legal battles to defend the coastal environment. Yet there remained discord within the local unions on this issue, namely whether the CRZ should be supported in toto or not, as it continued to leave vague the rights of the fishing community to construct their homes within the 200 meters of the HTL. This ambiguity at the level of the unions also provided the space for the government to flout the regulation as and when needed.

The government appointed the Swaminathan Committee to again look into the issue, and this committee submitted its report just after the tsunami hit in February 2005, hoping that effective implementation of the CRZ will in future safeguard the coasts and the communities that live along with it. The committee examined all the findings of the various committees that were instituted in the 14 years prior to it. It clarified the division of areas for

management and the kinds of activities that could be undertaken in each area. It accepted the main findings of the prior reports, namely that there should be no drawing of ground water in the No Development Zone (NDZ), including the CRZ area, except by manual extraction and recommended landscaping in the NDZ by the dressing of sand dunes, live fencing along resorts and permitted playfields but not swimming pools in the NDZ. It stated that no further permission for sand mining in the CRZ be given after December 31, 2005. It confirmed that siting development activity on the coast be based on the vulnerability of the coasts exposed to natural hazards, erosion, and flooding. It also broadened the scope of the regulation that the ocean waters up to the territorial limits should be an integral part of the coastal zone management and that all activities like dredging, sea wall, breakwater, and jetty construction that have a direct impact on the inter tidal area come under the purview of coastal zone management.

In the aftermath of the 2004 tsunami, CRZ notification, 2011 was brought in to streamline and further strengthen coastal zone protection against harmful commercial interests. This notification recognizes 200 m from the high tide zone towards the land area as no-development zone (NDZ). CRZ-I includes the most ecologically sensitive areas like mangroves, coral reefs, and sand dunes, and inter tidal zones and is not permitted to be utilized for tourism and infrastructural development. While CRZ II covers areas close to the shore which have been developed, CRZ III includes areas that are relatively undisturbed and which do not fall under CRZ I or CRZ II. On the other hand, CRZ IV pertains to the shallow belt of coastal waters extending up to 12 nm, which are mandated to be protected from pollution from offshore activities such as oil exploration, mining, and shipping. The notification says that, in this zone, fishing activity by communities is not regulated.

In 2014, the NDA government appointed the Shailesh Nayak committee to examine the CRZ notification 2011 with special reference to 'management and conservation of marine and coastal ecosystems, development of coastal areas, eco-tourism, livelihood option and sustainable development of costal communities.' The committee submitted its report in 2015 based on which several amendments were made on the 2011 notification. This paved the way for the CRZ notification, 2019, which is stated to lead to 'enhanced activities in the coastal zones thereby promoting economic growth while also respecting the conservation principles

of coastal regions.' However, following this, there have been widespread concerns about the dilution of the very basic purpose for which CRZ rules were originally proposed. The draft divides the CRZ into seven categories – CRZ-IA, CRZ-IB, CRZ-II, CRZ-IIIA, CRZ-IIIB, CRZ-IVA, and CRZ-IVB. Primarily, it reduced the NDZ from 200 m to 50 m from high tide zone in densely populated areas (CRZ IIIA areas), which in turn technically allows tourism-related infrastructure to be built quite close to the shore. Further, the CRZ limits on land along the tidal-influenced water bodies have been proposed to be reduced from 100 m or the width of the creek, whichever is less to 50 m or the width of the creek whichever is less. Several exceptions were proposed for CRZ-IA, which is environmentally the most sensitive, that includes the construction of roads and roads on stilts, by way of reclamation of CRZ-I areas for defense, strategic purposes, and public utilities, subject to impact assessment and approvals from Ministry of Environment, Forest and Climate Change (MoEFCC).

Further, the notification states that 'only such projects/ activities, which are located in the CRZ-I (Ecologically Sensitive Areas) and CRZ IV (area covered between Low Tide Line and 12 Nautical Miles seaward) shall be dealt with for CRZ clearance by the MoEFCC'. The powers for clearances with respect to CRZ-II and III have been delegated at the State level with necessary guidance. The notification also permits to de-freeze the Floor Space Index allowing FSI for construction projects. With the new rules in place and several ambitious multi-million investment projects on the anvil, the fragile coastal areas of the country would certainly be more vulnerable to developmental pressures.

3. The Struggle Against Joint Ventures

As early as 1984, the NFF had challenged importing Dutch trawlers as an aid to India that was developing its deep-sea fishing fleet. This lobbying process, made possible by a committed group in the Netherlands, successfully stopped the Dutch Government from sending the trawlers to India.

But the Indian government did not give up its attempts to modernize the fishery always under the pretext that there were untapped fish resources in the deep sea. Although there were already about 140 deep-sea fishing vessels in the country, only around 20 were in operation by the late 1980s. By the early 1990s, taking advantage of the new liberalization policy, the Indian Government

had issued 170 licenses for joint venture fishing, including about 700 fishing vessels. The small trawl sector of Maharashtra was most vociferous about the government's 'joint venture' policy as they were the first to be hit by this new and growing fishery. Their apex cooperative body called the Maharashtra Machimar Krithi Samithi had assisted the traditional fishermen in accessing government support and subsidies for the development of their fishery. By the late 1960s, the trawl sector was highly developed in this region, and it was landing large catches of high valued species. There was also a fixed bag net fishery[36] that also netted large quantities of Bombay duck[37], and in this way, the employment generated both for men and women in coastal communities was substantial. Being at the same time a very enterprising community with a sizeable amount of accumulated capital, this sector considered it their right to further their development by entering the deep-sea fishery as the inshore was already maximally exploited. This association in 1994 categorically demanded that the Deep Sea Fishery, as spelt out in the new Fisheries Policy of the Ministry of Food Processing and Commerce, be banned and received support from the NFF, which then led to a long struggle against joint ventures in deep-sea fishing.

On examining the matter more closely, it was clear that there was no real ground for the signing of joint ventures to assess the untapped resources of the deep sea. In 1992, the report of an FAO consultant, which analysed the existing potential of the Indian fishery in the light of the further development possibilities, was published. The report concludes, "The main problem of the deep-sea fisheries is not so much its capital and operational costs which have generally been fair by developing country standards. The primary concern is, by far, the situation of over-investment in the shrimp business, and subsequently, of economic overfishing its target resource. Therefore, the priority need for this fishery is not further development but resource management. The first step of this policy should be to decrease the pressure of the DSF on the penaeid shrimp stock through retargeting a substantial portion of its catching power on other resources".[38]

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36. This is a net that has a wide-open mouth and a closed bottom. Its mouth is kept open in the sea with the help of fixed stakes. Hence the net is stationary.
37. A variety of fish, harpodon nehereus
38. Study on Deep Sea Fisheries Development in India, M.Giudicelli, FAO, Rome, 1992

Despite this, the government went ahead with its new Deep Sea Policy. According to John Kurien, "part of the answer to this contradiction is to be found in the present scenario in global fishing. Global marine fish catch has stagnated around 85 million tones after 1989. Distant water fishing vessels the world over are in particularly bad shape. Their capacities were built up over the years with massive state subsidies, which promoted easy entry. Unfortunately, a fishing vessel, once built, has a fairly long economic life and little alternate use other than scrap metal. Redeployment to other less exploited fishing areas is, therefore, the only solution for owners who wish, for whatever reason or compulsion, to continue in business. The liberal Indian offer seems to have come at the right time for them. All the tabs have been taken off our earlier norms for joint ventures. The state made the Indian EEZ one huge open-access regime, and the resource was up for grabs. There are no property rights in such a regime, and it is a possession that is proof of property. Hence the scramble to get at it as quickly before too many join the fray. The melee is really not for any particular variety of commercially valuable fish but for any fish resource, which can be harvested quickly to obtain a profit on the investment made. From the side of the Indian Government, they have provided every bait to attract foreign investment – subsidised fuel, hundred per cent export with permission for transshipment at sea, no compulsion to dock in an Indian port during operations, permission to use any foreign port as base operation for fishing in our EEZ."[39]

The NFF believed that the drive to make quick profits in a situation where resources were seriously under threat and where there were no management regulations would ensure the ecological ruin of the fishery. Many of the species are straddling stocks, which move in and out of the inshore, offshore, and deep sea at different points in their life cycle. Consequently, merely because resources are harvested in the offshore waters provided no guarantee that such action would not affect the resources in the inshore.

From February 1994, the NFF launched a nationwide struggle against the licensing of joint ventures. The All India Fisheries Strike on February 4th was the first of its kind and a total success. With no fish market, this strike caught the attention of all the consumers

39. Industrial Fisheries and Aquaculture: Thoughts on some Common Features, International and an Alternative, John Kurien,1996

who began to be informed of the reasons for the high price of fish and its fall in supply. Although the NFF took the leadership, it decided to make the small trawl sector an ally in the struggle. This sector was otherwise considered an enemy of the artisanal fishers. For the first time, in such a struggle, the struggle committee was made up of trawlers operators, traders, and exporters and not unions. In May that year, leaders of the artisanal and mechanized sector from all over the country created the National Fisheries Action Committee Against Joint Ventures. This committee, under the leadership of the NFF, pledged to continue the struggle until the demand was met.

A Black Day was observed all over the country on 20th July 1994. The All India Fisheries Strike on November 23-24, 1994, was politically a crucial one. It obliged all the political parties to intervene in the Parliament on December 14-15, and the Minister for Food Processing was forced to freeze the issuing of licenses and promised to appoint a Review Committee to restudy the matter. The P. Murari Committee was established on February 7, 1995, but, as this committee included only government representatives, the National Fisheries Action Committee decided to continue its agitation with its Convener, Thomas Kocherry, going on a hunger strike in Porbandar, Gujarat, and a mass satyagraha in New Delhi on May 2. This was supported by demonstrations in all the coastal states and caught the attention of Parliament, which demanded an explanation. Subsequently, the Minister agreed to reconstitute the Murari Committee and to change its terms of reference, specifically to see if licenses should be issued or not. Six individuals representing the different fisheries interests and sixteen MPs belonging to different political parties were inducted into the committee. This committee then undertook a unique procedure of travelling all around the country for public hearings with local people to ascertain for themselves the pulse of the coastal communities vis-a-vis the government's Deep Sea Policy. The mass response of the people was indeed an eye-opener for the Parliamentarians. They were educated not only on the negative impact of the Deep Sea Policy but on the actual living conditions of the coastal people and their various problems. Large groups of women participated in these public hearings again, much to the surprise of the Parliamentarians, who did not know that so many women were also involved in the fishery. This process made a profound impact in favour of the people. Still, despite the positive recommendations of the Murari

Committee on the 6th February 1996, the bureaucrats of the Central Government stalled the process. It took another hunger fast by the Convener Thomas Kocherry in Mumbai and a series of mass protests all over the country to urge the government to finally agree to execute some of the recommendations of the Murari Committee, namely :

1) All permits issued for fishing by joint ventures/charter/lease/test fishing should immediately be cancelled, subject to legal processes as may be required.
2) No renewal, extension or new licenses/permits be issued in future for fishing to joint venture/charter/lease/test fishing vessels
3) All licenses/permits for fishing may be made public documents and copy thereof made available for inspection in the office of the registered authority.
4) The areas already being exploited or which may be exploited in the medium term by fishermen operating traditional craft or mechansied vessels below 20m size should not be permitted for exploitation by any vessels above 20m length, except currently operated Indian vessels which may operate in the current areas for only three years subject to recommendations 1 and 7.[40]

The government could not revoke the licenses but said it would not issue further licenses and scrapped the Deep Sea Fishing Policy. Subsequently, in 2002, new guidelines were announced that included the issue of Letter of Permissions (LOP) to the operating companies for resource-specific fishing operations[41]. The Comprehensive Marine Fishing Policy (CFP), 2004 that came into being shortly afterwards, underscored the need for stringent management measures for optimal exploitation of deep-sea resources. In 2014, the Expert Committee for Comprehensive Review of Deep Sea Fishing Policy and Guidelines appointed under the Chairmanship of B. Meenakumari, then Deputy Director General (Fisheries), ICAR was tasked to review the CFP 2004 and guidelines for DSF, to suggest full exploitation of catch potential and to examine

40. Report of the Committee to Review Deep Sea Fishing Policy, Feb. 1996, Submitted to Government of India, Ministry of Food Processing Industries, New Delhi
41. Sebastian Mathew, Trade in Fisheries and Human Development, Country case study-India, Asian-Pacific Regional Initiative on Trade, Economic Governance, and Human Development, UNDP, Asia, 2003.

compliance status to regional and global requirements. Its recommendations in favor of expanding deep-sea fishing operations and allowing acquisition of foreign fishing vessels and, or, joint ventures, leasing, etc., to operate within the Indian EEZ were widely criticized and resulted in large-scale protests from fishers' organizations across the country[42]. Following the notification of National Policy on Marine Fisheries, 2017, the government rescinded the LOP scheme.

The struggle against joint ventures for intensive deep-sea fishing certainly propelled the NFF into centre stage and, despite it being an independent union, gave it the stature of a national trade union that could focus the problems of the coastal communities at the national level. But this did not mean that this struggle did not create waves of discord within the movement itself. One of the main areas of discord came from the initial base of the movement, which was the artisanal fishery. This group comprised of the motorized crafts now had to join hands with their traditional enemies — the small trawlers, to ward off the bigger evil of the deep-sea vessels. While the leadership saw this as a necessary alliance between actual traditional fishermen, coastal people who had been fishing all their lives, against the non-operator owner industrial sector, there remained questions in the minds of the artisanal fishers. It was also apparent that the trawl owners wanted the leadership, but the NFF disagreed, and the trawlers of some areas even left. Though the other trade unions were initially supportive, seeing the growth of the NFF, in Kerala, the CITU issued circulars to people not to participate in the fishing strike as they saw it as a threat. But finally, in the last stage, after the report was finalized, the left unions came forward to collaborate with the NFF and to make it a broader platform of the trade unions. But the struggle was almost over by that time.

One of the major outcomes of the struggle was the propelling of the NFF into the national political arena. It grew in stature and recognition. The Parliament was aware of this as in the major elections that followed in the country, and the Congress lost and was defeated in the coastal areas, and the BJP attributed this to the wrong deep-sea policy. This was the only successful struggle

42. Parappurathu et al., 2020, Harnessing Artisanal Prowess in offshore fisheries: The case of Thoothoor fishers from India, Marine Policy, https://doi.org/10.1016/j.marpol.2020.104174.

in the unorganized sector after the NEP. When all the other struggles in the organized sector were either ending in a deadlock or were failing with the country opening up in a big way to foreign investment, the NFF succeeded in getting a commitment to stop joint ventures in fisheries.

This struggle also saw the solidarity of groups from all over the world, from countries that were deploying industrial vessels into the Indian waters, protesting to their governments on the same. Support groups from all over the world lent support in various ways. The ICSF included Harikrishna Debnath, the co-chairperson of the NFF, on its delegation. With Greenpeace's support, he had the opportunity to make an impressive intervention at the United Nations Conference on Highly Migrating and Straddling Stocks. This exposure to the international milieu and communities that were also being hit by new liberalization policies indicated new allies in the struggle against the expansion of capitalism. So, although fisheries worldwide were always internationally connected because of the age-old trade of fish, this was possibly the first time in history that the fish workers, the coastal communities realized that they had something to defend in common against a common enemy.

These successes of the NFF were also internationally acknowledged and were seen as a means to further alliance building at the international level.

4. Including Women in the Famine-cum-Relief Scheme

Saving-cum-Relief Scheme: The Central Government created this scheme to provide relief to fishermen in the four months of the lean fishing season.

Under this scheme, Rs. 75/- per month is collected from eligible marine fishers for 8 months in a year. A total of Rs. 600/- thus collected will be matched with 50% contribution, i.e., Rs. 300/-, each by the State Government and Central Government separately. In respect of Union Territories, the share of the Union Territory Administration would also be borne by the Government of India. The total sum of Rs. 1,200/- thus collected will be distributed during the four lean months (closed season) to the beneficiaries in four equal monthly installments of Rs. 300/- each. The interest accrued will also be disbursed with the fourth installment.

For this scheme, an eligible marine fisherman means a person who is professionally engaged in full-time fishing in the sea, is

a member of Cooperative Society/Federation/Welfare Society, lives below the poverty line, does not own a mechanized fishing boat/ beach landing craft and is below 60 years of age. If any member of a fishermen's family has regular employment or indulges in any other income-generating activity, such family will not qualify to be beneficiary under this scheme. Lean months in different parts of the coast vary according to climatic conditions and monsoon weather. Therefore, the Director of Fisheries of the respective maritime states/UT's will have the discretion, based on the climatic changes and other valid reasons, to decide which are the lean months in a year. However, the number of lean months will be limited to four.

Women in the KSMTF had already taken for granted that the scheme applied to all fishers, men, and women, whose primary source of livelihood was fishing or fish-related activity. They had succeeded in seeing that women enrolled in this scheme and got relief. It was only later that other women in the NFF desired that they also benefit from this scheme, and when they tried to enroll in West Bengal and Orissa, objections were raised by the state governments. The NFF then took up a national struggle to see that the term fisherman also included all those who earned a livelihood from fish-related activity. Although the term fisherman in the scheme was never changed, the state governments, where the people have organized and reacted, include women in this scheme.

Going Global

In 1996, the FAO celebrated its 50th Anniversary with a Conference on Food Security in Quebec in Canada. The Canadian Council of Professional Fish Harvesters decided to invite fish worker organizations from other parts of the world to interact with them on this occasion. As one of the members of the Canadian Council was also a member of the ICSF, his suggestion was to invite movements that represented the coastal fishers. Among those who were invited were also representatives of the NFF. Enthused by the successful struggle against joint ventures, but seeing in it only a fragile victory in the wake of new globalization policies of the WTO, the NFF leaders easily lent support to a suggestion to create a World Forum of Fish Harvesters and Fish Workers to counter global centralization strategies. The NFF hosted the founding meeting of the World Forum in New Delhi in November 1997, where it was decided to constitute an interim coordination

committee, and Thomas Kocherry was elected its first Coordinator.[43] It was the NFF that recommended that representation in this new body be equal between men and women. While this took the unions of the northern world by surprise, it was an occasion for the women of those countries also to assert themselves and gain their rightful representation in the new body. The Constitutional Assembly was held in Loctudy, France, with a 50% representation of men and women from fish worker organizations in 2000. Within this period, the differences between the perspectives and thrust of the two main partners, the NFF representing the interests of the artisanal coastal fishers and the Canadian Council of Fish Harvesters representing the interests also of the mid-shore fishers, surfaced. This led to a split at the Constitutional Assembly with the organizations of Asia, Africa, and a few northern organizations breaking away and creating the World Forum of Fisher People. The term fisherpeople was meant to include the community dimensions as different from the fish worker concept. Subsequently, these two international organizations operated as two distinct entities but without a specific agenda.

Rights and Responsibilities

The demand for rights, any democracy assumes, has to be accompanied by responsibility. While making claims for the right to the fish resources, the NFF that speaks in the name of the traditional fish workers also has the responsibility to safeguard these resources that are a common heritage of society at large. The NFF is a federation of state unions, and it is up to the state unions to develop their bases and implement the gains of the struggles. The success depends on the actual participation in the base. Unorganized sector unions that wage mass struggles have alongside to build up a membership base at which level the gains of the struggles and the actions to evolve new norms for the sustainability of the fishery should be implemented. Unfortunately, the member unions, especially the KSMTF that fought a few legal battles, had not been able to take advantage of the successes they have won, for instance, the ban on night trawling and the ban on purse seining. Getting such judgments enacted in practice was not easy administratively.

43. History from the Annual Reports of the NFF, 1991-99

Further, the union in Kerala does not have a structured membership base to implement its own management regulations or see that such regulations are implemented by the state. When the state is the violator of people's rights, then the state certainly does not have the political will to implement the decisions of the court and finds all possible excuses to nullify such decisions. This has become a greater uphill task in this era of globalization, and liberalization, and with the Indian state well entrenched in this logic, the fish workers and other sections of the working class will have a tremendous battle to fight for their survival. Simultaneously, all unions are forced to respond to their own member's demands to survive. With fish getting more scarce, the successful fishers have got more capital intensive and hence their demand for greater subsidy rather than implementing management strategies to safeguard the resource and their won futures. This was why the KSMTF was therefore caught on the rebound when all the states of the west coast declare a closed season for fishing in the monsoon months, and they demanded that the motorized fishers be permitted to fish, thereby defeating the ban orders.

Like any other movement, the fish workers' movement has, to build the larger perspective into the struggle for rights. Several questions arise in the context of people asserting rights over resources. In this case, whose rights are we talking about? Rights also imply duties to conserve resources. How will users negotiate these rights and duties? What institutional arrangements have to be made to safeguard rights and execution of responsibilities? In the context of a weak state apparatus, to whom can such marginalized people appeal to protect their rights?

Issues Thrown Up by the Tsunami

Natural disasters are not a rare occurrence along the coastal tracts of Asia. Despite the warnings beamed over early warning systems, all these acts of nature result in the loss of life and property. There is the momentary sense of pity, but then life moves on as usual.

The tsunami of December 2004 seems to have changed all this. This nameless, stealthy killer came in broad daylight, totally unannounced. Those who were fishing at sea did not perceive its presence. Those on land had no living experience of such wave behaviour and fury. It devastated the coastal communities of several countries all at once. It has traumatized those for whom Mother Sea was a source of life and sustenance. The adage that the oceans

unite us and landmass divides us became undisputedly true – except that this was not unity in life, but rather in death and destruction.

Fisherfolk were traumatized by the fact that the sea, had deceived them and taken away their children, family members, and property in a rare display of fury. The position that this was nature's fury which no human agency could predict or prevent, was untenable. Coastal communities, scientists, the government, and civil society are asking several important questions. Could thousands of lives have been saved if proper Coastal Regulation Zone plans had been implemented without pleading for numerous exemptions in the name of 'development'? Could short and long-term measures have been taken to mitigate the extent of the devastation inflicted on the coastal communities? If all fisherfolk had been given housing sites on the landward side of coastal roads, would not the death toll have been lower? If natural green-belt barriers (such as mangroves, windbreaker trees) had been in place, would the damage to property and the death toll have been reduced? If the coastal communities had been given disaster management training, could more lives have been saved? If the prime responsibility, as well as the finances and material resources, for safety and rescue, were vested at the community level, would the response time to the crisis have been more rapid and the damage greatly mitigated?

Though no major disasters stuck the Kerala coast for more than a decade after the tsunami, the occurrence of the tropical cyclone Ockhi destabilized the coastal lives once again. On the fateful day of 30th November 2017, the cyclone Ockhi wreaked havoc on the South West coast of India, claiming over 100 lives and causing widespread destruction. Though the eastern coast of India routinely faces such natural disasters, a cyclone of this scale was unprecedented on the west coast for several decades in the past. The fishermen households along the Kanyakumari district of Tamil Nadu, Thiruvananthapuram, and Kollam districts of Kerala and the Minicoy island of the Lakshadweep archipelago bore the brunt in a bitter way. The resultant damage includes large-scale destruction of electric and communication networks, fisher folk houses, fishing vessels and equipment, coastal roads, fishing landing centres, and so on.

The flood that occurred in August 2018 was another major climatic event that unsettled the coastal dwellers and many affected

people all over the state. It was the worst flood that hit the state in over a century, with considerable human and material casualties. Even though floods occurred again the following year, losses were far lower compared to the earlier one.

There are differing views on how well the advance warning establishments in the country functioned in forecasting and communicating the inclement disasters or how effectively the Central and State agencies handled the crises. Notwithstanding the tremendous vigour and valour displayed by the Navy, Coastguard, Coastal Police forces, and fellow fishermen in co-coordinating the rescue efforts, these latest instances of nature's fury exposed the many loopholes that pervade the country's disaster response and management system at times of calamities. Even if they do well triggering an impeccable response in saving lives, there is a limit to which physical losses could be averted. Moreover, with the risks of frequent extreme weather events looming large as a Damocles sword in the wake of deepening impacts of climate change, there is a need to think beyond just saving lives. The moot question is whether we should have adequate pre-emptive risk-containing measures and quick response systems in place? More so when the coast of Kerala no longer remains insulated from climate change and its associated impacts, including extreme weather events in times to come.

The answer to all these questions is a big YES! We now realize that the costs of neglecting several basic and simple precautionary measures have been so huge in terms of human lives and property. This disaster context should be turned into an opportunity—not just to put in place emergency measures and early warning systems, but also to work out rehabilitation plan for long-term livelihood security for these communities. Such rehabilitation plans should consist of an agenda for action that covers the following realms:

Environmental Protection of Coastal Land and Sea

Protection of the coastal area ecosystem—composed of a sea and land interface—should receive top priority. Foresters should play a significant role in this. They need to advise about location-specific, appropriate green belt protection alternatives and lobby for implementing the Coastal Regulation Zone requirement of a 200 to 500 meter 'no development' zone. Suggestions being made in certain influential quarters for building sea walls along the entire coastline need to be countered for their huge investment costs,

the scope for corruption, impact on natural coastal sand and water dynamics, adverse impact on small-scale coastal fishing, and even on tourism potentials. The right approach is to have a menu of alternatives with the appropriate one chosen, keeping the geo-physical and ecological characteristics of the coastal tract and its uses in mind.

Housing and Related Facilities

Good housing, appropriate sanitation, water facilities, lighting, and spacious community facilities are a priority if the hitherto abysmal quality of life of fishing communities is to be radically improved. These facilities must be provided to them close to the 'no development zone' with secure land rights. Creative architects need to provide several disaster-proof building plans, where adequate space is provided around a house, and only the basic 'shell' is standardized. Finances should be given to each family to innovate around it in accordance with their needs. Sanitation structures need to factor in the highly porous nature of coastal land. This makes pit latrines a veritable disease bomb. Alternatives such as dry composting toilets coupled with hygiene education are vital. Portable water and rain water harvesting, where appropriate, should be provided.

Gainful Employment in Fishing and Related Activities

Most fisherfolks wish to get back to their livelihoods at the earliest after a calamity strikes. This is also one way to get over the trauma which many of them suffered. All the small beach landing crafts—particularly kattumarams—can be replaced without much lead-time if appropriate wood from forestry schemes in states such as Kerala can be supplied. Nets and small-scale motors are also easily supplied by private companies. The major problem relates to replacing the trawlers which were destroyed. Supplying new trawlers is not the right option. There was so much excess capacity in trawlers in earlier times. This was contributing to economic, biological, and ecosystem overfishing. If those who lost trawlers are insistent on getting them back, then the solution should be to provide them with good secondhand ones which are easily and quickly available. Trawler crew can be given the option of going back to small-scale fishing or being trained for alternate livelihoods.

Decentralized, low-energy-using fish processing techniques as well as coastal and market infrastructure for hygienic fish

marketing should be popularized. They should focus on the domestic market potentials. These investments will greatly help women from fishing communities to attain improved incomes.

Social Infrastructure

Investment in community-oriented social infrastructure should be given priority. Roads to coastal areas, bridges, community halls, schools, and fishery-related infrastructure are major investments that can absorb a sizable amount of aid contributions and community labour. They can also become realms for both immediate 'food for work' type of programmes and conscious alternative employment training programmes for many of the disaster-displaced persons who do not wish to go back to sea for various reasons.

Education and Training

Post-disaster rehabilitation is an excellent occasion to solve the educational backwardness of the fishing communities. They need a greater range of technical skills. This is an opportune moment to involve young men and women from the community in learning-by-doing. This can also be matched with a variety of training schemes to develop skills in trades that are now much sought after in the service sector—masonry, plumbing, carpentry, home nursing, geriatric care, water harvesting, and ecological sanitation skills, to name a few. After the tsunami crisis, the residential fishery schools starting from the primary classes onwards proved to be a boon for a large number of orphans and future generations.

Safety and Disaster Preparedness

Though tsunamis are rare, monsoon sea ingress, cyclones, and tidal waves are a fact of life along the coastal belt. The yearly calamities can be reduced if an early warning system is put in place and safety and disaster management training is provided. A village-based IT-enhanced communications network linked horizontally across coastal villages and vertically to higher-level disaster management cells will be required. This can also be a realm to exchange the nuanced traditional knowledge of fishing communities on weather and the sea. Every village should have its own well-trained safety brigade of women and men, fashioned along the lines of a home guard. An FM radio service focusing on the coastal communities can serve the purpose of education, entertainment,

and safety. Sea safety kits and radios supplied to fisherfolk will be a worthwhile investment.

Protective Social Security

Fishing is by far the riskiest occupation in the world. The tsunami and subsequent calamities have revealed the deficient insurance coverage across the coastal communities. This should also be the occasion for the state and public sector insurance companies to reach out to the weaker sections in the community with affordable and subsidized insurance policies and social security packages for health, accident, and old-age pensions for men and women. The mechanism for disbursal of such welfare measures should be decentralized. A fishery disaster insurance scheme that will cover loss of life and property resulting from a collective natural disaster with the premium paid entirely by the government is warranted.

Responsible Fishery Resource Management

Considerable lip service has been paid to the need for moving towards responsible fishery resource management. This is the occasion to take firm decisions and positive action by both the state and the community to achieve this. Disaster affected fisherfolk who wish to leave fishing, particularly the older ones, should be given a good compensation package. Many trawler owners may use this occasion for an honorable exit from the fishery. They must be adequately compensated. Community initiatives for erecting coastal artificial reefs, which can act as barriers to nature's fury and also help to rejuvenate coastal living resources, should be encouraged. Greater state and community co-management arrangements for the coastal waters need to be negotiated. Aquarian reforms assuring rights to coastal waters and producer-controlled arrangements for the first sale of fish should be enacted.

In conclusion, we may say that fishing communities have rarely been at the center of the attention of civil society. Now that so many of them have been taken away by the sea and thousands are faced with a shattered future, they are the focus of an outpouring of concern. This swell of human kindness—if it is not to take the shape of a tsunami of misplaced concerns and competing priorities—needs to be channeled appropriately. Unfortunately, the aid givers, either because of their ignorance or because of other vested interests, have nullified the inner governance systems of these communities and turned them into aid victims thereby also undermining the

inner dynamics of communities and their strength for collective action.[44] (see Annexure II).

Conclusion

The situation that prevails since the 1990s is vastly different from the earlier decades. Most of the commercially valuable stocks are overfished, leading to both biological and economic over-fishing. Even so-called scientifically managed stocks have collapsed. Modern economic theory, which puts the market at centre stage, has seen the ruin of world fisheries. The rights to life of the disadvantaged still have to be fought for, and in this era where people's rights are citizen's rights, the right to life that is a universal value has to be fought in the context of the nation-state. It is for this reason that the United Nations and not the World Trade Organisation is the prime organ for the mediation on access rights to natural resources.

It is clear from the above that no rights to life and livelihood are established without major struggles. The manner in which the capitalist state grows and penetrates all corners of daily life seems to have a momentum of its own with the logic that might is right, disregarding people and the environment – **life** – to be more precise. Fortunately, through the fish workers' movement, the fisherfolk have been able to wage battles both at the state and national levels. Challenging the mainstream concept of development and establishing their right to the resources and thereby their development has been the main thrust of their struggles.

Upholding the basic right to livelihood becomes increasingly complex as power games penetrate the economy more intensely and natural resources get more scarce. It also becomes more evident that human rights are indivisible, and the basic right to be human is the focus. Basically, the fish workers' movement is making a plea for an alternative development paradigm that focuses on the following:

- the rights over the resources to be bestowed on the people who work and draw a livelihood out of them
- a development process that is sustainable, which implies that technology is at the service of humans, respects the natural cycles, and does not displace people

44. This section is abstracted, with a few additions, from a paper written by Dr. John Kurien and circulated on the internet just after the tsunami hit.

- that social processes are democratic and participatory so that men, women, and children may have their rightful space to grow as human beings
- and that diversity rather than uniformity manifests the wealth of humanity and sustains it.

The demands for these different rights in the fish workers' movement have therefore to be accompanied by nurturing seeds that will give rise to the alternative.

Annexure–I

Representation of NFF to the Standing Committee on the Aquaculture Authority Bill

The terms of reference, as per the Supreme Court Judgment (dated 11th Dec 1996), is to set up an authority to protect the ecologically fragile coastal areas, seashore, water front, and other coastal areas specifically to deal with the situation created by the shrimp culture industry in the coastal stats and union territories.

- The Central Government shall constitute an authority under section 3(3) of the Environmental Protection Act (1986)
- The authority so constituted by the Central Government shall implement the precautionary procedure and the 'polluter pay' principles.
- The shrimp culture industries/shrimp ponds are covered by the prohibition contained in Part 2(1) of the CRZ Notification. No shrimp culture pond can be constructed or set up within the coastal regulation zone as defined in the CRZ Notification. This shall be applicable to all seas, bays, estuaries, creeks, rivers, and backwaters.
- All aquaculture industries/shrimp culture industries/ shrimp culture ponds operating/set up in the coastal regulation zone as defined under the CRZ notification shall be demolished and removed from the said area before March 31st 1997.
- The farmers who are operating traditional and improved traditional systems of aquaculture may adopt improved technology for increased production, productivity, and return with prior approval of the 'authority' constituted by this order.
- The agriculture lands, salt pan lands, mangroves, wet lands, forest lands, land for village common purposes, and the land meant for public purposes shall not be used/converted for construction of shrimp culture ponds.

- No aquaculture industries/shrimp culture industries/ shrimp culture ponds shall be constructed/set up within 100 mts of Chilika Lake and Pulicat lake, including bird sanctuaries, namely Yadurapattu and Nelapattu.
- Aquaculture industry/shrimp culture ponds already operating and functioning in the said area of 1,000 meters shall be closed and demolished before March 31, 1997.
- Aquaculture industry/shrimp culture industry/shrimp ponds other than traditional and improved traditional may be ser up/ constructed outside the coastal regulation zone as defined by the CRZ Notification and outside 1,000 meters of Chilika and Pulicat Lakes with the prior approval of the authority as constituted by this court. Such industries which are already operating in the said area shall obtain authorization form the 'authority before April 30, 1997, failing which the industry concerned shall stop functioning with effect from the said date.
- We further direct that any aquaculture activity, including intensive and semi-intensive activity, which has the effect of causing salinity of soil or the drinking water or wells and/or by the use of chemical feeds increases shrimp or prawn production with consequent increase in sedimentation, which on putrefaction is a potential health hazard apart from causing siltation, turbidity of water courses and estuaries with detrimental implication on local fauna and flora shall not be allowed by the aforesaid authority.
- Aquaculture industry/shrimp culture industry/shrimp culture ponds which have been functioning operating within the coastal regulation zone as defined by CRZ Notification and within 1,000 meters from Chilika and Pulicat lakes shall be liable to compensate the affected persons on the basis of the polluter pay principle.
- The authority shall, with the help of expert opinion and after giving an opportunity to the concerned polluters, assess the loss to the ecology and environment of the affected areas and shall be liable to compensate individuals/ families. The authority shall further determine the compensation to be recovered from the polluters as the coast of reversing the damaged environment. The authority shall lay down just and fair procedure for completing the exercise.

It is to be noted that the envisaged Aquaculture Authority Bill (1997) does not in any way provide for any of the measures set in the judgment for protecting the ecologically fragile coastal environment and the traditional livelihood of the coastal people from the onslaught of the aquaculture industry/shrimp culture ponds already operating and functioning. Instead, it proposes to give amnesty to all aquaculture industry set up right from 1991, which have devastated the coastal environment and its people through section 24 of the proposed bill.

Why the aquaculture authority bill 1997 must be withdrawn?

1) It is an act of the parliament and union cabinet to circumvent and subvert the historical Supreme Court Judgment by Justice Kuldip Singh and Justice Saghir Ahmad of 11th December 1996
2) It is an action that is biased, based on the needs and demands of the Aquafarms owners, Union government, 4 coastal governments Gujarat, Orissa, Andhra Pradesh, and Kerala. All those scientists, academicians, social activists, political parties, farmers, and the fishing community who were opposing it for the last 5 years were not consulted before the drafting of this bill. It is not sufficient to merely call for an all-party meeting on this matter as several senior leaders of political parties own shrimp Industries, often in Benami names.
3) Till date, the Bill has only been passed in the Rajya Sabha by voice vote. The Lok Sabha is yet to take up the Bill for consideration. It is now before the Standing Committee of Agriculture.
4) This bill fails to place before the elected representatives or the society at large a white paper on the negative impact of Aquaculture worldwide, especially in countries like Thailand, Taiwan, Philippines, Bangladesh, etc. In Bangladesh, above 30,000 families had to be evacuated and rendered homeless because there was no drinking water in their original settlements after the onslaught of these industries.
5) The process of centralized licensing designed by the Authority in order to guarantee the protection of the coastal environment naturally lends itself to the elimination of all small farms or individual persons attempting to do

smaller farms. It is supportive of only large businesses and Transnational corporations.

6) The draft bill only attempts to deal with regulating Aqua farms in relation to its impact on the environment. Neither the movement against aquaculture nor the Supreme Court judgment limits to environmental aspects. Categorically, the negative impact of shrimp industries is dramatically felt on people's livelihood systems, on health care, on housing and drinking water, etc.
7) National Fishworkers' Forum and other movements in other states opposed the shrimp industries on the grounds that:
    - It radically alters traditional ecology and livelihood systems that are mutually sustainable.
    - It leads to the salinity of lands surrounding the 'ponds' causing bareness.
    - Millions of prawn seedlings that come into creeks, streams, backwaters, etc., for breeding, are caught and given to the industrial farms.
    - Thousands of acres of rich agriculture lands were converted into shrimp industries or kept for land reclamation.
    - Aquaculture farms provide employment only for a few. The loss of employment due to agriculture lands being taken has resulted in severe unemployment.
    - Extensive tapping of sub-soil water leads to a reduction of groundwater level. This has resulted in damage to coastal aquifers that are fragile and important in maintaining the equilibrium between two mutually sustainable ecosystems.
    - The aquaculture ponds itself cannot be used or reclaimed due to the extensive use of fertilizers and chemicals. The damage done to the land is permanent.
    - Salt pan lands, mangroves, wetlands, forest lands, land for village common purposes, and land meant for public purposes were converted for construction of shrimp culture industries causing irreparable/permanent damage to the fragile coastal environment, which has been sustaining millions of peoples livelihood for centuries.
    - Due to large aquaculture industries being permitted to set up their plants very much within the high tide

line by constructing huge boundary walls, it has resulted in the 'sandwiching' of traditional fishing villages between these large farms. This has resulted in extreme levels of salinity in the groundwater and also affecting existing houses of the fishing people. Further, during the monsoon since these large farms have destroyed all coastal vegetation and their boundaries, preventing the natural flow and ebb of water that results in the complete flooding of the fishing villages.

- Fertilizer and chemicals used for the growth of shrimps are pumped out as toxic water into the streams, creeks, backwaters, and into the sea, adversely affecting the breeding of young shrimp and fish, thereby creating a drastic production depletion and crores of survival income for the fishing community and agriculture labour and small farms is lost.

8) Section 24 of the aquaculture authority bill is a wolf in sheep's clothing and is a violation of the CRZ Notification. It attempts to permit the aquaculture industry to establish firms within the Coastal Regulation Zone, which is now prohibited from doing as per the 1991 notification and the Supreme Court order of 11th Dec 1996. It does this through a 'simple' but dangerous inclusion as given hereunder.

"Sec 24.(1) Not withstanding anything contained in clause(v) sub-section (2) of section 3 of the Environment Protection Act, 1986 of clause (d) of sub- rule(3) of the rule 5 of the Environment Protection Rules 1986. In the notification of the Government of India in the Ministry of Environment and Forest No S.O 114(E), dated the 19th February 1991 (herein after referred to in this section as the said notification), in paragraph 2, after sub- paragraph (xiii) the following sub-paragraph shall always be deemed to have been inserted with effect from the 19th day of February, 1991, namely:-

"(xiv) nothing contained in this paragraph shall apply to aquaculture"

The said notification shall have, and shall be deemed always to have, effect for the purpose, as if the foregoing provisions of this section had been in force at all material times, and according, not withstanding anything contained in any judgment, decree or

order of any court, tribunal or other authority, no aquaculture farming carried on or undertaken or purporting to have been carried on or undertaken, shall be deemed to be in contravention of the said notification and shall be deemed to be and to have always been for all purposes in accordance with law, as if the foregoing provisions of this section had been in force at all material times and, not withstanding anything as aforesaid and without prejudice to the generally of the foregoing, no suit or other proceeding shall be maintained or continued in any court for the enforcement of any direction given by any court of any danger or order directing the removal or closure of any aquaculture farms activity or demolition of any structures connected there under which would not have been so required to be removed, closed or demolished, if the foregoing provisions of this section had been in force at all material times."

Similarly, astounding is that Sec 24(2) validates all the shrimp industries that have been set up from the date of the CRZ notification, which is Feb 1991. With retrospective effect, it brings in the said notification in paragraph (XIV). This means that all the shrimp aqua farms get a blanket reprieve and amnesty to continue despite all the damage they have caused in the last 6 years. It condones all the violations committed by shrimp industries and stands the noble Supreme Court order on its head further to permitting aquaculture with retrospective effect since 1991 CRZ Coastal Notification this sec, also nullifies all decisions of courts prohibiting shrimp farming in CRZ

9) What happened to the Aquaculture Authority set up on February 6, 1997?

   On February 6, by a Notification, the Central Government had set up an Authority as ordered by the Supreme Court in its December 11, 1996 Judgment; then why this hurry to set up another Authority and not as per Supreme Court's term of reference. It is very clear, the Government wants to circumvent the Supreme Court order and bail itself out of the mess it had nurtured, save the polluting and destructive Shrimp Aquaculture Industry and the accused No 1, viz MPEDA, World Bank, the Nationalised banks, and specialized Financial Institutions and Insurance companies whose nexus is fundamentally responsible for this scam and destruction. The status of the Authority set up on March 7 headed by Mr. Justice Ramanujam, Ret. High Court Judge and 6 other members is ambivalent.

10) Because the Supreme Court entertaining the second batch of review petition and granting a stay on its December 11 order, the government decided to introduce this aquaculture authority bill to achieve the following.
    - Constitute a centralized, single authority made up like any other bureaucratic arms of the government. No scope for representation for independent experts, social activists, and representatives of NGOs who have been challenging the damage caused. An authority to function independently needs to constitute itself in such a manner. Sec 3 of the bill proves this point.
    - Sec 10, 11, and 12 describe the powers and functions of the authority. It is clear from these sections that it is not intended to implement the December 11 Supreme Court order. Instead, it says nothing in these sections about how they would deal with all the violations caused by the aquafarms since the CRZ Notification of 1991. It grants amnesty to all the civil and criminal wrongs committed by the Aquaculture industries – not just small prawn farm owners but the real big business-industrial interests and the huge farms owned by prominent politicians in the ruling government itself.
    - If Sec 10, 11, and 12 are attempted to be worked, it means that only big industries and TNC's could get a license. The authority has the power to prescribe all the regulations regarding regulation. Given the nature of the non-independent authority that is to be constituted, we can be sure that this authority will neither entertain petitions against a particular firm (interestingly it has no mechanism to deal with public petitions/grievances) nor does it have the mechanism to act on a petition to the authority by a citizen or citizen group.

      How is this authority sitting supposedly in Delhi, obviously with a limited staff going to regulate the activities of nearly 1,000 prawn farms in Tamil Nadu? These are only the big industrial houses, who claim they have an international design for the plant to be pollution-free, who will claim it will carry on a community development programme in the nearby villages, who can fudge figures of employment, who can claim to set up recycling plants, effluent treatment

plants, etc. and who can look after the representatives of the authority, when they come for inspection can afford to get a license from this aquaculture authority

- Let us take sec 10 (1).9(a) it prescribes regulations for the construction and operation of aquaculture farms within the coastal area.

How is a coastal area defined?

Sec 2(d) defines Coastal Area as 'Coastal Area' means the area as the Coastal Regulation Zone for the time being in the Notification of the Government of India in the Ministry of Environment and Forest No S.O 114(E) dated the 19th February 1991 and includes such other area as the Central Government may by notification in the Official Gazette, specify.

Sec 24 attempts to exempt aquaculture activity in this CRZ is equal to Coastal area, then it is clear that this authority will regulate only in the Sec 10 (1) (a). All other shrimp aquaculture industries outside the CRZ coastal area will have no regulation whatsoever as per the regulatory plan of this authority.

- **The other powers/functions are**
  - To inspect aquaculture farms with a view to ascertaining the environmental aspect.
  - To grant licenses to aquaculture farms
  - To order removal or demolition if causing pollution

But the proviso to Sec 11 is a gem of a fraud on the people. It reads

> *"provided that no such person shall enter on any aquaculture land, pond, pen or enclosure without giving such occupier at least twenty four hours notice in writing of his intention to do so."*

Why 24-hour notice. If a person generally or specifically authorized by the authority has to give at least 24 hours notice in writing of his intention before entering any aquaculture land/ pond/ pen/ enclosure, this is the easiest way to defeat any law or authority empowered with an inspection. Even pollution control board personnel or factory inspectors don't have to go through the humiliating experience. It is very easy to claim that your 24-hour notice in writing was never served, and even in the twenty-four hours, the entire atmosphere can be stage-managed and fabricated.

Sec 12(6) seems radically as it says that

"no license shall be granted for aquaculture farming proposed to be carried out within 200 metres of high tide line as per CRZ. However this has to be read together with the proviso"

> *"Provided that in case of creeks, rivers and backwaters, no such licenses shall be granted within the Coastal Regulation Zone declared for the time being under the environment protection act of 1986."*
>
> *"Provided further that nothing, in this sub section shall apply in the case of an aquaculture farm which is in existence on the appointed day."*

Thus the second proviso makes it clear that all farms already in existence and even though in violation of 200 meters CRZ will be exempted. Why have this aquaculture authority at all?

> *"… not withstanding anything as aforesaid and without prejudice to the generality of the foregoing no suit or other proceeding shall be maintained or continued in any court for the enforcement of any direction given by any court of any decree or order directing the removal or closure of any aquaculture farms activity or demolition of any structures connected there under which would not have been so required to be removed, closed or demolished if the foregoing provisions of this section had been in force at all material times."*

This annuls completely all the numerous cases in the courts over the last 5 years or more. It makes a mockery of the justice system. If you can stand justice on its head in 8 lines drafted by bureaucrats and passed by voice vote without a debate by our elected representatives, piloted by government that swears by the COMMON GOOD OF ALL. THEREFORE MAY I REQUEST YOU PLEASE RECOMMEND FOR THE REJECTION OF THE BILL. THE BILL SHOULD NOT BE BROUGHT BEFORE LOKSABHA AS THIS BILL IS ANTI FISHER PEOPLE AND POOR COASTAL PEOPLE.

Signed by the Chairperson - **Fr. Thomas Kocherry**

Annexure – II

Towards Post-Tsunami Rehabilitation of Fishing Communities: Recommendations from the *NGO Meeting on Post-Tsunami Rehabilitation of Fishing Communities and Fisheries-based Livelihoods*, organized by ICSF

Chennai, 17 January 2006

These recommendations were presented at ICSF's "Regional Workshop on Post- Tsunami Rehabilitation of Fishing Communities and Fisheries-based Livelihoods", held in Chennai on 18 and 19 January 2006

The past year has seen considerable mobilization of aid and diverse interventions towards relief and rehabilitation of tsunami-affected populations in Asia, including fishing communities, who are considered among the worst affected. A little over a year after the tsunami and after taking stock of interventions aimed at rehabilitating fishing communities, we—organizations that have been working with fishing communities for a considerable period of time in Sri Lanka, Indonesia, Thailand and India—wish to emphasize aspects that need to be integrated into the ongoing interventions of governments, multilateral agencies and NGOs.

Land and Shelter

1. It is important to urgently resolve issues still hindering completion of permanent housing as part of tsunami rehabilitation, particularly issues of land allocation, after paying special attention to the problems of tenants and the homeless. Where communities decide to relocate, rights to vacated coastal lands should remain vested with the community.
2. Housing sites for fishery-dependent tsunami victims should be located at a convenient distance from areas where fishing communities store fishing equipment, access fishing grounds, and dry fish. It is important to ensure common quality standards, use of locally available material and technology,

proper habitat planning, basic amenities, equity, and the involvement of the fishing community in the reconstruction process.

3. Titles to houses built as part of tsunami rehabilitation should be provided and should be in the joint names of the woman and the man of the household.

Quality of Rehabilitation Assistance

4. Tsunami rehabilitation programmes should adopt a broader coastal development approach and should aim to improve the quality of life and livelihood of coastal communities, including those not directly affected by the tsunami. Particular attention should be paid to historically marginalized communities and victims of conflict.
5. Governments should put in place mechanisms for the maintenance of public utilities provided by donors/NGOs as part of tsunami relief/ rehabilitation programmes.
6. Mechanisms for maintaining community assets created post-tsunami, such as auction halls and fish drying and processing facilities, should be assessed and, where lacking or inadequate, should be established in participation with communities.
7. Transparent, single-window mechanisms should be set up to register complaints about the quality of the tsunami rehabilitation that has been delivered, as, for example, poor housing and poor-quality boats. Such complaints should be addressed in a timely manner.
8. Regional and other imbalances in the provision of tsunami rehabilitation assistance should be assessed, and equity in access to aid ensured.
9. Mechanisms for coordination of tsunami rehabilitation at different levels and between various actors should be established/strengthened. Government-NGO partnerships for coordination of tsunami rehabilitation should be fostered.
10. Mechanisms to promote accountability of the different actors involved in tsunami rehabilitation—governments, NGOs, and others—should be established.

Local Institutions

11. Under tsunami rehabilitation, local and traditional institutions should be strengthened after assessing their roles, potentials,

and limitations. A coherent and sensitive strategy should be developed to work with them and to strengthen them in the long run.

Protection and Restoration of Coastal Habitats

12. Protection and restoration of coastal habitats and biodiversity should be undertaken on a priority basis and should not be confined to the tsunami- affected areas. It is necessary to implement/put in place measures to regulate activities that can pollute, degrade or otherwise harm the coastal environment and its capacity to protect coastal communities from future natural disasters.
13. Habitat restoration programmes in tsunami-affected areas should be undertaken in participatory ways and should not lead to the alienation of communities from coastal lands. The focus of coastal afforestation programmes, such as shelterbelts, should be on native, indigenous species and on building local awareness about their importance.

Fisheries Management

14. A scientific assessment to improve understanding about the possible impact of the tsunami on fishery resources and habitats should be undertaken in affected and unaffected areas. There is, for example, a reason to believe that even some 'unaffected' areas are facing problems of high tides and waves after the tsunami.
15. Further construction and distribution of small-scale fishing vessels as part of tsunami rehabilitation should be undertaken only if there is clear evidence that there has been a shortfall in replacing vessels in particular regions. Where affected persons have not received vessels in a situation of oversupply, mechanisms to provide replacements should be established without further addition to the fishing fleet.
16. Efforts should be made to ensure that appropriate and selective fishing gear compatible with the status of fishery resources are distributed under tsunami rehabilitation programmes.
17. Diversification of fishing activities to target offshore fishery resources as part of tsunami rehabilitation should be undertaken only if there is evidence of resource availability and financial viability of such fishing operations.

18. Replacement of fishing vessels lost to the tsunami that have habitually been targeting fishery resources in the waters of neighbouring countries should be done only after due consultation with stakeholders to lay down conditions of access to such fishery resources.
19. Brackishwater aquaculture and mariculture should be promoted as an alternative source of employment in tsunami-affected areas only after addressing concerns of environmental and social sustainability.
20. Systems for effective registration of craft, gear, engines, and fishers should be established to streamline post-tsunami rehabilitation of the fisheries sector, and, where appropriate, governments should establish such systems in cooperation with relevant local institutions and NGOs.
21. Participatory programmes to improve and strengthen management regimes for the conservation of fishery resources and protection of fish habitats should be undertaken in the context of post-tsunami rehabilitation programmes. Failures on this account in the past underline the need for greater co-operation amongst fishing communities, departments of fisheries, fish worker organizations, NGOs, and scientists.

Sea Safety

22. Safety of fishing vessels and fishing operations should be given greater attention under tsunami rehabilitation programmes. Setting standards for boatbuilding and developing awareness among fishers about safety aspects need to be undertaken on a priority basis. Fishers should be imparted sufficient training in basic sea safety in accordance with the draft revised FAO/ ILO/ IMO Fishing Vessel Safety Code and Voluntary Guidelines.

Post-harvest Operations in Fisheries

23. Tsunami-rehabilitation programmes to support the post-harvest sector should promote labour-intensive, locally appropriate, low-cost technologies of fish processing. The establishment of cold chains should ensure that they benefit, and not displace, the small-scale fish processors and traders.

Insurance, Compensation and Social Security

24. Vessel and crew insurance should be made mandatory for all fishing operations at affordable premia. Social security

schemes in tsunami-affected countries, including accident benefit schemes for fishing and other coastal communities, should be developed to enhance long-term resilience and to ensure rapid recovery from disasters. The experiences of State-run systems, commercially-run systems, and community-managed systems need to be reviewed to develop systems appropriate to the social, economic, and legal environment of each country affected by the tsunami.

Census of Fishing Communities

25. A periodic census of men and women involved in fishing and fishery-related activities, including migrant fishers, should be undertaken on a priority basis to facilitate proper enumeration and effective compensation during natural calamities, such as a tsunami.

Disaster Preparedness

26. Programmes to enhance community-based disaster preparedness and training should be initiated/continued.

Women in Fisheries

27. Women of fishing communities engaged in fisheries operations (fishing, marketing processing, etc.) should be recognized as workers in their own right. Tsunami rehabilitation programmes should be tailored to meet their requirements and should aim to improve women's livelihoods, conditions of work, access to resources, and social security.

Diversification of Livelihood Options

28. The quality of education and opportunities for skill development should be enhanced to enable diversification of the livelihood options of tsunami-affected fishing communities.

Check Your Progress

1. What is the importance of Social and Economic Rights in imparting Social Justice?

2. Is Right to Development a Human Right? How can it be achieved under a Constitutional mandate?

3. What is the role of Courts in making Directive Principles as justiciable rights?

4. What is the relation between Man and Nature, and how is man dependent on Oceans?

5. Fisheries are an important source of livelihood for the coastal people, what is the role of International Instruments in the conservation and management of fish- stock?

6. What is the significance of Kanya Kumari March?

7. Give a brief outline of the "feminist perspective on fisheries."

8. What is Agenda 21? And how to achieve environmental protection of coastal area protection?

9. What is the role of the State and Civil Society in ensuring responsible fishery resource management?

10. What are the important interventions aimed at rehabilitating tsunami-affected fishing communities?

Attached Reading Materials

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