### ORGANIZATIONAL ARRANGEMENTS IN THE FISHERIES OF KERALA

A Case study of Kerala State Cooperative Federation for Fisheries Development Ltd (Matsyafed)

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For

International Collective in Support of Fishworkers

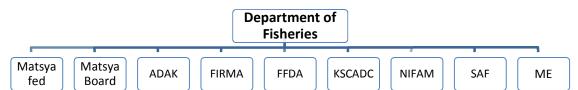
#### INTRODUCTION

Although the fisheries development and management is a joint venture of the Central and State Governments the Constitution of India specifies *Fishing and Fisheries beyond Territorial Waters (12 to 200 Nautical miles) as Union Subject, and within territorial water (up to 12Nm) is a State Subject* [5]. The organizational arrangement for fisheries development in the country is that *the Government of India acts as a facilitator and coordinator responsible for policy formulation, strategies for national development plans through research and channeling funding support to the States/UTS in line with the national priorities [17]. The Central Fisheries Department which is one of the constituents in Department of Animal Husbandry, Dairying and Fisheries (DAHD&F) of Ministry of Agriculture (MoA) is the prime organization and there are another nine more Union Ministries associated with the fisheries development in India. These multi-ministerial and departmental arrangements quiet often become hurdles for the timely and effective implementation of fisheries and fisheries development activities in our country. The State Government is the principle custodians of fisheries in their respective jurisdictions on land as well as the territorial waters [24].* 

The territorial waters of Kerala have the unique characteristic features of highest primary productivity in the country. This has been aided by the rich nutrient supply through the 41 rivers and 35 backwaters to the Arabian Sea from the Western Ghats (one of the unique evergreen forests in the world), mid land and coastal plain. The continuous flow of nutrient, that responsible for the higher primary productivity throughout the year is maintained by richest rain fall in the State and is recognized as one of the highest in the world. Consequently the small State of Kerala having only 590 km coast line quiet often became one of the leading fish producing States in India and a record production of 8.4 lakhs tones of fish was landed in 2012 and that constitute 21.3% share of the total marine fish production of India (39.4 lakhs tones) in that year [4]. The very important feature of the territorial waters is that 87% of the total marine fish resources in the EEZ are available in the shallow waters up to the depth range of 0-100 meter and the rest is widely scattered in the deeper waters [17]. The fish production in 0-100 range is at or beyond the MSY level by over exploitation and reached near to a situation of collapse of the coastal fishery which is evidenced by extinction of certain species and lower fishing days in a year. The reasons for the current situation are many in which the prime factors are the ever increasing fishing pressure due to increase in capacity of fishing units and the consequent of diminishing returns as well as the inroad of high 'efficiency' fishing even in the traditional sector since late 90's all over the State of Kerala that added on over fishing, juvenile fishing and ecosystem damage.

In Kerala, though the Department of Fisheries (DoF) is the prime agency for the development and management of fisheries in the State, a number of allied organizations are also inducted to implement the diverse nature of fisheries and fisheries related activities. The allied organisations that responsible are: Kerala State Cooperative Federation for Fisheries development Ltd (Matsyafed), Kerala Fishermen's Welfare Fund Board (KFWEB), Agency for Development of Aquaculture, Kerala (ADAK), State Fisheries Resource Management Society (FIRMA), Fish Farmers Development Agency (FFDA), Kerala State Coastal Area Development Corporation (KSCADC), National Institute of Fisheries Administration and Management (NIFAM), Society for Assistance to Fisherwomen (SAF) and Marine Enforcement (ME). These organisations have been implementing the State Government's vision and development programs and the organisational arrangement of DoF in Kerala is charted below.

#### **Organisational Arrangements in DoF - Kerala**



The Fisheries Department is managed by the official as per the policies and programs of the State as well as Central Governments from time to time. However, the two wings of Department which constituted in 80's such as the Matsyafed and Matsya Board have fishermen representations in the decision making bodies in which the former have the selection of fishermen representatives by election and the later by nomination, and the term of office is normally for a period of five years. KSCADC also has fishermen representation that intended for the coastal infrastructure development. ADAK and FFDA are the aquaculture development agencies taking care of the inland fisheries development activities that include technical and financial assistance to fish farmers and are mostly managed by the officials. FIRMA primarily responsible for the Resource Management aspects whereas NIFAM on Fisheries Administration and Management and SAF on Fisherwomen development. The Marine Enforcement wing of the department is the sole authority of implementation of Kerala Fisheries Regulation Acts (KFRA) in the territorial waters with the coastal police station net work in the State. However, the draft Marine Fisheries (Regulation and Management) Bill, 2012 proposes Coast Guard as the total player for the implementation of FR Acts including the territorial waters of the State for the sake of national security that may subside the activity of ME and coastal police net work of the State.

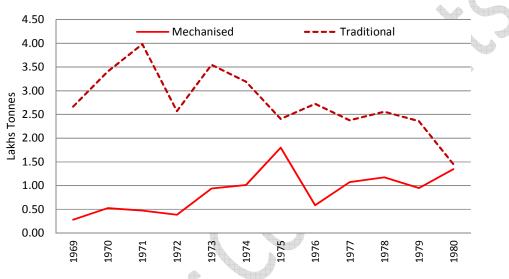
#### **INCEPTION OF MATSYAFED: THE CONTEXT**

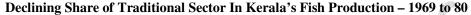
Several attempts have made by the Governments to improve the life of the fisher folk since the independence. It was often the State that initiated the cooperative development efforts in the fisheries sector. The evolution of co-operatives in fisheries sector can be categorised into three phases such as The Introductory and Failure Phase (mid 50's to mid 70's), Dormant & Reorganisation Phase (mid 70's to late 80's), and Reinstallation and Development Phase (since mid 80's). *The first co-operative society for fishermen in the region that is now in Kerala was registered in 1917 [19]. In 1935 after re-organisation of the Sate, three tyre multipurpose co-operative societies were introduced. The Vaippa (credit), Matsya-utpathaka (fish production) cooperative societies (MUCS) at the village level, marketing societies at the regional level and co-ordinating apex federation at the State level were introduced" [10]* 

Issuing mechanized boats through co-operatives was one of the attempts that miserably failed during late 50's to early 70's. "During this period 805 high subsidy mechanised boats were issued through MUCS and ultimately the real fishermen were not benefited and the co-operativastion process was failed" [8]. On the other hand the mechanized sector controlled by both the external capital and better equipped entrepreneurs had been gained access on fishery particularly of the export item that was encouraged by the Government's dollar driven policy and incentives. This dualism in fisheries development has triggered a crisis in the sector. Poor access to fish resources and low income from fishery pushes down the traditional fishers into starvation and deprived of the basic needs - that was one of the very hardship time lines in which the traditional fishers were passed through during 70's.

Government had been in search of option to tackle the very vital development issue of the traditional fisher folk, primarily due to the political pressure exerted by the fish workers

movement through a series of agitations and protest during 80's all over State through the Independent Fish Worker's Trade Union. Issuing mechanized boats again to the traditional fishers was not at all in the agenda. The political leadership in Government also felt guilty with the pathetic living condition of fisher folk and realized the consequences of dollar centered policy and the dualism in fisheries development that led to the alienation of traditional fishers from their livelihood. Fig- given below clearly depicts the progressive reduction in the share of traditional fishing from the total fish production scenario of the State and the gradual alienation of fishers from fishing.



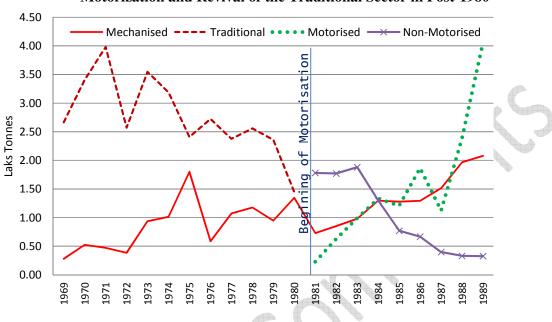


The Government approach to neutralise the fish workers agitation was through welfare measures and a number of such welfare programmes implemented at that time has been still continuing with more spending by modification and more coverage. In the context of the antitrawler agitations, what the Government was trying to do was to push technological change and big welfare spending for the fishing community to neutralize the movement. Promoting OBMs was a policy of "if you cannot beat them (the trawlers), then join them (with your OBMs)!"(Kurien J). The organizational arrangement for the implementation of the new programs and activities was the constitution of 222 Fisheries Welfare Societies under the Fishermen's Welfare Societies Act, in 1980, intended to route all the developmental and welfare activities for the uplift of fishermen. But these societies never became functional for reasons attributed to be the paucity of finance and other resource support.

To mobilise institutional finance from organisation like National Cooperative Development Corporation (NCDC), and as insisted by NCDC, Government set up cooperative net work in the name of **Matsyafed** as the State level apex federation of Kerala State Cooperative Federation For Fisheries Development Ltd by re-organising the KFC, KIDFC and KFWC. A co-operative model developed at Maryanad and the successful three tier structure developed by NGO during the stagnant phase of co-operativisation in the State as mentioned elsewhere also facilitated the reinstallation co-operatives by the State Government. As an alternative of mechanisation, intermediary technology like motorization gained momentum at that time (early 80's) and that

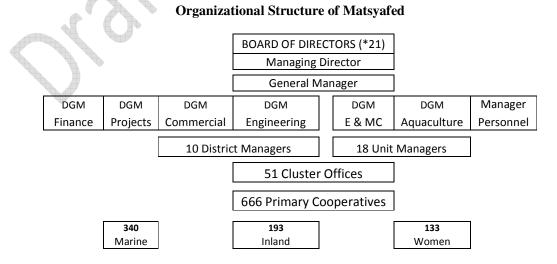
Source: CMFRI catch data adopted from PCO & SIFFS study 1991[20]

was adopted by Matsyafed as an appropriate option for empowering the traditional fishers for better access to fishery resources and the impact of motorization in favor of traditional fishing is exhibited in Fig - .



Motorization and Revival of the Traditional Sector in Post-1980

Matsyafed, the apex federation of three tier co-operative institutions has set up in the year 19<sup>th</sup> March 1984 with the objective of ensuring the economic, social and cultural development of the fishermen community by implementing various schemes aimed at promoting the production, procurement, processing and marketing of fish and fish products [14]. The three tiers comprise village level primary societies, intermediary district federation and the state federation at the apex level. Matsyafed aims to improve the per capita income of producer fishermen through interventions in credit, technology, marketing through capacity building of their institutions as well as its members to bring them into the main stream of the society [15]



Source: CMFRI catch data adopted from PCO SIFFS study 1991[20]

\*14 Elected members from Primary Coops and 7 Nominated from Government including representatives from NCDC, NBCFDC and NMDFC

The Matsyafed was the brainchild of Chief Minister Karunakaran who was also the Fisheries Minister in charge and his way of co-opting the independent fish workers' struggles when he was CM from 1982-1987. In the defeat of the UDF in 1987 elections, the most noticeable election fact was the "left" swing in the coastal constituencies (Kurien J). In 1988, eighty one primary cooperative societies were registered under the LDF rule. The number increased to 292 in 1992 under UDF. The number again increased dramatically in 1996 during the next LDF rule and the drama has been continued till date. During 2002 the number of 'functional societies' was around 420 again in UDF rule. This increase continued again by LDF rule by adding inland and women development Cooperatives and it become 666 in 2007. It is increased again by UDF in the year 2015 by adding the poor performing and non functional societies which was under liquidation process during the last LDF rule.

The political drama over the period to conquer political will of the fishers in favour to political parties obviously exhibited in the co-operativsation process of the State. Religion as well as cast also played vital role in this political battle and those fractions of the fishing community who clubbed these ingredients with the main stream politics won the battle of the leadership position in Matsyafed. The others occupied the back seat continually and however remained as part of the system. The UDF realised the fact that their traditional vote banks of fishers has been eroding and to restore their upper hand they also have formulated strategies as part of the drama. They registered complains against denied and biased membership to fishers in late 80's and also started numerical increase of Cooperatives from time to time whenever they came into power. Earlier, the LDF acquired strong holds traditionally in the mechanised sector where the dichotomy of owner and working class exists. This division is not that obvious among the traditional fishers and that found difficulty for the entry of LDF to the fishing community at that time particularly in South – finally they also got an opportunity through the co-oprativation process of the traditional fishers that enable to a great extend to achieve the political balance of the two fronts such as the UDF and LDF within the traditional fisher folk in the State. Kerala's political mind is always favoured a five year turn of LDF and UDF rule and let it be a healthy political battle for the betterment of this deprived.

# \*Objectives of Matsyafed

• To liberate the fishermen from the clutches of middlemen by extending cheaper credit and organising them by providing a platform for coming together and directly involving them in the decision making process.

• The ultimate aim is to assist the fishermen to assert their legitimate right over their produce and thereby enhance their income which would be a major step in the total development of the community

• To achieve this objective, Matsyafed has developed a well-defined strategy, the major thrust of which is member participation at all levels. **\*Source Web site: Matsyafed** 

To achieve the objective:

the programmes and activities being initiated and implemented by Matsyafed are;

- 1. Supply of fishing implements
  - Subsidy schemes, Empowerment of primary Cooperatives, Beach level first sale of fish
- 2. Welfare schemes
- 3. Operation of net-making industrial units
- 4. Import of OBMs, sale and after service

- 5. Marketing of fish and value added fishery products.
- 6. Other commercial units
- 7. Employment diversification programs: SHGs, micro finance, EDP and development of micro-enterprises
- 8. In-land fisheries development through Cooperatives Management of hatcheries brackish water farms
- 9. Training Extension and Personnel

Beside these the new major projects in pipeline are Net Factory in Trivandrum and Subsidized Kerosene retail network all over the State.

#### **Attainment of Co-operative Entity**

A co-operative is an economic organization that engaged business deals and affairs within a set of social values. In this context Matsyafed supported the fishermen primarily to become the owners of production means and there by an improvement in income as well as reducing the drain in the net income at various levels of backward and forward linkages in the production system. It starts with the collective procurement of production means at a competitive price on behalf of fishermen such as nets and accessories, crafts, OBMs and it's after sale services, coupled with provisions of subsidized credit to own the production means on a group basis. Right to first sale is the follow-up step implemented through primary Cooperatives that also intended to check the drain in net income. At the time of the inception of Matsyafed the core team of the organization was primarily engaged in the village level CBO building process and this has laid the foundation for the co-operativisation process. The time line analysis of Matsyafed in this endeavor has under gone ups and downs and a critical analysis of the activities as listed above may give insights on the impact of these activities of Matsyafed and scope for improvement and is discussed below one after the other.

### 1. Supply of fishing implements

It started through NCDC Phase I project in the selected four maritime districts of the State such as Trivandrum, Ernakulam, Kannur and Kasaragod (1985-90). The remaining five maritime districts such as Kollam, Alappuzha, Thrissur, Malappuram and Kozhikode were covered in Phase II (1987-92). The III<sup>rd</sup> phase covered the entire 9 coastal districts of the State that enable the complete physical coverage (1991-96).

The initial supports such as training of personnel of cooperatives, working capital, grant-in aid helped the self footing of the primary cooperatives. Capacity building at different levels in cooperatives such as local level leadership development, trigger for formation of fishermen groups, and performance targeted activity through BDP (Business Development Plan) are some other initiatives for self reliant cooperatives during the course of activity.

Co-operative is a member centered organization possesses unique entity when compared to the other business organization. It has a value system with emphasis on member's individual economic growth and is adopted as an appropriate management tool for the development of these outliers. Over the 30 years of activity of Matsyafed, *13 integrated fishery development projects with the financial assistance of NCDC has been implemented with the total outlay of Rs 287 crores that supported about 75000 active fishermen [12] for owning fishing assets on group basis. The average annual project cost for providing fishing implements through IFDP project from 2010 to 2013 was about Rs 30 crores by which annually 5258 fishermen were able to supported through 168 cooperatives and the per-capita investment is Rs 58600 and is detailed in Tab - .* 

		Numbers	Investment (Rs in	Per capita	
Project	Cooperatives	Cround			Investment
	Cooperatives Groups Ben		Groups Beneficiaries		(Rs)
IFDP 2010-11	187	1093	6877	35	50397
IFDP 2011-12	169	1384	4673	28	58894
IFDP 2012-13	148	1055	4223	28	66509
Average	168	1177	5258	30	58600

#### Investment details under IFDP 2006-2013

Source: DCB statement of Matsyafed 2<sup>nd</sup> quarter 2014-15

On contrary *the annual demand for the maintenance of traditional fishing implements in the State as a whole is estimated as Rs 400 crore* [16] and the share of Matsyafed is at a lower level of 15% only. Then who are the other parties playing the significant role by providing 85% of the credit support to the artisanal sector? There is a need for the proper and through enquiry that will cull out the various intermediaries in the system. It is important to find out: Who are they? How much share? What are their intentions? Is there any new actors entered? What is the situation that triggered the new entrance? Is there any new situation of over capitalization in fishing? If so what is the new composition in the credit structure? Whether the hike in the capital could be affordable to the fishermen and their cooperatives? These are some of the vital questions that Matsyafed need to look into particularly in the context of recent changes in the fishing practices of traditional fishers. Otherwise the prime purpose of Matsyafed that is liberation of bondage of fishers from the intermediaries and the improvement of net income of fishermen - certainly will receive a setback.

The field level enquiry of the author by visiting some of the important fish villages all over the State from Kasargode to Trviandrum revealed that the change in fishing practices and the hike in investment has reached in the order of more than one corer of Rupees per unit. It created a situation that the role of Matsyafed going to be diminishing further. It is also an important fact that the Matsyafed is one of the prime organizations in the State intervening regularly on the development issue of the fishing and fishery related activities on a day to day basis which need more attention and corrective measures to sustain the co-operative system from the collapse.

The credit rendering scale of Matsyafed for new units in ring seine belt vary from 20 to 30 lakhs and in special cases it may go up to 40. Matsyafed is generally not encouraging full loan to the new units instead tried to support more number of existing units for the partial replacement to sustain as well as to cover more fishers under the co-operative fold. Even in beast cases the Matsyafed Cooperative is not in a position to cover more than 25% of the total fishing units in a village in terms of credit or auction. Matsyafed has been providing only about 15% of the credit support (25 to 30 crore) annually to the artisanal sector as against the requirements of 400 corer every year. This big gap has been exploiting by many intermediaries such as the gulf remittance, merchant, money lenders and the old story is continuing with new flavor at a higher scale of lending and non-transparent deal with the ignorant. The changing fishing practices coupled with high "efficiency" and greater capacity embedded with hike in investment already become a risky venture to the poor and deterioration of their grass root level systems. Matsyafed least bothered on the fishery resource management aspects instead it plays one of the competitors for selling/marketing its products and services particularly in marketing of nets.

#### **Recent Changes in Investment Trend**

Though Matsyafed is aware of the increase in capital as well as operational cost of traditional fishing and its consequence on credit structure which has direct bearing on the activity of Cooperatives, no attempt from Matsayafed has noticed to address this vital issue. Just opening up of kerosene bunk and diesel propelled long tail OBM on trail basis will not solve the problem.

In Southern villages from Kollamkode to Sakthikulangara which was recognized as the non-ring seine belt earlier, the fishermen are using comparatively smaller craft, lower hp OBM and small quantum of nets which required low investment. Only marginal increase has been noticed over the period on the constituents of fishing units such as the quantum of the net from about 300 kg to 500 kg in a craft and 8 hp OBM to mostly 9.9 except in a few pockets like in Maryanad and Anchuthengu (25 and 40 hp). About 15 years back (in 2000) the average investment was only about 3.5 lakhs per unit and it has been increased 5 to 6 lakhs at present (2015). This hike in investment is not that significant when considering the inflation of rupees particularly against USD over this period and the proportionate increase in size of the components of fishing unit and is detailed in the Table. –

Components	Specification	Changes in investments			
		(Rs	in lakhs)		
		2000	2015		
Plywood craft	28 ft	1.55	2.5		
OBM	9.9	0.65	1.1		
Net 500kg @ Rs 400/kg	Twine no 1, 2, 4, 6, 8	1.25	2.25		
Accessories		0.05	0.15		
Total		3.5	6.0		

### Investment trend in South (Kollamkode to Sakthikulangara)

Note: Only the dominant fishing unit is considered to contrast the changes in investment over time

In the ring seine belt (Neendakara to Kasargode) the unit cost of ring seine has been increased about 3 to 4 times (from 20 to 30 lakhs to 100 lakhs) since the last 15 years when it was converted from a comparatively smaller motorized unit to much bigger IBM units. There are 443 such mechanized ring sine units enumerated by CMFRI in 2005 and has been increased to 495 in 2010 census and this unit is locally known as *kappal vallom* (= craft have the size of a ship). The cost of an IBM ring seine unit, sources of capital for IBM and consequence of changes in investment is detailed in Table- a and b.

mycsinent trenu m c	Investment trend in Central & North Kerala for ring senies							
Components	Specification	•	n investments					
		(Rs i	n lakhs)					
		2015	2000					
Steel Craft, IBM & Winch	76ft	35	OBM Ring					
FRP Carrier craft 2	58ft 28ft	5.3	seine units					

#### Investment trend in Central & North Kerala for ring seines

	(4.5+0.8)		cost about
IBM Yanmar	550 hp	28	20 to 30
OBM 3	40 hp2 25hp1	5.48	lakhs
Thanguvala 18-20 mm (Rs 12.5 lakhs) + Accessories (5) + setting charge of net and other expense (2.5)	525x53 fm 2500 kg	20	
Dolphin net	120 mm	1.25	
Echo sounder, G.P.S, Wireless, Battery		1.4	
Steering Hydraulic & other accessories		3.1	
Bus		10	
		109.53	

Cost of IBM ring seine at Nattika in Thrissur - set up in 2013

Sources of Capital	<b>Total</b> (Rs in lakhs)
25 Group owner share (@0.25 lakhs per fishermen)	6.25
6 Share sponsored by friends (Working in middle east @ 5 lakhs /share)	30
NCDC	25.5
NBCFDC (with surety)	15
Society (with surety)	15
Money borrowed on interest @Rs 2/100	6.25
Old nets craft and in Hand	11.53
Total	109.53

# Sources of capital for IBM ring seine

Source of capital of IBM ring seine at Nattika in Thrissur - set up in 2013

#### Other gears

*Dappa-vala* in central Kerala, *twenty-twenty* in Malabar, *rani-vala* in Kasargode are the motorized ring seines which required comparatively lower investment of 20 to 30 lakhs. This gear is important in the IBM ring seine belt of Kollam to Kasargode and is playing reasonable contribution to the shallow water pelagic fin-fish as well as prawn landing during monsoon. It also plays significant or little less role in the IBM ring seine dominating districts such as Malappuram, Kozhikode, Ernakulam and Thrissur. Other fishing units like boat seine locally known as *thaguvala* in Alappuzha *mini* in Kannur, are the miniature of ring-seine but without ring that need less capital similar to that of the gill netters. The investment of these smaller units ranges from 5 to 6 lakhs and the cost of each constituent such as Craft 24-28 footer cost Rs 2 to 2.5 lakhs.

#### Subsidy schemes of Matsyafed

Fishing implement subsidy annually in the tune of about 6 crores, working capital of about 5 crores, motorization subsidy, bankable subsidy for fishing implements are the major subsidy schemes. The subsidies give cushion to the member fisherman in dealing the credit on one hand and enable Matsyafed to eliminate competitors on the other. As mentioned elsewhere Matsyafed catering the credit requirement of only 15% of fishing implements in the State, and the subsidy benefits restricts only to the selected fishermen/fishing groups that create an unequal play ground in fishing and in a way trigger competition in investments and fishing capacity. Another noticing factor is that all these subsidy pack benefitted only to the owner fishermen and not to the laborers (except in a few pockets) who comprises the major chunk. A re-arrangement in allocation of subsidy pack, preferably linked to the primary Cooperatives need to be thought of for the equitable distribution. The table given below shows the components of subsidy in the credit package of Matsyafed.

Subsidy pack in Matsyafed loan							
Schemes	Subsidy	Beneficiary	Principal	Interest			
		contribution	for repayment				
NCDC	22%			11.75%			
NBCFDC	22%	10%	68%	6%			
* Bankable Scheme	22%	10%	08%				
Craft	22%						
**OBM	Rs 10,000						
*** Gear	Rs 6000						

\*Applicable to interest rate of Bank or Cooperatives \*\*Subsidy restricted to OBM of hp <10 \*\*\*The minimum purchase should be Rs 25000

In the case of NCDC scheme only 55% of loan needs to be repaid by fishermen to Matsyafed and no need surety for the loan. The society will be the guarantor and the beneficiary selection is based on the stipulated criteria. Whereas NBCFDC/NMDFC schemes designed mostly as a direct deal with the Matsyafed and the surety is a pre-requisite to avail loan. Earlier this scheme was directly implemented by Matsyafed by-passing the Cooperatives mostly for non-fishing activity to youths and women beneficiaries who were not the members in the primary Cooperatives. Later, when these schemes also diverted for supplying fishing implements, it routed through primary Cooperatives, SHGs, and Women Cooperatives. It enables stream lining the repayment system through the primaries. NBCFDC/NMDFC schemes are more beneficial to the loaners because of the low interest rate but need surety, which enabled prompt repayment than the NCDC schemes. However these schemes are not that beneficial to the primary Cooperatives when compared to NCDC scheme because it provides only 1% interest margin benefit to the Cooperatives as the service charge.

# The performance of primary Cooperatives

666 primary societies are registered under Matsyafed in which 325 participating in the business activities (65%). Out of the 666, 340 belongs to marine, 193 inland and 133 are the Women Cooperatives. The membership in the primary societies of Matsyafed as on September 2014 is 4.89 lakhs that comprises 58% of the total fisher folk in the operational area of Matsyafed [16]. Overlapping in jurisdiction of primary Cooperatives, dual membership, non-operational societies and over politicisation are some of the issues need to be streamlined. Being the vital organisation in the state dealing the day to day fishing and related activities of the small scale fisheries of the State, it is very important to update information on changes in fishing practises and its consequent

changes in the credit structure, the revamp of bonded labourer and the obstacles for the right to first sale of fish – that need immediate attention to cop up with the changes.

Out of the 340 marine Cooperatives 10 have the yearly business turnover of rupees more than 10 crores, 15 have more than 5 crores and 106 Cooperatives have only 1 crore annual business turn over [6] and is detailed in Tab-.

<b>Total Turnover</b>	Number of	Turnover
(Rs crores)	Cooperatives	(Rs in crores)
100	10	Above 10
75	15	5-10
106	106	1-5
46	209	Below 1
327	340	Total

#### Performance of the 340 Marine Cooperatives 2014

The various ingredients of the best 10 cases mentioned above in the Table need to be explored for next step which could be the foundation for next intervention and decide the future of Matsyafed and its primary Cooperatives. Right and stable leadership, proper representation of actual sea going fishermen in the decision making body, a reasonable coverage of fishers and fisher folk of the locality in the Cooperatives, need based professional support, capability of dealing volumes of fish sale at the first point particularly of export items that involved shipment and delay in payment, transparency and people friendly procedure and norms, capability to mobilize resources that include finance and personnel could be some of the major constituents to take off at the next level. Direct procurement of fish form beach to the next market through one of these 10 Cooperatives could be the next intervention. A pilot case approach may be fruitful to stream line the effort.

#### Status in first sale

The support services provided by Cooperatives and its activities must be economically viable. The members must meet the cost of all services. Therefore the fish must be sold only through the cooperative and thus the first sale of fish must be the right of the fish workers and their primary Cooperatives to avoid the bondage with the merchant middlemen nexus. *In the year 2013-14 fish worth Rs 321.41 crore was auctioned through 248 primary Cooperatives* [15]. Rupees 3.21 crores were accrued as 1% auction commission to the Matsyafed in that financial year. On an average each of the 250 Cooperatives auctioned fish worth Rs 325 crores in the last two years and is one of the major sources of income to the primary Cooperatives as well as Matsyafed and is detailed in Tab - .

Financia Year	Al Number of Cooperatives	Quantity (Lakhs	Value (Rs in Crores)	1% Remittance by fishermen to
I Cal	Cooperatives	tones)	(KS III CIOICS)	Matsyafed
2012-13	3 252	108773	328.94	3.28 Crores
2013-14	4 248	138100	321.41	3.21 Crores

### **Performance in beach level auction**

Source: Administrative report of Matsyafed 2013[15]

While examined the auction performance of one of the primary Cooperatives at Adukath-bayal FDWCS F5-115 at Kasaba fishing village in Kasaragode where out of the 10 units in the village, only two rani-vala ring seines are participating in the auction of Matsyafed Cooperatives. These two units were auctioned fish worth Rs 1.26 crore from April 2014 to February 2015. If this Cop was able to mobilize another two more units the amount could have been doubled. Setting up of auction monitoring cell alone will not solve the problem, instead Matsyafed should support credit services, competitive auction system and market linkages to ensure good price not only for the members but also to non-member fishing groups and that create better returns for the community as a whole. Production bonus scheme is one of the interventions proposed to be implemented by Matsyafed. If Matsyafed could succeed in that, all the 250 Cooperatives that are participating at present in beach level auction could easily mobilize auction worth Rs 1000 cores without much difficulty. In the Tab – given below estimated the potential for the first sale of fish from the traditional sector of the State for one year based on the last 10 years marine fish production data from CMFRI.

a. Present status							
*Average	Present annual	**Value	1% Auction	1% Auction			
Annual fish	auction by	(Rs in	Commission to	Commission to			
Production	M.fed	Crores)	M.fed	Cooperatives			
(lakh tones)	(lakh tones)		(Rs in Crores)	(Rs in Crores)			
6.4	1 lakhs T	300	3	3			
	b. Potential						
If go for	2 lakhs T	600	6	6			
If go for	3 lakhs T	900	9	9			
*Source: CMFRI	- The average fish pr	oduction in F	Cerala since the last	10 years (2004-13)			

#### Present beach level auction and potential for first sale a Present status

Source: CMFRI - The average fish production in Kerala since the last 10 years (2004-13)

\*\* Average value of beach price per kg fish is taken as Rs 30 as followed by Matsyafed

Co-operatives are working under the principles of equity in the distribution of co-operative surplus to all of its members. If the services of Matsyafed and Cooperatives are adequate, more fishers will participate in the auction through the primary Cooperatives. The demand for fish is always on increase and price is also shows the proportionate increase in trend. These advantages certainly will cater increased income to all the three parties mostly of fishers, the primary Cooperatives and Matsyafed that make the system self reliant and enable to strengthen its activities into diverse areas.

One of the major bottlenecks while dealing the first sale of export item is that the price money delayed a few months till the shipment of the product. This has been normally happened during bulk landings and monsoon seasons that block the movement of revolving fund resulted in moving away the fishers to other channels where cash payment is comparatively in time. Solution to this problem also needs to be addressed to boost the first sale through the Cooperatives network.

#### 2. Welfare schemes

Debt Relief Scheme (DRS): As per the recommendation of the Debt Relief Commission for Fish Workers Constituted by GoK Rs 140.93 crores has been provided for 78716 fish workers (Rs 17904 per loaner) who availed loan from NCDC, NBCFDC and NMDFC schemes for the debt relief on principal amount, interest, and penal interest and also the loan availed by the primary Cooperatives. This scheme not only relieved the fish workers from their debt but also the primary

Cooperatives and Matsayafed that boost up the repayment performance of various schemes. The undesirable outcome is that it will demoralise the promptly repaid beneficiaries - like in agriculture sector, the beneficiaries in Fisheries may also expect such benefit from time to time and it may indirectly encourage the defaulters.

<u>Fishermen Personal Accident Insurance Scheme</u>: The scheme provides compensation of Rs. 5 lakh to the dependents of fishermen who die in accidents, Rs. 1.5 laks for hospital expenses limited to Rs. 0.6 lakhs if the accident leads to disability of 50%. Fisheries Department also provides Rs 5 lakhs to the dependents of fishermen who die in accident.

<u>Matsyafed Input Security Scheme</u>: Compensating the loss due to accidents and natural calamities sustained to the fishing implements distributed through Matsyafed schemes. So far Matsyafed has assisted 314 beneficiaries amounting to Rs. 68.63 lakhs and on an average each of them is compensated with Rs 21,850.

<u>Vanitha Bus</u>: Matsyafed is operating special bus service for the travel of fisherwomen vendors from landing centers to the market places and back at nominal rates in Trivandrum & Ernakulam districts and this incurred loss to Matsyafed.

<u>Community Peeling Centres</u>: Matsyafed is running two community peeling centers as a preprocessing facility for the fisherwomen of the area.

<u>Kerala Sustainable Urban Development Project (KSUDP)</u>: a joint venture project of Matsyafed with KSUDP. The project envisages the livelihood improvement of fishermen community with outlay of Rs. 1640.81 lakhs and is implemented in 4 districts as pilot project.

# 3. Net-Making Industrial Units

This unit supplying good quality nets through the retail net works of Matysafed known as Vyasa stores at reasonable price and by this activity Matsyafed claims that they controls the market price favourable to the fishermen. The gear subsidy component also provides advantage to the member fishermen and Matsyafed for gaining good market share. On an average the two net making factories with the annual production capacity of about 1000 tones able to produce about 605 tonnes of net that made profit Rs 2.2 crores annually and is detailed in Table-.

Year	Production	Sale	Gross Profit	Expense	Net Income
	Tonnes	Rupees in Crores			
2011-12	557	34	6	4	1.55
2012-13	595	45	7	5	2.25
2013-14	662	52	8	5	2.92
Average	605	44	7	5	2.2

Performance of Net factory at Ernakulam and Kannur

Ring seine net of mesh size 8-10mm and 18-20mm is the major item which has good demand particularly in central as well as north Kerala. This fine mesh net is operating in the IBM ring

Source: Annual report of Matsyafed 2014-15

seine of 495 units [CMFRI 2010]. Besides this the ring seine operating with OBM is also created adverse impact on the fishery due to over fishing and juvenile fishing. Matsyafed should realise the fact that without fishery no existence for the fishermen and their Cooperatives. Setting up of more net factories will create adverse impact to the fishery.

### 4. Import of OBMs, sale and after service

The usage and number of OBM has been shown an increasing trend in Kerala and it was 11621 in 1991 [census SIFFS 1991] become increased to 16466 in 1998[census SIFFS 1991] and now it is about 25000 [Annual report Matsyfed 2014-15]. Though attempt has been made to promote the long tail OBM run on diesel at Kozhikode by Matsyafed that could not succeeded due to the poor acceptance from fishermen - the prime reason was slow speed. Annually on an average Matsyafed was able to supply about 1700 OBMs of different horse-power and earn a profit of Rs 2.33 crores annually and is detailed in Tab-.

Year	Supply	Sale	Gross Profit	Expense	Net Income
	Number	Rupees in Crores			
2010-11	1350	17	3	0.31	1.84
2011-12	1832	22	3	0.47	2.27
2012-13	2170	24	3	0.91	1.80
2013-14	1620	22	4	1.05	3.41
Average	1743	21	3	0.69	2.33

#### **OBM** sale and profit

Source: Annual report of Matsyafed 2014-15

13 Vyasa stores of Matsyafed in all coastal districts have been supplying OBMs and other fishing implements that enable them to control the market. Matsyafed is the major market share holder of OBM business in Kerala. Subsidy to OBM upto 10 hp adds cushion effect to the fishermen in this deal with Matsyafed which is also restricted to the members of primary Cooperatives. Recently the Vyasa stores also deals the sale of echo sounder, GPS, VHF radios, insulated boxes and crates. Ten workshops providing OBM service at all the coastal districts were also extending after sale service, repairs and maintenance of OBMs.

# 5. Marketing of fish and value added fishery products

Matsayfed exports locally consumed major fishes like sardine, mackerel, tuna and marlins to Thailand, Singapore, Dubai, Oman, Sri Lanka, Spain, Libya, Tunisia, Algeria, Japan, Iran and Vietnam. Recently Matsyafed also started direct marketing of fresh fish through a few retail outlet named as **fish mart** set up locally at Kozhikod, Cochin and more at Kottayam with the involvement of SHGs and collaboration with the Local Bodies with an objective of supplying quality fish to the local consumers. Matsyfed's fresh fish point is the recent intervention which is at the introductory stage and that has the product features of directly procured, dressed, iced, packed, ready to cook branded products, with premium pricing and natural segmentation of consumers. On an average the total deal in direct fish marketing of Matsyafed that included export item is 1292 tonnes of fish that earned a net profit of Rs 1.02 crore and is detailed in Tab.

# Ice and Freezing plant

Year	Production	Sale	Gross Profit	Expense	Net Income		
	Ton	Rupees in Crores					
2010-11	1260	8.77	0.96	0.52	0.43		
2011-12	1414	13.88	2.63	0.69	1.93		
2012-13	1614	13.70	2.14	0.82	1.32		
2013-14	881	RI	3.25	0.84	0.41		
Average	1292 13 2 0.72 1.02						
Market 0.2% of the average annual fish production in the state based on							
share CMFRI catch data.							

Source: Annual report of Matsyafed 2014-15

Matsyafed is very much lagging behind in dealing with the fish marketing during its 30 years of activity which is one of the vital as well challenging areas needs to intervene effectively. Matsyafed is simply entrusting the primary Cooperatives to deal the beach level auction. The other lucrative deals, after the beach sale to the dining table is dealing by many other intermediaries. Legislative support for market control favoring the producers is one of the pre-requisite for intervention. Out of the 10 best performing Cooperatives as mentioned elsewhere who have the annual turnover of more than 10 crores need to be empowered to take up this venture. A SWOT analysis of these Cooperatives give out better idea how to take up a pilot attempt in this line which is one of the higher priority area need to fruitfully intervene with utmost care for a better future of Matsyafed and its primary Cooperatives.

### 6. Other commercial units

The performance of other commercial units need to be improved to avoid losses particularly in the production and management of fish meal and chitosan and is detailed in Tab - .

	i citorinance of other commercial and										
			Rs in lakhs								
	Year	Fish me	eal plant	Chitosan Plant							
	ſ	Azhikode	Kozhikode	Neendakara							
	2010-11	37	39	10							
	2011-12	78	76	-36							
	2012-13	148	106	-9							
	2013-14	54	54	4							
Ð	Average	79	69	-7.7							

# Performance of other commercial units

Source: Annual report of Matsyafed 2014-15

# 7. Employment diversification programs:

SHGs, micro finance, EDP and development of micro-enterprises

The per capita income of fishermen is Rs.50491 that is only about half against the State average of 99,977 and 64.1% of fisherman family is below poverty line and 41.43% of the workforce is unemployed [7]. The complete dependency of fisher folk on fisheries for livelihood is also not appropriate for their social mobility. In the marine sector operating cost has increased resulted in diminishing return which necessitates concrete action for generation of further employment opportunities. The fisher folk fall within the backward as well as minority classes and Matsyafed started availing financial assistance from NBCFDC and NMDFC since 1995. Fisher women and youth

were targeted initially and that was later widened to accommodate more segments such as the fish vendors as well as fishermen.

To improve the income of the fisher's household, women empowerment program was initiated through 133 women Cooperatives. 15,962 SHGs were formed over the last 15 years in which 1,94,218 persons were enrolled as members and the average membership is 12. Rupees 83.47 corers were mobilized as thrift and the average amount generated as thrift from each SHG in one year is Rs 3486 and in one month Rs 291. Similarly each member generated the average thrift amounting Rs 287 per year and Rs 24 in a month.

Rupees 103.89 crores generated as loan without the support of external agencies. In addition Rs 300 crores provided as microfinance loan at 6% interest and the achievement on repayment is 100%. Under interest free loan scheme Rs130.6 crores has been provided to 136475 women fish vendors in which Rs 5000 has been given to 57640 women, Rs 10000 to 40409 and Rs 1500 to 38426 and now the amount has increased to Rs 20,000 and that also achieved remarkable performance with repayment of 100% [15].

#### 8. Inland Fisheries Development

Organized inland fishermen under primary inland fishermen cooperatives and provided fishing input and micro-credit, so far 193 primary Cooperatives were set up in the Inland sector. Kottyam district office is exclusively dealing the inland development activities of Matsyafed, though the others dealing the same activities in their respective jurisdiction. To provide alternate employment for women, ornamental fishery has been taken up by Women/inland societies as one of the activities.

Matsyafed set up 4 hatcheries with the production capacity of 3 crore prawn seed each at Thirumullavaram in Kollam, Kaippamangalam in Trichur, Moplay Bay in Kannur and Veliyamkode in Malappuram in which except the last one the other three running on profit. The production, capacity and utilization of the four hatcheries are detailed in Tab.

	2011-2012	2012-13	2013-14	Average					
	Number of prawn seeds in crores								
Production	4.47	5.15	6.70	5.44					
Capacity	12	12	12	12					
Utilization	37%	43%	56%	45%					

Hatchery production performance

Source: Annual report of Matsyafed 2014-15

Matsyafed is also running 3 fish farms which were run on loss earlier (2011-12) started making profit now in the last two financial years in the order of Rs 4.78 lakhs and 47.05 lakhs. The introduction of tourism with boating, spot fishing and food package run with the involvement of SHGs of neighboring women Cooperatives enable the these farms to recover from loss and making profit which is an innovative attempt made by the Aquaculture division. Matsyafed has also opened 3 aquariums in different parts of the State for recreation and tourism purposes.

### 9. Training Extension and Personnel

Training to officials in personality development and IT, awareness creation program for the beneficiaries about the activities of Matsyafed, study classes to the primary Cooperatives board members and officials, EDP programs to SHGs particularly on ornamental fish and fish product were the areas conducted training. Awards and scholarship to fishermen children, cash awards to

best performing Cooperatives, SHGs and fishing groups are aimed for the motivation of personnel at various levels.

Mass contact & awareness program at grass root level, EDP/Training to leaders, office bearers and fishermen. Vocational training for self-employment, training to SHGs, Women empowerment programs are the similar nature. Recruitment of community motivators and trainers, training program to develop a pool of trainers to continuously interact with fishermen are the major outdoor training.

Matsayafed need more than 1000 personnel to run the day today activities of the organization but at present only have 822 employees in which 329 are permanent, 410 temporary and 83 are the community motivators. Continuous training to officers of Matsyafed, Publication of Matsya a magazine with wide coverage among fishermen, conducting workshops, seminars and exhibitions are the ongoing activities.

### **10. Income and expenditure sources of Matsyafed**

Matsyafed is also in a situation to meet its administrative expenditure by mobilizing own fund through its business activity, though it is partially supported in the various project components. As part of it, the institution also started formulating yearly Business Development Plan (BDP) since late 90's to boost up the business activity based on a target. Primary Cooperatives also motivated in this line. Over the period Matsyafed at the apex as well as intermediary level could go ahead to a larger extend with the BDP. Sale of OBM, production and sale of nylon nets from the net factory, sale of monofilament by procurement from private companies, sale of accessories for fishing and income from other commercial units are some of the other major sources of income by which Matsyafed could thrive upon. The Revenue Budget for the year 2015-16 and the anticipated Revenue Income for the next year is detailed in Tab - .

1	vevenue b	uugeti	or the year 2015-	10	
Revenue Income	Rs in	%	Revenue	Rs in	%
Revenue meome	crores	70	Expenditure	crores	70
Sale of petroleum products	97.41	36	Production distribution expenditure	237.10	89
Fish marketing	60.04	22	Salaries & other benefits	26.07	10
Sale of fishing implements	48.91	18	Vehicle expenditure	0.96	0
OBM sales	22.13	8	Welfare expenditure	0.53	0
Fish manure	7.07	3	Guarantee commission	1.25	0
Prawn seed	5.21	2			
Beach level auction	4.36	2			
Others	26.46	10			
Total	271.59	100	Total	265.91	100
Anticipated revenue inc	5.67 cro	5.67 crores			
		1	C 1 0 1 4		

# **Revenue budget for the year 2015-16**

Source: Annual report of Matsyafed 2014-15

#### DISCUSSION

Matsyafed was envisaged as an economic organization which was to develop a business plan and strategy to maximize the economic benefit of its members. It had a Business Development Plan (BDP) which was meant to elevate Matsyafed as a business organization which would not be a burden to Government (like many of the loss making public sector organizations) and also serve the economic and social welfare needs of the fishermen. To strike the balance between the two objectives, appropriate strategies need to be taken up by Matsyafed from time to time.

There is a false belief that co-operatives should not focus on making profits like a corporate concern and that they should be non-profit oriented and yet be socially responsible organizations. Social responsibility however also covers provisions for better income to members and their long term prosperity. This cannot be achieved if the organisation makes financial losses. In this context Matsyafed needs to spear head in a big way to accomplish the major challenge of attainment of prosperity of the downtrodden in the State and therefore a check and balance is always necessary for attaining the social responsibility and business endeavor. In the journey of playing this dual role, the line staff and core team of Matsyafed moved away to a greater extent from the fishermen and their primary coops due to a variety of reasons. This organization also not updated on the very important aspects such as the changing scenario in the sector such as the over fishing and sustainability of resources and the alienation from market that could have been otherwise accessible and beneficial to the producers and their organizations.

Matsyafed play different types of the co-operative role simultaneously such as a credit cooperative by channelizing subsidized credit to its members and as marketing societies for better value for their produce by beach level auction system. The activities were also diversified into non-fishing activities for generating self-employment opportunities targeting women and youth. Formation of SHGs, thrift and credit mobilization, EDP and promotion of microenterprises are some of the initiatives that remark the growth of Matsyafed in diverse fields. Though some of the success stories of Coops are documented by Matsyafed [7] the performance of SHGs and microenterprises has been not yet documented. It needs to be analyzed that whether the SHGs are simply generating thrift and revolving loan to its SHG members or they elevated as entrepreneurs running micro-enterprises. The activities of coops should also be beneficial to the non-members in the locality directly or indirectly to improve their net income that will improve the social acceptance of this organization.

"Too many people chasing the same fish in the same coastal waters" the negative effect will be falling productivity, disturbing ecology, higher capital and operational cost and reduced income to fishers. The latest innovation or adaptation of high 'efficiency' fishing has not necessarily contributed to improved productivity and better standards of life of the fisher folk. This was mainly due to increased investment as well as operational costs of catching the same fish from the same coastal waters in a short fishing season in a year in bulk. The hike in demand and the price of fish both in the domestic as well as international markets makes fishing viable to a larger extend. However the possible surplus income has been losing by over fishing in adopting high 'efficiency' fishing. That leads to the collapse in the balance of supply demand equation in fish production. Whatever fish available in a fishing season had been be landed completely on harbors in bulk – results less accessibility of fish to the community, fewer fishing days in year, low price to the producer, higher margin to the intermediaries and poor quality high priced fish to the consumer. The other income drains in backward linkages are increasing investment cost on IBM, steel and plywood crafts, nets, OBMs and operational cost, particularly of fuel.

In context of Voluntary Guideline on Sustainable Small Scale Fisheries of FOA (VGSSSF) the small scale sector is viewed as vibrant, competitive, cost effective, and economically viable. The sector is also socially desirable and ecological sustainable. Therefore the VGSSSF will have a time-bound agenda for further development with the total inclusion of all players in the chain. Small scale fisheries are also involved in food production, processing and marketing which is provider one of the large scale employment opportunities both at sea and on land for the poor fishers as well as the ordinary poor in the State. Therefore this sector requires a vibrant policy measures to lift up the downtrodden to the main stream to compensate the neglect of this sector since the independence.

This recognition of the worth of the small sector and its capacity development will contribute to more sustainable and equitable fisheries development. The small scale fisheries of Kerala should reach to a position for sustainably harvest the resources from the coastal as well as deep sea waters in the context of Murai Report of 1994 [18]. A policy intervention is necessary with the inclusion of small scale fishers for deep sea fishing by adopting Thoothoor deep sea fishing model and the continuance of recommendations of Murai committee. The status-co need to be maintained based on this committee's recommendation till the implementation of the new policy that aiming at capacity development of artisanal fishers for deep sea fishing under the cooperative institutional arrangement.

Co-operativisation of the small scale fish workers need to be continued and is the most important activity for betterment of the one of the outliers in Kerala. The State's political leaderships should recognize the fact that the activity of the grass root cooperatives and their federations should be a common platform irrespective of the politics or casts or sects. The need of the hour is that Masyafed core team and the line staff with its 30 years of professional experience review its earlier phase of CBO building process to bridge the present gap in updating fishing practices and its sustainability on one hand and accessibility of markets favorable to the producers and their organization on the other. Matsyafed need to equip the fishers and the 666 primary Cooperatives with an updated perspective to cop up with the changes and the opportunities accordingly frame policies, strategies and business plan in the changing scenario.

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