

# **ENGAGING COMMUNITIES AND COOPERATIVES IN FISHERIES GOVERNANCE: EMERGING CHALLENGES AND PATHWAYS IN KERALA, INDIA**

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## **Abstract**

Among the varieties of systems experimented for good fisheries governance, there has been no consensus on the choice of partners and their positions in fisheries management even today. The most difficult task has been to engage local communities in fisheries management. Although cooperatives have a long history of existence, their performance varied widely across nations depending on the structure of local communities, government policies and influence of modern markets. In India, the process of establishing partnerships for management has been complicated due to diversity of resources, ecological services, communities, institutions and political interference. Moreover, cooperatives failed to acquire reputation and confidence in policy making circles to formally hand over the responsibility of fisheries management. However, the cooperatives have been informally engaged in fisheries management relying on their indigenous knowledge systems and political networking. Under these circumstances, the paper critically examines the challenges of engaging communities and cooperatives in modern fisheries governance in Kerala India. The paper also identifies a number of constraints that make their engagement difficult and suggests that informal networks of organizations representing civil society, political parties and the state at multiple levels are essential to guarantee a robust interactive fisheries governance regime.

**Keywords:** cooperatives, Institutions, fisheries governance, Political networks, livelihoods

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## *Introduction*

Engaging communities, fisher organizations and cooperatives in fisheries management has been an unresolved puzzle to commons researchers (Chakalal 1998; Jentoft 1989). Since modern fisheries cooperatives formed through a political restructuring of artisanal communities, their social acceptance as management institutions has improved considerably. Although community based enterprises, cooperatives and social enterprises participate in fisheries governance and undertake management responsibilities in developed countries like Canada, the USA and Japan, confusions still prevail on how to assign rights and responsibilities to local communities and fisher organizations in fisheries governance in developing countries (Bray et al. 2005; Berkes and Hunt 2007 and 2010; Fujita et.al. 2010; Stiglitz 2012). Fisher organizations and cooperatives however, undertake a variety of management tasks informally and provide useful services to conserve fisheries. Recent studies that evaluated the roles of public-private management of marine fisheries in Kerala, India demonstrated that fisher associations and cooperatives did participate in resource management through political processes (Thomson, 2006; Jentoft et.al. 2009; Bavinck, et.al. 2012; Baiju 2013). This paper undertakes a detailed examination of how marine fisheries cooperatives and fisher associations informally involve in marine fisheries management in the state of Kerala, India. It explores the constraints faced by local cooperatives to balance production and conservation objectives and shows the emerging pathways that delineate space of local communities and cooperatives in fisheries management. The paper is divided into four sections. Section 2 deals with the methodology used in the study. Section 3 presents the structure and functions of fishery cooperatives and fisher associations in the study area and shows how these organizations informally involve in marine fisheries governance in the region. Summary and conclusions follow

### *2. Methodology and data collection*

The study is based on secondary and primary data collected from selected fishing communities and cooperative societies in Ernakulam district during the period 2003-2006 (Thomson 2006). Details of selected cooperatives and fisher associations with special reference to how they informally involve in marine resource management were collected, tabulated and presented in this paper. The district is one of the leading mechanised fish landing centres in the state where mechanised fishing enterprises coexist both in the private and cooperative domains. The mechanised sector contributes largest proportion of fish landed while the cooperative artisanal mechanised sector as the second best competitor contributes around 25 percent of landings today. Moreover, this region has also witnessed active presence of the state in regulating fishing operations during monsoon months. 22 marine fishermen cooperative societies are active in the district today of which six were selected for the study. Out of 65 artisanal mechanised ring-seine fishing vessels operating in Ernakulam district 18 were selected for the study. Group discussions, personal interviews and focus group discussion with office bearers of cooperatives, group leaders of fishing units, auctioneers at landing centres and other political leaders were conducted to collect information for the paper.

### *3. Evolution and present structure of fishery cooperatives in Kerala*

The cooperative movement in the fisheries sector of Kerala dates back to 1917 when the Travancore state initiated efforts to organise fishermen cooperatives on the basis of the religious/caste affiliations of communities. By 1933, ninety five cooperatives got constituted from among the Hindu, Muslim and Christian fishermen with a membership of 8194 in the Travancore region alone. Since the performance of these cooperatives was very disappointing, an enquiry committee was constituted in 1934 to study their problems and suggest reforms. Among others, the committee suggested restructuring of fisher

cooperatives into multi-purpose cooperatives. After the formation of Kerala state in 1956, the state intensified its efforts to strengthen the cooperative web in an attempt to foster the economic development of fisheries sector through mechanization of fishing boats. Although mechanised boats were disbursed to fishermen groups under this scheme of mechanisation, most of these fisher groups could not sustain them for reasons of internal conflicts, resistance from artisanal fishermen and lack of economic profits. This crisis later led to the introduction of an intermediate technology in 1980 to motorize the country craft and increase the fish catches and income to fishermen. Later in 1984, the government constituted Kerala State Co-operative Federation for Fisheries Development Ltd. (Matsyafed) and linked the 654 village level primary societies spread over 10 coastal districts of Kerala to this apex federation<sup>2</sup>. The major focus of societies under Matsyafed was on development and welfare activities such as employment generation, motivational schemes, extension services, commercial aquaculture development and women empowerment.

Cooperative movement in marine fisheries sector in Kerala has been deeply influenced by civil society interventions and active party politics. For instance, cooperatives in Trivandrum and Quilon districts are affiliated to an apex body called South Indian Federation of Fishermen Societies. Today, majority of the societies are controlled and managed by elected representatives and politicians. Among the 10 active fisher cooperatives in Ernakulam district, two societies at Chellanam are under the direct control of Kerala Swathathra Matsya Thozhilali Federation, four each are being controlled by the Congress and CPI (M).

In spite of the strong network of cooperatives and fisher associations across Kerala's coastal villages, these organisations do not have any formal mandate in fisheries management. Examining the reasons for the failure of fishery cooperatives in Kerala, Kurien (1980) noted that the constitution and structure of cooperatives in the fisheries sector did not provide the necessary space and autonomy for them to undertake the task of fisheries management in any meaningful way. Enlisting the different kinds of cooperatives operating in Kerala Achari (1990: 223-24) found that successful organizations are those initiated and led by fishermen with clear objectives inspired by religious or socialistic values keeping solidarity, collectivism and egalitarian principles in planning, plan implementation and evaluation especially in matters related to access to credit, grants and effective utilization of funds, flexibility in development approach, making adjustments and adaptations based on consultations and deliberations involving all concerned in a compact, efficient and democratic manner. The question therefore is how management concerns of fishermen are addressed and resolved by engaging cooperatives and fisher associations?

#### *Formal marine fisheries management*

As already stated above, there is no formal sanction for fisher cooperatives to involve in fisheries management; it is the formal responsibility of the state. It has taken active interest to resolve the management concerns of fisheries sector especially since 1980. It declared various fisheries policies and enacted legislations and rules to reserve territorial waters for the exclusive use of artisanal fishermen using provisions of the Indian Marine Fishing Regulation Act (IMFRA) 1980<sup>3</sup>. By 1980's, Kerala government recognized that the blue

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<sup>2</sup> The Federation presently comprises 340 societies in the marine sector, 183 in the inland sector and 131 Women Co-operatives. The Federation follows a two-tier structure. The primary societies are directly affiliated to the Federation at the state level. The administration and management of the Federation is vested with a Board of Directors comprising 23 members of whom 15 are elected from primary co-operatives, 5 official members and 3 non-official members nominated by the government. The Chief Executive cum Managing Director is appointed by the Government.

<sup>3</sup> According to the Indian federal system both central and state governments are responsible for fisheries management. The central government recently proposed a draft bill (The Marine Fisheries

revolution technology package and other deep-sea fishing policies have produced ecological and socio-economic vulnerabilities in the fisheries sector and decided to craft legal instruments to conserve resources. Following the general spirits of national legislation, the Kerala government introduced the Kerala Marine Fishing Regulation Act, 1980 (KMFR Act) to provide legal protection to the operations of artisanal sector and to diffuse conflicts between traditional fishermen and mechanised trawling/purse seine fishing enterprises. The legislation was a landmark in the history of the fisher folk movement in Kerala as it banned purse-seines from within 22 km of the coast, banned mechanized boats and trawlers from within 20 km of the coast and banned trawling during the three monsoon months of June, July and August. The Act empowered the State to regulate, restrict or prohibit the number of fishing vessels and gears in any specified area and catching in any specified area, the period of fishing or the species caught within its jurisdiction. All mechanised fishing vessels have to procure licenses to operate in any specified area of coastal waters. Formal rules were crafted under the “Kerala Marine Fishing Regulation Rules, 1980” to regulate, restrict, or prohibit fishing by a ship, or boat fitted with mechanical means of propulsion in the specified areas along the Kerala coast including boats using pelagic/mid water/bottom trawls, purse seines and ring seines. Moreover, every vessel has to register with an authority, procure necessary licenses for fishing in any specified area and inform port authorities about the movement of fishing vessel. The state also created specialised organs within the Fisheries Department for designing and enforcing fisheries regulations and rules and engaged district administration and police in fisheries governance. Figure 1 and 2 shows the administrative arrangements and consultative process for enforcement of fishing regulations in Kerala.

Figure 1 Administrative arrangement for enforcement of rules

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Regulation and Management Act 2009) to facilitate regulation of fishing vessels engaged in direct or indirect exploitation of fisheries resources, conservation and sustainable use of fisheries in the maritime zones of India. In another bill published in the same year, (The Traditional Coastal and Marine Fisher folk Protection of Rights Act 2009) the central government proposed to provide a framework to protect the rights of traditional fisher folk who have been residing in coastal areas for generations.

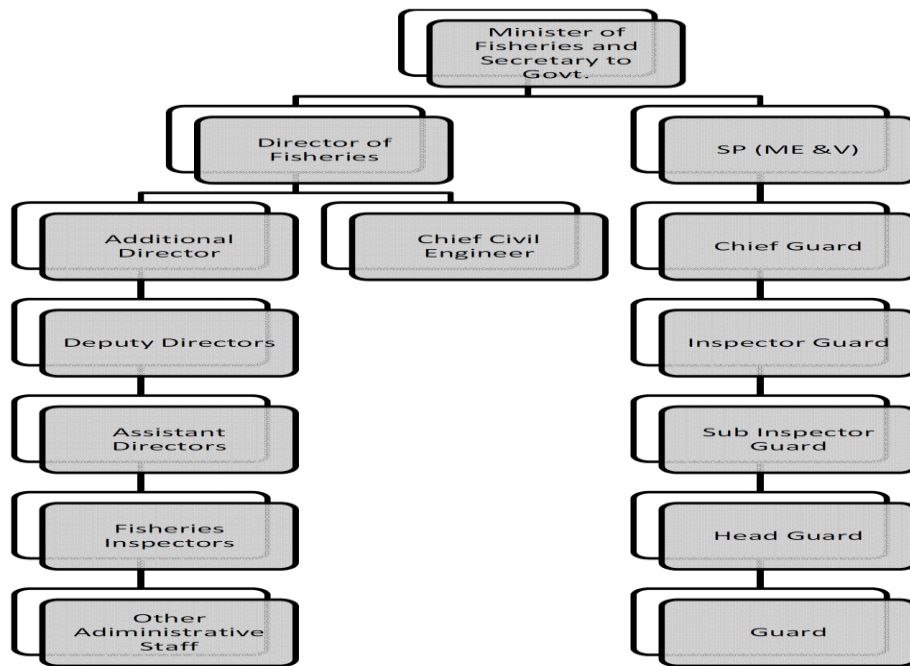
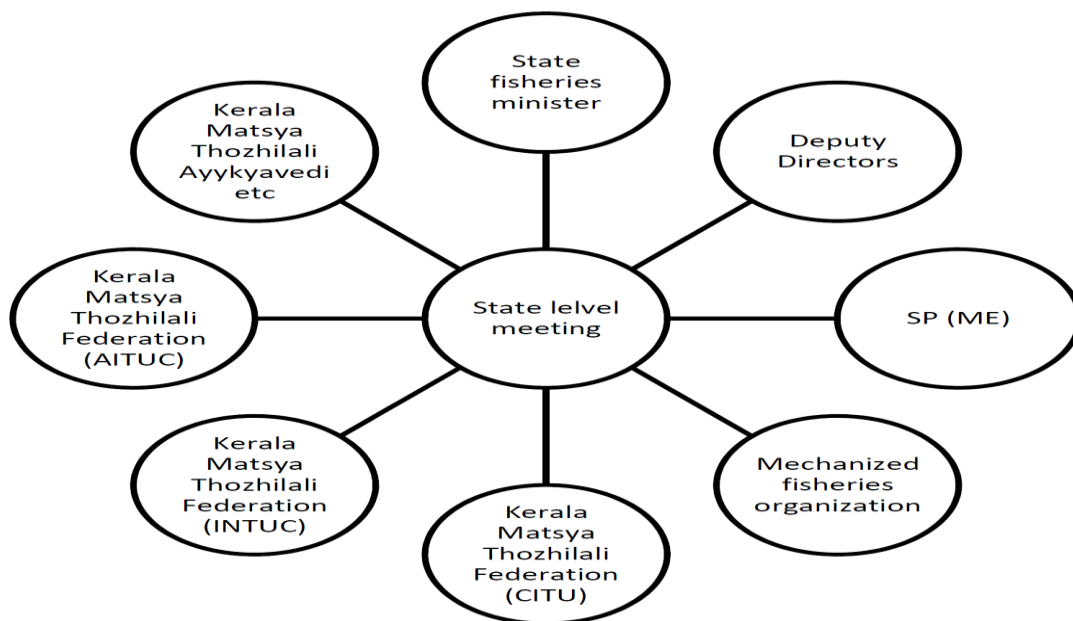


Figure 2 Consultative process of fisheries management in Kerala



The limitations of the state-centric mode of management have been reported by social scientists (Kooiman, 2003; Gray, 2005). Within the specific context of Kerala, the state centric consultative process of marine fisheries management did not provide resolutions to the management crisis exists in the local economy. First, the regulations are partial and target mainly shrimp fisheries during monsoon months. Second, it does not guarantee the overall resource health of Kerala's multispecies fisheries. Third, it does not tackle the evolving economic crisis in fisheries due to resource crisis and escalation of input costs. Fourth, the regulatory regime did not seriously address livelihood vulnerabilities of artisanal fishermen, the primary ground on which communities demanded comprehensive management regimes, in any satisfactory manner. Finally, the consultative process of

informing resource users, although appears to be participatory, is not at all satisfactory to engage fishing communities in fisheries governance.

*Emerging pathways of modern fisheries management in Kerala: Self organising communities, fisher associations and political networks*

Artisanal fishermen knew very well that modern challenges of fisheries management are beyond their capacity to resolve. At the same time, they also realised that the state sponsored trawl ban regulation was not sufficient enough to address their management concerns in a globalising world. Therefore they demanded a comprehensive institutional framework that is capable of resolving their problems. The state on the other hand, was not in a mood to develop such framework due to poor knowledge systems especially on the economic and social processes of globalisation. The inertia in bringing up reforms in governance is clear enough in Kerala's marine fisheries

Limitations of formal regime to address management concerns led to the gradual engagement of fisher associations and cooperatives in marine fisheries management. Since artisanal fishermen are the major beneficiaries of modern fisheries management, fisher organisations and cooperatives started involving in fisheries management and governance in many ways. Artisanal fisher organisations and their social action made definite influence on fisheries policies and management strategies. Since mechanized fishing led to a decline in fish catches and income of traditional fishermen, communities felt the need to strengthen collective action against overfishing, economic disparities and livelihood vulnerabilities. Accordingly they formed a variety of organisations to participate and present their demands on the use of resources.

It must be stated at the outset that the process of restructuring of fishing communities for the sake of participating in fisheries management has been deeply influenced by the activities of civil society/nongovernmental organisations and political parties. The first non political fisher organisation - Kerala Swathantra Matsya Thozhilali Federation (KSMTF) - was formed in 1980 with the inspiration of catholic priests<sup>4</sup> (Erthayil, 2002). Artisanal fishermen, who joined as workers in Purse seine boats, formed the Purse-seine Boat Workers Union in 1994. The Union started its activities by organizing workers in about 114 boats and had an active membership of 3000 workers. During the past 12 years of its activities, the union has organized many agitations to protect the rights of fish workers, especially those who work on distant multi-day purse-seine fishing vessels. Today, only 500 workers are enrolled in this union. The number of purse-seine boats has also declined to around 12. In addition to these organisations, artisanal fishermen also formed organisations under the banner of various political parties and radical groups. For instance, the Communist Party of India (Marxist) floated Matsya Thozhilali Unions in different fishing villages and affiliated them with its state level federation called the Kerala State Matsya Thozhilali Federation (CITU). Organizations like the Matsya Thozhilali Union (AITUC) and Kerala State Matsya Thozhilali Congress (INTUC) were started by Communist Party of India (CPI) and the Indian National Congress (INC) respectively. For leading political parties, apart from vote banks, fisher organizations

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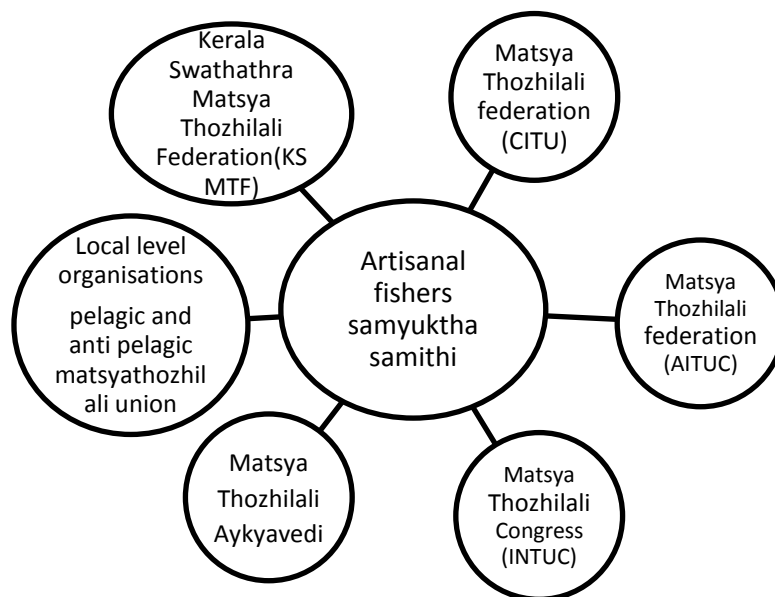
<sup>4</sup> KSMTF was formed due to the joint efforts of Thiruvanthapuram Roopatha Malsya Thozhilali Union, Kollam Jilla Swathantra Malsya Thozhilali Union, Allpuzha Catholic Malsya Thozhilali Union, Allpuzha Jilla Ulnadan Mahla Malsya Thozhilali Union and Vijayapuram Roopatha Malsya Thozhilali Union. This network was initially named as Kerala Lateen Catholica Malsya Thozhilali Federation (KLCNTF). The KLCNTF intensified the struggle against mechanized fishing by involving the fisher folk in various modes of protest- hunger strikes, picketing, dharnas, public meetings and submission of memorandums. Soon after the leadership of the movement felt the need to secularise and broaden the federation and renamed the organization as Kerala Swathantra Malsya Thozhilali Federation (KSMTF).

under their labels are channels to address the fundamental problems of the working classes in fishery sector. These associations therefore demanded introduction of welfare funds, social welfare schemes, pension, work protection projects and subsidised fuel for outboard engines etc. Fisheries management obviously was the secondary choice.

Critics pointed out that the environmental politics of leading political parties and nongovernmental organizations is not strong enough to effectively shape public policies to resolve institutional and state failures in fisheries management. Local fishermen of Vypin Island, where artisanal fisheries still dominate local livelihoods, admitted that they had approached radical groups and leaders for resolving inter/intra village fishery conflicts among contesting resource users (Thomson, 2006). This led to the formation of village level organisations exclusively for resolving inter/intra village fishery conflicts. For instance, the artisanal small gill net fishermen of Ambaladakavu fishing village in Vypin Island floated an organisation called the Swathathra Matsya Thozhilali Union in 2003 under the banner of a radical political party CPI (M-Red flag). The association was formed with the sole intension of objecting pelagic and mini trawling in local area. To retaliate, the rival groups engaged in mini trawling formed another union called the Vypin Artisanal Transom (Swathantra) Fishermen Union and organized many local level agitations to protect their fishing rights. Since these organisations could not resolve all gear conflicts among various resource users, left radical parties formed the Matsya Thozhilali Aykyavedi in 1982 and launched its basic struggle to sustainable livelihoods to fishermen. Involvement of these organisations has been successful to resolve fishery conflicts at the village level.

Fishery conflicts that occur at the district level are resolved by a consortium of organisations called “Artisanal Fishermen Samyuktha Samara Samathi” comprising Kerala Swathathra Matsya Thozhilali Federation(KSMTF), Matsya Thozhilali federation (CITU), Matsya Thozhilali federation (AITUC), Matsya Thozhilali Congress (INTUC), Matsya Thozhilali Aykyavedi and Local level organizations like pelagic and anti pelagic matsyathozhilali union. Figure 3 shows the political network of these artisanal organizations at the district level.

Figure 3 Structure of the joint council of artisanal fisher organisations in Ernakulam District



Artisanal Fishermen Samyuktha Samathi has a democratic system of functioning. The secretary, president and office bearers are elected from member associations every year.

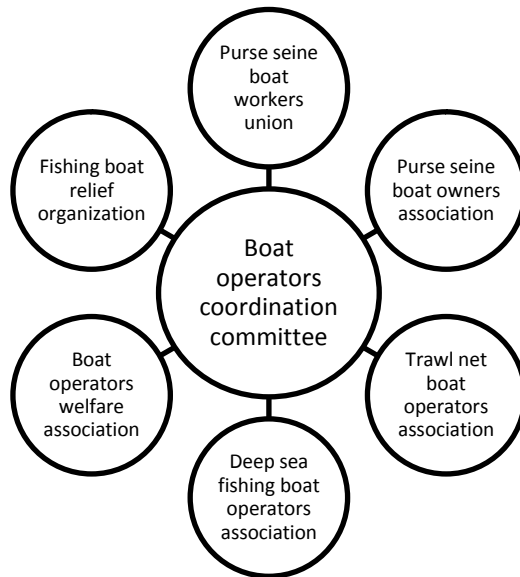
The main objective of the samathi is to protect the rights of artisanal fishermen in Ernakulam district. The samathi offers the necessary platform for member associations to bring their problems (livelihood security, economic profits and resource conservation) and seek solutions through discussions and negotiations.

#### *Organisations of small scale industrial fishing fleet*

Artisanal fishermen and their organisations blamed mechanised sector for fisheries crisis and demanded their active cooperation to resolve problems. The mechanized boat owners responded to allegations in many ways. During the early decades of mechanisation, they approached the courts for solving fisheries conflicts. Later, they formed independent organisations to effectively scale up defence and resistance against the allegations raised by the artisanal sector. The first organisation of the mechanised boat owners (Fishing Boat Owners Association) was hence formed in 1982 with a mission to offer financial assistance to members, react to the allegations of artisanal sector and formulate defence. Since this organization could not provide services to majority members, 30 boat owners left the parent association and formed the “Munambam Fishing Boat Operators Welfare Association” in 1989. This association was formed with the sole intension of providing self protection and security to capital. After the split, the parent association was renamed as Fishing Boat Relief Organization in 1992. Activities were redesigned to effectively resist anti-mechanization movements of artisanal fishermen. The association which had a membership of 150 initially retains only 100 members today. In purse-seine fishery most of the owners were from outside fishing communities. As there were heavy resistance to the operations of these boats purse-seine owners floated a strong association known as the “Purse seine Boat Owners Association” in 1994. In addition to the above mentioned organisations, mechanised fishermen operating from different fishing harbours within the district formed harbour specific organisations like “Munambam Fishing Boat Operators Welfare Association”, the Munambam Trawl net Operators Association and the Deep Sea Fishing Boat Operators Association in 1990,1996 and 1999 respectively. Although the mechanised fishermen floated a variety of organisations to resolve internal problems, none of these organisations effectively participated and contributed to resource conservation in any significant manner. The anti-conservationist attitude of mechanised fisher associations was severely objected by artisanal fisher associations and they demanded the former to effectively contribute to sustainable resource uses through active participation in fisheries governance. Reacting positively to this criticism, mechanised fisher associations later formed an apex organization called the Boat Operators Coordination Committee to defend economic interests of mechanised sector. See figure 4

Figure 4 Boat operators' coordination committee in Ernakulam District





*Crafting district and state level management organisations*

Crafting of these two major consortiums representing the interests of artisanal and mechanised fishermen in the district was a remarkable milestone in the management of marine fisheries resources in the region. Although these organisations represented individual benefits and economic interests, there are many arenas where they cooperate and resolve management problems at the district and state levels. In order to resolve problems at the district and state levels, two additional networks are crafted by these organisations through democratic channels. At the district level for instance, competing fisher associations moulded Ernakulam District Fisheries Co-Ordination Committee by including elected members from the “Artisanal Samyuktha Samithi” and the “Boat Operators’ Coordination Committee”. See figure 5. Major mandates of the district level consortium are to involve in management issues at the district level and to cross examine unsettled disputes at the village level. In a similar fashion both artisanal and mechanised fishermen have agreed to cooperate and work together in advising the state related to crucial macro issues of fisheries management at the state level. This has been undertaken exclusively by a state level consortium called the State Fisheries Coordination Committee. The structure of the state level organisational network is depicted in figure 6 below.

Figure 5 District level committee

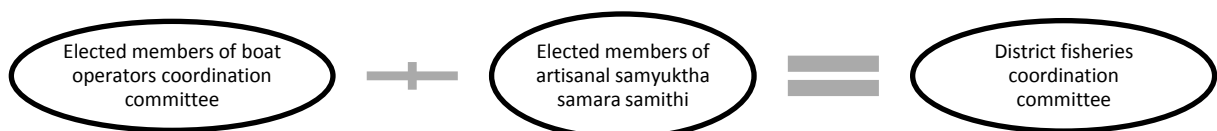
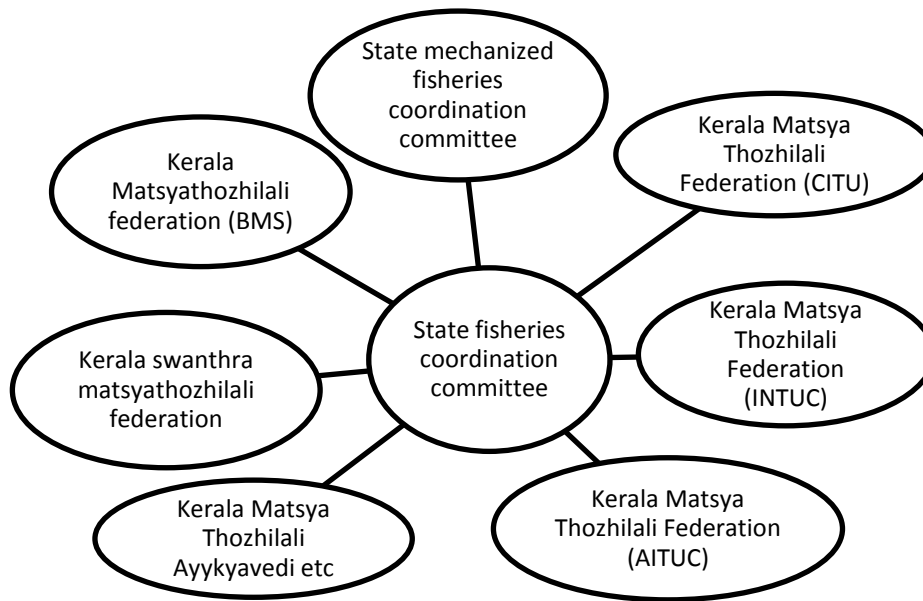


Figure 6 State fisheries coordination committee



To sum up the arguments developed so far, failure of state policies and institutions necessitated active engagement of artisanal and mechanised fishermen, cooperatives and fisher associations in fisheries management. The evolution of management networks and consortiums at different scales is to be seen as an essential outcome of this demand for resource management. These networks are energised through the politics of the constituent actors of the coalition. Depending on the nature of problem, fisher associations solve them at the lowest level as possible through negotiations and discussions. The process of articulation involves state non state interaction at appropriate scale (Adger, et.al. 2005; Fujita et.al 2010).

#### *Major regulations crafted by fisher organisations and cooperatives*

As discussed above, the three tier system of informal cooperative fisheries management evolved in Kerala's marine fisheries sector provides a comprehensive regulatory framework to address problems of resource allocation, conflict resolution, economic and livelihood vulnerabilities and resource conservation.

The consortium offers the necessary platform where state, communities and private enterprises interact and resolve management problems. It fosters competition between artisanal and mechanised sectors. Political networking enables contesting resource users to discuss and resolve grievances at the appropriate scale at which the problems occur. Moreover, the interlinked networks (politicised co management organisations) craft management institutions through negotiations and enforce them effectively. The following section details some of the major institutions evolved for the prudent use of marine fisheries locally.

#### *Access rules and social control on the growth of artisanal mechanised fishing technology*

Cooperatives have played an incredible role to revive the marginalised artisanal fisheries in the region by empowering artisanal fishermen to mobilise financial capital to mechanise their traditional large plank-built canoes ( *thangu vallams* ) using inboard engines (Edwin and Hridayanathan, 1996; SIFFS, 1999; Vijayan et al., 2000). Capital required for modernisation was offered to fishermen groups as soft loans based on membership rules. Membership in cooperatives guarantees access to fishing territories and livelihoods/social welfare provisions. Workers who have not borrowed money could freely choose any fishing unit, while those who

borrow money from any unit should work in it until dues are fully settled. Competition among individual units is strictly controlled by informal institutions listed below

1. All the fishing units have to follow a common fishing calendar prepared and finalised by the Artisanal Samyuktha Samithi from time to time.
2. Artisanal mechanized ring seine fishing vessel with inboard engine should undertake only one fishing expedition per day between 6 a.m and 4 p.m.
3. Night fishing ( *Kavaru pani*) by mechanized purse seiners within the Cochin maritime zone is strictly banned by the Artisanal Samyuktha Samaithi.
4. Artisanal mechanized fishing vessels with inboard engine and large ring seine should use only one carrier canoe
5. Use of multiple engines and gears are strictly prohibited in artisanal mechanized fishing vessels using large ring seine.
6. Artisanal Samyuktha Samithi controls size, length and horse power of the artisanal mechanized fishing vessel using in-board engine and standardized operations with horse power within 250

#### *Institutions for social control over markets*

Informal cooperative resource management institutions also warranted social controls over markets and hence offered stability to trade and markets. For instance, individual fishing units have freedom to choose their auctioneer (private or cooperative society) in fish marketing. Cooperative society charges five percent as commission and divides as per norms laid down by Matsyafed.

#### *Influence of informal cooperative management on fisheries policies*

Mechanized sector viewed the entry of ring seine boats as the biggest threat to their operations and hence vehemently opposed the operations of artisanal mechanized fishing vessels. They could even convince the state about this destructive fishing method which led to the ban of ring seines in 2002. This ban on ring seines was opposed by artisanal fishermen and they protested under the collective banner of the District Artisanal Samyuktha Samithi. Serious tension mounted in the coastal areas of the district and on June 15<sup>th</sup> 2002 fishermen operating artisanal inboard engines ventured into monsoon fishing by violating state regulations. After this incident, the organisation exerted severe political pressure which finally led to the declaration of Kerala Monsoon fisheries (Pelagic) Protection Act 2007 that granted exclusive fishing right to artisanal fishermen to conduct pelagic fishery during the monsoon season using traditional and modified traditional crafts and gears within the territorial waters. The act aims to provide security of life and livelihood of the traditional fishermen and to ensure their subsistence. This struggle reveals how artisanal communities politically negotiated their demands for livelihood security with state and representatives of industry. It is interesting to note that these interactive processes could effectively legalise an informal practice to a formal state law that permitted communities to restore their rights to resources.

#### *Summary and conclusion*

The paper made an attempt to highlight the cooperative restructuring process among the marine fishing communities of one of the leading marine fishing and exporting state of India during the post independent period. Indian marine fishing economy has witnessed a blue revolution in sea food production and trade during the past half century, unfortunately at the expense of resource sustainability and livelihood security of artisanal fishermen. The formal initiatives did not engage communities in resource management and failed to offer solutions to management concerns that occurred at different scales. As a response to this failure, artisanal fishers with the help of civil society organisations and cooperatives made an honest attempt to recoup the rights to resources and livelihoods. The cooperative management of

marine fisheries that evolved with the help of state effectively addressed these concerns through a process of collective action at the village, district and state levels and empowered them to realise the potential of growing international markets for sea food. Politicised cooperative management hence evolved brings together the state, the industry, communities and fisher organisations at various levels and made sincere effort to resolve fisheries conflicts, protect local livelihoods and conserve fisheries at appropriate scales. The stability and future of this politicised cooperative management that prevails today in the marine fisheries sector in Kerala however depends on how honestly different parties participate in the process of fisheries management which obviously is matter of concern for good marine fisheries governance in the country.

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