

Chapter 4

Financial Inclusion of Marine Fisher Households

Introduction

Fisher households gain attention across the globe due to the peculiarity of the occupation, which involves high risk, irregular income and seasonal livelihood. Fisher households are backward in socio-economic status. It has been reported that 64 per cent of the fishermen households in Kerala were indebted and more than half of their liability was for buying fishing inputs (SIFFs, 2001; State Planning Board, Kerala, 2009). And that 21.1 per cent fisher population could not afford to meet basic needs as against the State's incidence of poverty figure was 9.4 per cent (R, 2010). However, the contribution of this community to the economy is highly commendable as they provide employment to many and fetch foreign exchange, and guard the boundaries of the nation (ARD & World Bank, 2010; (Dhanya, 2013). Fisher households are characterised by low per capita income, high dependency ratio, indebtedness, exploited by middlemen in the market, and less financial capability. Lack of alternative occupation and the low financial capability in planning, budgeting, saving and spending of the irregular and seasonal income make the fishery sector a high risk prone sector. A number of schemes by various international and national forums have been implemented to reduce the misery and guard the dignity of fishermen and to scale up the overall welfare of the fisher community around the world.

The increased demand for sea food has prompted the fishermen across the globe resort to fishing intensification through extension of fishing ground, increase the overall length of the vessel, enhancing the HPs of OBMs. Adoption of irresponsible fishing methods like reducing the mesh size of the gears, competition between Mechanised vessels, trawlers and use of ring seiners have become the trend of the time to catch more and to earn more (Department of Fisheries, Kerala, 2012). Consequently, cutting the branch of the tree, where one is seated. This growing chase for sea food ultimately affect

the livelihood of traditional fisher folk who solely depend on this common resource (Namboothri, Muralidharan, & Sridhar, 2012). The traditional fishermen, who fight with the rough sea, have also to fight with the commercial sharks who eat up the profit of the poor fishermen that they earn for their livelihood. Here, the situation of the fishermen could be compared to the character of Ernest Hemingway's Santiago in his famous novel '*The Old Man And the Sea*' who comes to the shore with the skeleton of the fish after the hard labour (Hemingway, 2007). Most of the fishing days the fishermen come to the shore with the debt burden ranging between ₹7000/- to ₹30000/-. A wake up call for deep-sea fishing could be heard to combat the present menace of declining fish production and endangering of the ecosystem, which means huge investment and intense training to fishermen in this sector. This responsibility cannot be shouldered by the fisher households alone, but a joint effort of the government agencies and formal financial institutions could easily address the need of the hour.

The structure of this chapter has been divided into seven sections with a concluding paragraph. The first section deals with global scenario of the fishery sector and its contribution to the world. The second part is an attempt to present the importance of marine fisheries of India in world fishery with its issues and challenges. The third portion of this chapter analyses the institutional mechanism built up to plan and implement schemes to promote and protect fishermen households in Kerala, like Department of fisheries, Matsyafed and Matsyaboard. The fourth section would be the thrust given by these institutions to include the fisher households financially into the fold of formal banking institutions. The fifth section is the core section, which depicts the financial inclusiveness of fishermen in Alappuzha and the initiatives taken to create financial literacy among them. And finally the last would give a sketch of the peculiarity of the needs of the fisher households in Alappuzha. The conclusion presents the challenges and issues faced by the fisher households in Kerala.

4.1 Marine Fisheries Sector -A Global Scenario

Global significance of the fishery sector could be understood in terms of fish production, employment generation and contribution to the food supply to the people. As per the FAO report in 2010, the capture fisheries and aquaculture fisheries together supply 148 million tonnes of fish to the world population, of which 128 million tonnes were used for human consumption which means the fishery sector provided 17 per cent of the population's average per capita intake of animal protein. The recent report points out that despite the fishery resource depletion, the fish production surged to 158 million tonnes, of which the contribution by the marine sector was 79 million tonnes (76.2 per cent) which were mainly contributed by 18 major fish producing countries. To be more specific, out of the 18 major producers, 11 countries from Asia contributed 72 per cent of the total marine fisheries. China topped the rank of marine capture fisheries and India stood the seventh place contributing 15.1 per cent of the global production. It was estimated that fisheries and aquaculture together assure the livelihoods of 10 to 12 per cent of the world's population using 4.72 million fishing vessels in 2012 (FAO, 2014). Worldwide, Fishery sector generate direct employment to 55 million people and 145 million people were engaged in fisher related activities. In 2012, a vast majority of 84 per cent of all people were employed in the fisheries and aquaculture sector in Asia, followed by Africa figuring around 10 percent.

Table 4.1
Major Global Contributors of Marine & Aquaculture Fish Production
(‘000 in Tonnes)

Countries	2005	2006	2007	2008	2009	2010	2011	*2012	2013
China	42710	44488	46074	47522	49699	52151	54393	13 869	59824
India	6659	7026	6972	7950	7859	8475	8875	3 408	9194
Indonesia	5893	6094	6433	6690	6837	7685	8426	5 420	9921
Peru	9414	7046	7250	7438	6959	4350	8341	4 815	5979
USA	5407	5372	5294	4851	4703	4923	5550	5 107	5671
Vietnam	3425	3684	4160	4599	4837	5086	5348	2 510	3458
Russian Federation	3312	3390	3581	3499	3943	4190	4384	4 068	4500
Japan	5059	5052	5048	5027	4878	4787	4318	3 618	4265
Myanmar	2217	2582	2840	3169	3545	3914	4150	2 332	4716
Chile	5052	4955	4599	4398	4247	3381	4018	2 572	2804
Norway	3054	2969	3222	3280	3486	3688	3420	2 149	3322
World	136775	137508	140684	143021	145736	147992	156195	79 688	162761
Kerala	6304.8	6571.61	6869.1	7127	7736	7890	6.81	6.93	6.80

*Source : Handbook on Fisheries Statistics 2014, Ministry of Agriculture & Farmers Welfare, Government of India & *Global Production database 2013 (marine fish production alone) (2011- 2013 in Lakh Tonnes)*

4.2 Marine Fisheries Sector - A National Scenario

4.2.1 Fisheries Population in India

India with 8118 km coastline spread out to 13 coastal States accommodates 7,64,868 fisher households living in 3202 marine fisheries villages, constituting 2.979 per cent (35,74,704) of the 1.2 billion population. India endowed with rich fisher resources in continental shelf of 53000 Sq.km, and the Economic Exclusive Zone of 2.02 million Sq.km, comprising of 0.86 million Sq.km on the west coast, 0.56 million Sq.km on the east coast and 0.60 Sq.km around the Andaman & Nicobar Islands under its jurisdiction. India's production as on 2013-2014 accounted for 63 per cent from inland sector and 37 per cent from marine sector.

India has been a major contributor to the world in marine fish production after China with 32,69,000 tonnes (3.23 per cent) and second largest producer of inland fish with 56,06,000 tonnes (10.19 per cent) in 2011 (Ministry of Agriculture & Farmers Welfare, Government of India, 2014). Fish production for the year 2013-2014, estimated to be 9.58 million metric tons with a contribution of 6.14 million tons from inland sector and 3.44 million tonnes from marine sector. India contributed 5.68 per cent of the global fish production in 2013-14, significantly playing a vital role in the National economy, providing livelihood to approximately 14.49 million people in the country. The South-West comprising Kerala, Karnataka and Goa were the top contributors among regions. Presently fisheries and aquaculture contribute 0.78 per cent to the National GDP and 4.47 per cent to agriculture and allied activities. Fishery being one of the promising sectors of agriculture and allied activities, generates employment and stimulates growth of a number of subsidiary industries, ensures cheap protein to the poor and earns foreign exchange for the country. As the report of the MPEDA, Kochi, India has exported 983756 tonnes of marine fish products worth ₹30213.26 crore for the year 2013-14 (MPEDA, 2015). The table 4.2 below depicts the prominence of India in Global Fish production.

Table 4.2
Distribution of Fishermen Population in India

Sl. No	States	Marine Fisheries Census 2005		Marine Fisheries Census 2010	
		Number of Fishermen	Fishermen Households	Number of Fishermen	Fishermen Households
1.	West Bengal	53816	269565	76981	380138
2.	Odisha	86352	450391	114238	605514
3.	Andhra Pradesh	129246	509991	163427	605428
4.	Tamil Nadu	192152	790408	192697	802912
5.	Puducherry	11541	43028	14271	54627
6.	Kerala	120486	602234	118937	610165
7.	Karnataka	30176	170914	30713	167429
8.	Goa	1963	10668	2189	10545
9.	Maharashtra	65313	319397	81492	386259
10.	Gujarat	59889	323215	62231	336181
11.	Daman&Diu	5278	29305	7374	40016
	Total	756212	3519116	864550	3999214

Source: Compiled from Marine Fisheries Census of India 2005 and 2010 by CMFRI.

Active fishermen involved in fishery activities have increased from 7,56,212 in 2005 to 8,64,550 in 2010 with an increase of 1,08,338 fishermen in this sector. As per the fisheries statistics by NFDB, there has been 17.64 per cent increase in the fisher population in the country from 2001 to 2011. India having third position in fish production after China and Indonesia and has second place in aquaculture production in 2013. The fish production of India and its growth performance has been depicted in the table 4.3 below:

Table 4.3

State-Wise Contributors of Marine Production in India ('000 tonnes)

Sl. No	State	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
1	Gujarat	733.82	747.33	721.91	765.9	771.5	774.9	783.72	786.09
2	Maharashtra	580.55	595.94	556.45	523.1	550.36	595.25	578.79	578.79
3	Karnataka	297.57	292.46	297.69	361.85	420.06	526.58	546.44	575.38
4	Kerala	636.89	677.63	667.33	865.99	698.85	681.61	693.21	633.49
5	Tamil Nadu	463.03	542.28	559.36	534.17	582.93	614.81	611.49	620.39
6	Andhra Pradesh	891.09	856.93	1,010.08	1,252.78	1305.86	1368.2	1603.17	1808.08
7	Odisha	325.45	342.04	349.48	374.82	382.55	386.19	381.83	410.14
8	West Bengal	1,250.00	1,359.10	1,447.26	1484	1517	1443.26	1472.05	1490.02
9	Puducherry	21.45	39.66	39.01	40.3	41.95	41.95	42.4	41.07
10	Goa	104.95	102.39	33.43	86.21	85.37	93.27	89.96	77.88
11	Daman&Diu	17.79	16.41	26.36	14.14	15.88	16.98	17.43	19.01
12	Andaman& Nicobar Islands	12.09	28.68	28.68	32.49	33.17	33.92	35.26	36.62
	India	3024.17	2919.5	2978.19	3103.84	3249.46	3371.75	3320.78	3443.11

Source: Handbook on Fisheries Statistics 2014, (Department of Animal Husbandry, Government of India, 2014)

4.2.2 Per Capita Fish Product Consumption

Fish and fish products have been indispensable diet of the people in Asia. One of the global concerns discussed by various forums has been food security, hence the contribution of fishery sector which provides cheap nutrient to the low-income group matters much. FAO estimated that 80 per cent of the fish production was used for human consumption. As per the household survey conducted by FAO in the Asia- Pacific, it was revealed that among the South region Sri Lanka ranked highest with 15.3 kg per capita and Pakistan with least consumption of 0.60 kg per capita (FAO, 2014). Table 4.4 indicates that fish consumption vary from region to region as the Lakshadweep and Kerala's per capita consumption found to be greater than the National figure.

Table 4.4
Monthly Per Capita Fish Consumption of Selected States & Union Territories

States/Union Territories	Per Capita Quantity Consumed in Kg/ Value Rs.				Number of Households per 1000 households reporting consumption of Fish	
		Rural	Urban	Rank	Rural	Urban
Lakshadweep	Quantity	4.367	1.2	1	851	815
	Value	80.96	78.64			
Kerala	Quantity	2.117	1.958	2	884	817
	Value	104.46	109.28			
Andaman Nicobar Islands	Quantity	1.353	1.2	3	851	938
	Value	80.96	78.64			
Tripura	Quantity	1.177	1.488	4	976	938
	Value	120.7	175.22			
Goa	Quantity	2.071	1.75	5	994	893
	Value	182.34	196.24			
All India	Quantity	0.269	0.238	-	282	209
	Value	18.18	20.74			

Source: Handbook on Fisheries Statistics 2014, Department of Animal Husbandry, Dairying and Fisheries, GOI.

4.3 Marine Fisheries Sector - A State Scenario

4.3.1 Socio-Economic Background of Marine Fisher Households

India claims to have halved the segment of people below poverty line from 45 per cent (404 million) in 1993-94 to 22 per cent (270 million) in 2011-2012. The 1.2 Billion population of India could be categorised into three, based on the depth of poverty experienced-Excluded (five per cent), impoverished (17 per cent) and vulnerable (34 per cent). Population unable to meet the basic needs were classified as excluded (poorest of the poor). The impoverished category of population, hope to have bare minimum for their sustenance but grouped below the poverty line. The third category of vulnerable population do not enjoy better standard of living, prone to shocks such as lost job or an illness and could be thrown into the state of extreme poverty and 44 per cent of population (Empowered group) have crossed the poverty line (Planning

Commission of India,2014). Hence, 21 per cent of the population in India still remains below the boundary of empowerment line. The quality of life or standard of living determines the level of poverty or welfare of a person (Wood & Shariff, 1997) In the Human Development Report 2005, the marine fisher community residing in the coastal villages had been described as an ‘outlier’ social group in Kerala (State Planning Board, Kerala, 2005).

4.3.2 Fisheries Population in Kerala

Kerala blessed with 520 km length of coastline, which constitutes 10 per cent of India’s total coast line, is stretched out to nine maritime districts. According to the 2011 census, there are 222 marine fisheries villages, which were distributed among the nine coastal districts accommodating 10.02 lakh of fisher population which accounts for 3 per cent of the State population. The estimated fisher folk population of Kerala during 2012-2013 is 10,00,662. The number of fisher folk in active fishing in the marine sector was 1,97,921 and in the inland sector 36,983. As per the recent data, fishing population reported to be 771249 and about 74100 people were occupied in fishery and allied activities (State Planning Board, 2014). Fishing industry in Kerala occupies a prominent role in the Indian economy. Among the maritime states, Kerala has the best fishery resources and brave fishermen. The fishermen of the State contributed 1.46 per cent to the Gross State Domestic Product in 2012-2013, which has dipped from 1.54 per cent in 2005-06 (Department of Fisheries, 2013).

Table 4.5
District-wise Distribution of Fishermen Population in Kerala
(2011 Census)

Sl. No	District	Marine				Inland				Marine & Inland
		Male	Female	Children	Total	Male	Female	Children	Total	
1	Trivandrum	61261	54120	48120	163501	439	509	434	1382	164883
2	Kollam	38210	32316	18940	89466	13215	12440	7979	33634	123100
3	Alappuzha (HIGHEST)	42352	38659	26193	107204	24491	23472	12627	60590	167794
4	Pathanamthitta	0	0	0	0	912	792	369	2073	2073
5	Kottayam	0	0	0	0	9611	9124	5685	24420	24420
6	Idukki	0	0	0	0	261	264	166	691	6917
7	Ernakulam	28126	26366	16463	70955	23258	22746	16428	62432	133387
8	Thrissur	27489	27697	15768	70954	7769	7104	4479	19352	90306
9	Palakkad	0	0	0	0	847	832	855	2534	2534
10	Malappuram	30472	24778	22647	77897	1771	1542	834	4147	82044
11	Wayanad	0	0	0	0	74	80	76	230	230
12	Kozhikode	37345	32575	24944	94864	4090	4309	3350	11749	106613
13	Kannur	20104	18269	15615	53988	2369	2505	1346	6220	60208
14	Kasargod	16781	15844	9795	42420	386	366	170	922	43342
	Kerala	302140	270624	198485	771249	89085	86085	54798	230376	1001625

Source: Directorate of Fisheries, Government of Kerala Economic Review 2012

Table 4.5 depicts that the density of fisher population in Alappuzha is highest among other districts and in the case of marine fisher population, Alappuzha stands second after Thiruvananthapuram.

4.3.3 Fishery Sector and Employment Generation

The significance of the industry becomes very crucial in the context of the NSSO 68th survey report in 2010-2011, as the unemployment in Kerala is very high, 256 adults out of 1000 are unemployed as Kerala ranked third after Nagaland and Tripura. As per the recent Report on Kerala Migration Survey

2014, the unemployment rate of population in Kerala is 7.2 in 2014 though declined from 10.5 in 2011 (GOI, 2014; Zacharia & Rajan, 2014). The fisheries sector is one of the significant employment providing sectors in the State, as it provides employment to 3.52 lakh people directly or indirectly. It also provides employment to a large segment of the society (6.6 lakh) engaged in ancillary activities and it is about 2,24,606, of which 1,40,222 are active fishermen, 71,074 in secondary activities (allied workers) and 13,310 in tertiary sector (middlemen and boat owners). In the context of emerging food insecurity, fisheries sector could offer cheap protein to the people of the State and the average consumption of fish by the people of Kerala is 23.5 Kg per annum against National average of 9.4 Kg per annum (GOI, 2014).

4.3.4 Export of Marine Products

Kerala has been the major exporter of marine products in the country contributing 18 per cent of the total quantity exported and the share in value constituted 18 per cent of the total value exported. Kerala's prominent species of exports have been frozen shrimp, frozen fish, frozen cuttle fish and frozen squid. Frozen shrimp constituted 80 per cent of our marine product export earnings. Besides earning foreign exchange, marine export sector provides 250-300 days employment to women in the coastal areas. Ninety per cent of the work force in shrimp peeling has been women; inspite of the unhygeinic work place and poor payment, it has become an alternative source of income for the fisher households in Kerala, especially in Alappuzha. (Dhanya, 2013). Table 4.6 portrays the marine product export of India and the contribution of Kerala.

Table 4.6
Export of Marine Products India and the Contribution of Kerala

Year	India				Kerala				% Share of Kerala over India	
	Quantity (Tonnes)	Growth (%)	Value (Crore)	Growth (%)	Quantity (Tonnes)	Growth (%)	Value (Crore)	Growth (%)	Quantity	Value
2004-05	461329	...	6646.69	...	87378	...	1158.07	...	19	17
2005-06	512163	11.02	7245.29	9.01	97311	11.37	1257.65	8.60	19	17
2006-07	612643	19.62	8363.52	15.43	108618	11.62	1524.12	21.19	18	18
2007-08	541701	-11.58	7620.93	-8.88	100319	-7.64	1430.95	-6.11	19	19
2008-09	602834	11.29	8607.95	12.95	100780	0.46	1572.18	9.87	17	18
2009-10	678436	12.54	10048.52	16.74	107293	6.46	1670.02	6.22	16	17
2010-11	813091	19.85	12901.46	28.39	124615	16.14	2002.1	19.88	15	16
2011-12	862021	6.02	16597.23	28.65	155714	24.96	2988.34	49.26	18	18
2012-13	928215	7.68	18856.26	13.61	166399	6.86	3435.85	14.98	18	18
2013-14	983756	5.98	30213.26	60.23	165698	-0.42	4706.36	36.98	17	16

Source: Kerala Fisheries Statistics, Various issues, Directorate of Fisheries, Kerala and MPEDA Export statistics

4.3.5 Capital Intensive Marine Fishery

Marine fishery sector has under gone a sea change in terms of fishing technology and fishing methods since 1952-53 with the Indo-Norwegian Project implemented in Kerala. Later, experimentation with crafts and gears were on. As the competition surged with the Mechanised sector, the traditional sector moved from *catamaran* to dough out canoes and then in 1985 tried with plywood vessels fitted with Out Board Motors and later inboard motors with very high Horse Power. Technologically updated vessels and gears have become criteria for getting crew for fishing units. It has been observed that owner fisherman is the one who holds the responsibility of finding the required finance for the next voyage and even in the case of collective ownership, at

times one or two fishermen of the fishing units have to deal with the debtors and crew fishermen could go home without any debt but at least with bata.

Financial requirements of owner cum fishermen for fishing could be classified into three. Firstly, the huge initial capital investment for the crafts, gears and other accessories. Then the daily operational expenses for fuel, food, transportation if the fishing ground is far away from residence and the repair maintenance of engine and replacement of nets and bata for the crew. Another major annual requirement which has been incurred is during the off-season repair and maintenance of the craft and nets. It created a situation where a fishing unit has become indebted to money lenders and merchants before it could commence its operations. In early 1970s, financial institutions had given loans to purchase boats and fishing inputs under the refinancing scheme of NABARD with the single objective of relieving the fishermen from the bondage of money lenders and commission agents but they were dependent on the money lenders for the working capital and off-season financial requirements. This implies that fishing units were indebted to formal institutions and informal lenders. Fishermen showed more commitment to the money lenders who were 'ever helpful' during the season and off season providing adequate money when required with hassle-free terms such as non-insistence of margin money, security and fixed instalments etc. Informal lenders followed various modes to ensure the repayment of advances, like pledging the future catch, pledging the kerosene permit, paying 10-20 per cent earnings as commission, selling a few shares of profit to the money lenders etc. Hence, the repayment of the institutional finance became difficult for fishing units and gradually formal institutions withdraw from this risky sector. Table 4.7 gives an idea of the types of fishing crafts owned and used in Kerala particularly in Alappuzha, in focus area. It also reveals that collective ownership of crafts exists more in Mechanised sector compared to Motorised and Non-Motorised sectors.

Table 4.7
Distribution of Crafts Owned by Fishermen in Kerala for the Year 2010

Crafts Owned by Fishermen (100% Ownership)			Crafts Owned by Fishermen Collectively(<100 %Ownership)		
A. Mechanised	Alappuzha	Kerala	Mechanised	Alappuzha	Kerala
Trawlers	13	370	Trawlers	14	439
Gillnets	1	96	Gillnets	7	39
Purse-Seiners	20	36	Purse-Seiners	12	56
Dolnetter	0	68	Dolnetter	...	46
Ring Seiners	31	179	Ring Seiners	147	2869
Liners	3	14	Liners	2	30
Others	0	17	Others	3	19
Total	68	780	Total	185	3498
B.Out board vessels			Out board vessels		
Catamarans	3	332	Catamarans	0	32
Dugout Canoe	27	171	Dugout Canoe	19	49
Plank Built	346	1435	Plank Built	637	1965
Plywood Boat	322	3017	Plywood Boat	194	745
Fibre Glass boat	286	1594	Fibre Glass boat	247	1989
Ferro Cement Boat	2	12	Ferro Cement Boat	3	6
Carrier Boat	15	41	Teppa	9	31
Teppa	7	19	Others	4	25
Others	7	50	...	...	.....
Total	1015	6671	Total	1113	4842
C.Non- Motorised			Non- Motorised		
Thermocole	1271	1324	Thermocole	..	..
Dugout Canoe	7	676	Dugout Canoe	..	..
Catamarans	3	1812	Catamarans	..	..
Plank Built	475	2468	Plank Built	..	..
Ferro Cement Boat	1	50	Ferro Cement Boat	..	..
Outrigger Canoe	0	6	Outrigger Canoe	..	..
Masula Boat	0	9	Masula Boat	..	..
Others	9	189	Others	..	..
Total	1766	6534	Total	..	..

Source: Marine Fisheries Census-2010 Kerala, CMFRI.

4.4 Institutional Mechanism to Support Marine Fisheries Sector

Fisher community has been promoted and supported by specialised institutions set up by Central and State Governments. Institutional support for the fisher community has gone through a wide transformation as the requirement of the sector cropped up. There are institutions to take care of the fisheries sector from culturing the fish to exporting the fish and fish products. It is important to look into the support system that exists exclusively for the fisher community at National and State levels. Therefore, the researcher presents a brief overview of the promotional and developmental schemes implemented by these agencies at National and State levels.

4.4.1 National Level

India's Fisheries Sector falls under the preview of Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries, Government of India. Though Indian fisheries sector has been playing a crucial role in Indian economy in terms of employment generation, earning of foreign exchange, it does not have a ministry of its own and at times it was observed that promotional, developmental and management efforts are scattered and left to ruin. There are number of national agencies for fisheries development under Ministry of Agriculture, Government of India, New Delhi, Department of Animal Husbandry, Dairying & Fisheries, prominent ones are Central Institute for Fisheries Nautical & Engineering Training for Coastal Engineering (CIFNET), Central Institute for Coastal Engineering for Training for Fisheries (CICEF), National Institute for Fisheries Post Harvest Technology and Training (NIFPHATT) Fishery Survey of India (FSI). Recently established National Fisheries Development Board (NFDB) under the AP Societies Registration Act 2001, would coordinate the activities of the various agencies working for the promotion of fisheries sector and encourage Public Private Partnership (PPP) in this sector (Mathew, 2006). Fisheries promotional and welfare schemes have been funded by national agencies like National Co-operative Development Corporation (NCDC), National Backward Classes

Finance Development Corporations (NBCFDC) and National Minorities Development & Finance Corporation (NMDFC).

4.4.2 State Level

Fisheries Sector contributes 1.46 per cent of the GDP to the State of Kerala. The Department of Fisheries, Kerala, as the apex institution coordinates the promotional and developmental programmes of Government of Kerala exclusively for the fisher population is headquartered in Thiruvananthapuram. Specialised agencies functioning under Department of Fisheries are:

1. Kerala Fishermen's Welfare Fund Board (KFWFB)
2. Kerala State Cooperative Federation for Fisheries Development Limited (Matsyafed)
3. Agency for Development of Aquaculture, Kerala (ADAK)
4. Fisheries Resource Management Society (FIRMA)
5. National Institute of Fisheries Administration and Management (NIFAM)
6. Fish Farmers Development Agency (FFDA)
7. Marine Enforcement (ME)
8. Kerala State Coastal Area Development Corporation (KSCADC)
9. Society for Assistance to Fisherwomen (SAF)
10. Harbour Engineering Department (HED).

4.4.2.1 Department of Fisheries

Department of fisheries coordinates the promotional activities and developmental schemes for fisher community in Kerala through its Deputy Directorate established in all the coastal districts. It is an extended arm of the Department of Fisheries, which directly deals with the fisher households. A few schemes implemented under its direct supervision are given below:

1) Housing scheme:

Under this schemes ₹2 lakh per beneficiary was given as grant and the amount has been distributed to the beneficiaries in the form of a cheque. An

allegation raised against the implementation of the scheme is that beneficiaries are selected by lottery method.

2) Saving Cum Relief Scheme (SCRS)

The Scheme intends to provide relief to fisher households during the lean period and promote thrift among the fishermen. Every fisherman or woman registered under Kerala Fisheries Welfare Fund Board are eligible for the grant of ₹1800/-, it has been the first welfare scheme routed through bank accounts with the sole intension of including the fisher households to the formal banking institutions since 2010-11.

3) Lump-sum Grant for the Children of Fishermen

Department of Fisheries directly implements the 'Lump-sum grant' to the children of fishermen. It had been reported that the objective of the scheme do not meet the purpose. The financial assistance has been received by the students, after meeting the educational expenses of the students sourced from informal sources.

4) Rescue Operations

Ensuring Sea safety has been considered as the integral part of fisheries management. Commercial fishing has increased the fatalities in fishing occupation (FAO, 2010). Kerala has only five rescue stations to undertake search and rescue operation in the territorial water and a little farther to the Exclusive Economic Zone (EEZ). For instance, in any incidence of mishap in Alappuzha, the State Marine enforcement wing has to reach either from Ernakulam or from Kollam.

5) Society for Assistance to Fisher Women (SAF)

SAF was initially implemented in the 16 Coastal Panchayaths of Alappuzha, which were declared as Tsunami affected area by the Government of Kerala. The scheme focused on the promotion of small scale ventures of women groups in the region (Department of Fisheries, 2010).

4.4.2.2 Kerala State Cooperative Federation for Fisheries Development Ltd (Matsyafed)

A cooperative movement committed for the socio-economic and cultural development of the fisher community in Kerala was established in the year 1984. Matsyafed, has played very significant role in the areas of promotion, procurement, processing and marketing of fish and fishery products with a sole focus to better the per capita income of the fisher households, who contribute much to the GDP of the state. The approach adopted by Matsyafed to combat the issues and challenges of fisher community was that of a 'Four Wheel Drive' (Matsyafed, 2009), concentrated on the productivity, credit, sales and providing suitable technology needed to meet the changing requirements that emerge in the fishing activities. The well-structured eight functional divisions have been steered by the Board of Directors, comprised of chairman and the 13 board of directors and representatives from Government of Kerala, Department of Fisheries, National Cooperative Development Corporation (NCDC) and Primary fisheries cooperative societies. Matsyafed has 10 district level offices, to facilitate and coordinate the programmes and schemes implemented at the district level, 53 Cluster Offices and 666 Primary Fisheries Cooperative Societies. The schemes and programmes of Matsyafed for the fisher community have been articulated through ten divisions such as Developmental Programmes, Employment Generation Programmes, Women Empowerment Programmes, Commercial Activities, Welfare Activities, Centrally sponsored Schemes and Plan Schemes, Aquaculture, Engineering, Motivational Programmes and Extension Activities. The major activities pertaining to the marine fisher households directly have been discussed in detail, are given below:

A. Developmental Programmes

The developmental programmes have been mainly aimed at providing assistance to the fishermen from procurement of fishing equipments to the marketing of fish produced. A brief sketch of the various schemes implemented

under the banner of developmental programmes with special attention to their linkage to the formal banking institutions are given below.

A.1 Bankable Scheme

Realising the inadequacy of the financial assistance offered through the Integrated Fisheries Development Project for the purchase of fishing inputs, Matsyafed decided to route institutional credit (Commercial Banks and NABARD) to the traditional fisheries sector through Bankable Scheme since 1988-89. The scheme envisioned that 25 per cent of the loan availed by fishermen from banks for purchasing inputs would be provided as subsidy, the subsidy amount would be directly released to the bank by Matsyafed. As for 2012-2013, ₹333.30 lakh has been provided as subsidy to 1633 fishermen who procured institutional credit for purchasing fishing inputs.

A.2 Integrated Fisheries Development Project (IFDP)

As the fisheries sector turned into capital-intensive sector, it became very difficult for the traditional fishermen to have ownership of fishing implements. The IFDP scheme meant for the purchase of fishing implements like Crafts, Out Board Motors and required Webblings assisted and to improve the infrastructure facilities for fish marketing & processing and to extend working capital assistance to fish vending. Since the inception of National Cooperatives Development Corporation in 1984, it has been implemented to fishermen as a loan with subsidy. The scheme has been implemented through the Primary Fishermen and Development and Welfare Cooperative Societies affiliated to Matsyafed. When the loan under this scheme provided to a group of fishermen, the loan amount would be limited ₹25 lakh. The funding pattern of the loan amount would be, 10 per cent beneficiary contribution, 22.5 per cent as subsidy and actual loan amount was 67.5 per cent with an interest of 12.5 per cent repaid within the period of three years. The loan amount has not been paid directly to fishermen in cash but in the form of required fishing inputs by the Matsyafed to ensure the productive use of the loan amount- if boat, it was paid '*malickaran*' (one who makes boat) and in the case of gears,

money was paid to the Vyasa stores (a commercial unit of Matsyafed). About 83301 fishermen benefited out of this scheme with an investment of ₹ 21288.28 lakh. An evaluation and impact of the scheme sponsored by NCDC, found that the scheme could make drastic changes in the economic lives of the fishermen and fish vendors and at the same time it was reported that loan amount provided under this scheme was insufficient (Trivandrum Management Association & Matsyafed, 2006). But the scheme was not free from drawbacks, it was observed that even after repaying the 67.5 per cent of the loan amount by the concerned fishermen to the societies taking three years, the subsidy amount, which should be released by the government to the society might not reach even after the repayment period. And there were cases where fishermen were charged 13 to 14 per cent interest for the same scheme in different societies.

A.3 Modernisation of Country Crafts

The modern fishing sector is characterised by information about the potential fishing ground and the market with high price of fish, prompt the traditional fishermen to make huge investment in better crafts and powerful engines to reach first to the fishing ground and back to the beach. Modernisation/Motorisation of country crafts scheme has been implemented through Matsyafed from 1988-89. Under this scheme, an amount of ₹10000/-, has been provided to a fishing unit desiring to buy or replace with Out Board Motors (OBMs) below 10 HP, was eligible for subsidy, provided the OBMs engine bought from the Matsyafed. Though, decision was taken to enhance the subsidy into ₹30000/-, the subsidy granted was only ₹10000/- even as on December 2015. The subsidy amount was released to the fishing unit in the form of bank cheque. The current market price of Yamaha outboard engine with 9.9 HP costs ₹1,12,496/- and that of Suzuki OBMs with same HP costs ₹1,05,913. As for 2012-13, this scheme has been beneficial to the 8020 fishermen groups and the subsidy released was ₹694.75 lakh (Statistical Cell, Department of Fisheries, Kerala, 2013), while 30776 registered non- Motorised vessels are still operating in Kerala.

A.4 Fish Auction at the Beach

Beach level fish auction was commenced to ensure fair and just reward for the hard labour of traditional fishermen who risk their lives for livelihood. As per the study conducted by NCDC in 2006, 63.8 per cent of the beneficiaries found the organised beach level auction 'good', 29.3 per cent rated as 'somewhat good' and only 6.9 per cent responded as 'Not good'. It was considered as a proactive step to free the fishermen from the exploitation of the middlemen and auctioneers who had established a right over the primary sale of the fish catches. The federation gave priority to the traditional sector in organizing beach level auction as it contributed 40 per cent of the total fish landings in the State. The beach auction system envisioned to evolve a standard practice in conducting the auction throughout the State and ensure better value for the catch.

The societies have appointed the auctioneers to conduct auction of the member fishing units at the beach. These registered auctioneers were expected to conduct the fish auction in a transparent manner, fetch a competitive price prevailing in the market and the sale proceeds are remitted to the primary society along with catch details. The fishermen group could collect the sale proceeds from the society after deducting the auction commission, loan repayment amount, and savings. The total deduction is limited to five per cent of the proceeds, of which one per cent goes to auctioneer, one per cent to primary cooperatives, one per cent to Federation, and two per cent is credited to the savings account of the fishermen group.

The beach auction system turned out to be an effective loan recovery mechanism of the primary societies. The percentage of repayment was between 75 per cents to 90 per cent for the year 2011-2012 in Alappuzha. It also has succeeded to introduce a saving habit among the fishermen. Irrespective of the seasonal and irregular income, the fishermen were able to save and could be affirmed that the best way to save was to deduct from the income source. At the end of the year, the savings would be shared among the fishermen as bonus

during the festival seasons. But the amount of savings has to be augmented to an extent that the fishermen were able to repair and replace their vessels after a few years without depending upon the money lenders, making the beneficiary contribution from their own savings. The present position of the beach level auction in Kerala has been depicted in Table 4.8

Table 4.8

Details of the Auction of Traditional Crafts under the Matsyafed in Kerala

Sl No	Year	No. of Fishermen Participating in Auction	Quantity Auctioned in (Tonnes)	Fish Landing MT.Tonnes	Value Auctioned in Lakh
1	2002-03	28587	30854	603286	5113
2	2003-04	33217	32169	608525	6557
3	2004-05	34387	32390	601863	6086
4	2005-06	35737	31156	558913	6553
5	2006-07	35832	44481	598057	8954
6	2007-08	36360	49944	586286	10271
7	2008-09	40736	56407	583150	12434
8	2009-10	42457	72573	570013	18185
9	2010-11	46149	91724	560398	21736
10	2011-12	44079	97956	553177	26207
11	2012-13	44856	108773	8.4Lakh tonnes	32895

Source: compiled from various issues of Marine Fisheries Statistics, Department of Fisheries, Kerala and CMFRI, Cochin.

Table 4.8 presents the snapshot of the fish auction undertaken by the Matsyafed to ensure fair price for the fishermen. A micro analysis reveals that the beach auction has become ineffective. There are 666 primary fisheries cooperative societies functioning in Kerala as per the report of NCDC 2014-15, but 240 primary cooperative societies alone are participating in the beach level auction conducted by Matsyafed. Matsyafed conducts beach level auction mainly for Motorised and Non-Motorised sector fishing units. The difference in the volume of fish landing and the volume of fish auctioned depicts the effectiveness of beach level auction organised by Matsyafed. CMFRI Annual Report (2011-2012) revealed that 73.4 per cent of the fish landing is from pelagic fishing, where Motorised and Non-Motorised crafts are

engaged. But the beach level auction by Matsyafed is found to be less than five of the total fish landing (CMFRI, 2012-2013).

Table 4.9
Fish Auction by Matsyafed –An Evaluation

Fish Auction Details	2009-10	2010-11	2011-12	2012-13
Number of Active Fisheries Development & Welfare Co-Operative Societies Affiliated to Matsyafed	654	666	666	666
Number of Societies in Auction (Traditional Craft)	231	242	237	252
Number of Societies Participating in Auction (Mechanised Crafts)	6	3	5	1
Total Societies Participating in Auction	237	247	242	253
Percentage of Societies Participating in Auction	(36.2)	(36.7)	(36.3)	(37.9)
Number of Members Participating in Auction	42732	46239	43899	44906
Per Capita Income of Members in Traditional Crafts (Auction Value/ Number of Members)	42832	47101	59567	73334
Per Capita Income of Members in Mechanised Crafts (Auction Value/ Number of Members)	17560	47038	59454	73275
Marine Fish Landing (in Tonnes)	570013	560398	553177	530638
Quantity of Fish Auctioned (in Tonnes)	72671	91739	97956	108786
Per cent of Total Fish Landing Auctioned by Matsyafed	12.7	16.4	17.7	20.5

Source: Compiled from Various Issues of Kerala Marine Fisheries Statistics, Department of Fisheries.

A detailed analysis showed that 36 per cent to 38 per cent of the fishermen groups alone were participating in the organised beach level auction conducted by primary cooperative societies affiliated to Matsyafed. The prominent reasons for the distressed sales could be 1) the fishermen units might be indebted to commission agents and have taken loan on the security of future catch. 2) The auctioneers who were appointed by the primary cooperative societies themselves were commission agents who lend money to the various fishing units, so, there exists a secret tie-up in fixing the price of the catch rather than getting the fair price for the catch 3) a lack of monitoring from the part of the responsible persons. 4) Even the telecommunication system has become a disaster to the fishermen in selling the product because before they

could reach to shore the information about the quantity and the types of fish have been conveyed to agents at the shore, which give them an opportunity to fix the price in advance. 5) During the auction the competitive price was not fixed but a predetermined price was received as per the unwritten rule on the beach that no outsider could participate in the auction; agents alone could bid the price. The price of the fish get changed by minutes depending on the supply, perishable nature and transportation facility, peak market hours and weather - cost incurred for fishing activities is same, efforts invested for fishing is also equal but unfair price was received. This situation prompt the fishing units to use more carrier vessels to reach fast to the fishing ground and to the shore, using two or three OBMs with high HPs and it resulted high cost in fishing and erosion of the profits of the fishermen. But the money lenders and commission agents who play with the lives of poor fishermen alone reap the benefits of their hard labour. Hence, the situation prompts to think of the necessity of support price/floor price for various species of fish.

A.5 Distribution of Suitable Components of Fishing Gears

Since 1996-97, this scheme offered financial assistance to the traditional fishermen to purchase required fishing gears suited for the fishing activities. As per the scheme, a subsidy of ₹6000/- per fishermen has been distributed to one who own craft fitted with Out Board Motors with the HP below 10. The financial assistance under the scheme would be enjoyed only once by a fisherman. Subsidy has been paid in cheque, routed through primary cooperative societies. As on 2012-13, subsidy of ₹279.25 lakh has been distributed to 4640 beneficiary groups.

A.6 Fishermen Debt Relief Scheme

A study was conducted by the Department of Fisheries, Kerala, among the 747 fishermen just before the Kerala Debt Relief Commission Bill in 2008 (Department of Fisheries, Kerala, 2008). It was found that fishermen have borrowed from Government Institutions like Department of Fisheries, Matsyafed, Housing Board and HUDCO. They were also indebted to scheduled

commercial banks, money lenders, Karayogangal, commission agents, auctioneers and even from blade mafias. Out of the seven districts, Malappuram has highest number of fishermen indebted to banks and fishermen in Ernakulam district was indebted to cooperative societies. Indebtedness of fishermen in Kollam was to Matsyafed. Thiruvananthapuram district was found to have indebtedness to money lenders and individuals. The analysis based on the purpose of the loan availed, found that most of them have taken loan for housing purpose followed by purchase of fishing inputs. In the case of repayment, out of the 82 respondents who borrowed from banks have repaid 70-80 per cent of the loan and the least repayment was observed to Matsyafed and money lenders.

As per the report submitted by Kerala State Fisheries Debt Relief Commission to provide debt relief to the fishermen who borrowed from cooperative societies registered under Kerala Societies Act 1969, the debt assessed was ₹115,03,49,024 from 421 cooperative societies, taken by 48,355 members.

Table 4.10
Debt Relief Scheme under Different Phases in 2008-09

Debt Relief Scheme 2008-09			
Particulars of the Debt Waived off	Amount (Crore)	Number of Beneficiaries	Group Benefitted
Phase I Financed from (NCDC &FDWCS)	115.03	48355	421
Housing Scheme	11.82	9891	--
Phase II (Primary Fisheries Societies)	8.18	8455	245
Financed from (NBCFDC & NMDFC)	3.59	1077	--
Phase III (NBCFDC & NMDFC)	4.44	1997	--
Financed from Societies Own Fund	9.32	18623	282
Total	152.38	88398	948

Source: Marine Fisheries Statistics 2013, Department of Fisheries, Kerala.

A.7 Value Addition & Marketing

Realising the hurdles faced by fish vendors who go from door to door on two wheelers and cycles selling fish, a scheme was introduced to establish model fish marketing centres in all the districts. The project out lays for the Phase I and Phase II were 99.94 lakh each.

A.8 Deep Sea Fishing

Marine fish stock in many parts of the globe have been exploited beyond recovery. The situation is not different in Kerala coast. Promoting to explore the untapped potential of the deep sea and reduce the overcrowded situation of the territorial fishing; this scheme was implemented under the special project of Hon'ble President of India, titled as 'Kerala Mission'. This scheme envisaged to assist fishermen groups consisting of 50 members who were willing to undertake fishing activities using one mother vessel with 6 carrier vessels. The scheme provided financial assistance to convert the existing crafts into tuna long liners, to give training for deep sea fishing, developing storage and marketing facilities and to acquire electronic and safety equipments. The project lay out was 488 lakh and 400 crore was received as central Government subsidy to the state government. But 13 fishermen groups in Thiruvananthapuram, Alappuzha, Kollam and Thrissur who benefitted this scheme, reported that the project was utter failure. Another serious issue faced by fisheries sector is the overfishing and over exploitation. This would force fishermen to move to the deep sea but the investment and the skill required are at stake. It is the need of the hour to emulate the success stories of foreign countries who are engaged in deep-sea fishing and export with the catch from the deep sea itself. Our younger generation fishermen should be equipped to face this emerging challenge.

B. Employment Generation Programmes

Employment generation programmes are aimed at enhancing the earnings of the fisher households promoting them to undertake self employment activities with the help of the institutional finance.

B.1 Term Loans Distributed

The Self Employment Scheme implemented with the financial assistance of NBCFDC, and NMDFC which intended to extend financial assistance to the members of the fishermen families to commence a self employment. The funding pattern followed in this scheme was 85 per cent subsidy from NBCFDC/ NMDFC, 10 per cent of the loan would be contributed by Matsyafed and only five per cent from the beneficiary. Loans under scheme have to be secured with either salary certificate or land document as collateral. Initially these loans were provided to individuals for commencing any employment of their own and gradually extended to fishermen who wanted to purchase fishing inputs. The maximum loan amount permitted to individual for self employment is ₹50000 per person with six per cent interest, repayable within five years (₹920/- per month). Loans are granted for purchasing fishing input; the maximum loan amount would be limited to 50 per cent of the asset valuation, repayable within three years. The term loans distributed over the period 2005-06 to 2012 to 2013 by NBCFDC and NMDFC are exhibited in tables 4.11 and 4.12 respectively.

Table 4.11

Term Loans Disbursed for Self Employment Financed by NBCFDC

Year	Amount Received (₹ In Lakh)	Details of Amount Distributed (₹ in lakh)				No. of Beneficiaries
		NBCFDC's Share	Matsyafed Share	Beneficiary Contribution	Total Amount	
2005-06	13.11	13.11	1.54	0.77	15.42	36
2006-07	158.93	158.93	18.7	9.35	186.98	296
2007-08	200	200	23.58	11.79	235.37	347
2008-09	200	200	23.58	11.79	235.37	376
2009-10	600	600	70.74	35.37	706.11	3605
2010-11	600	600	70.6	35.3	705.9	1539
2011-12	300	300	35.3	17.65	352.95	343
2012-13	1000	1000	117.65	58.82	1176.47	632
Kerala	4197.94	4197.94	490.78	246.28	4935	13588

Source: Marine Fisheries Statistics, Department of Fisheries, Thiruvananthapuram.

Table 4.12**Term Loans Disbursed for Self Employment Financed by NMDFC**

Year	Amount Received (₹ in Lakh)	NMDFC'S Share	Matsyafed Share	Beneficiary Contribution	Total Amount	No. of Beneficiaries
2005-06	...	...	...	...	...	...
2006-07	180	180	21.18	10.59	211.17	323
2007-08	300	300	35.29	17.65	352.94	537
2008-09	150	150	17.65	8.82	176.47	299
2009-10	250	250	29.41	14.71	294.12	369
2010-11	413.91	413.91	48.7	24.35	486.96	597
2011-12	350	350	41.18	20.58	411.76	426
2012-13	350	350	167.6	20.6	411.78	300
Kerala	2849.06	2849.06	335.2	167.6	3351.86	6202

Source: *Marine Fisheries Statistics, Department of Fisheries, Thiruvananthapuram.*

B.2 Micro Finance Loans

MNMDFC launched this scheme from 1998-1999 for the members of the Self Help Groups belonging to the poorest of the poor among the minority communities and backward classes and for families with family income less than ₹55000/- in urban areas and ₹40000/- per annum in rural areas. Matsyafed implemented this scheme from 2005-06. The loan has been sanctioned to the SHGs affiliated to Matsyafed who are ready to pay 10 per cent of the loan as the beneficiary contribution. The loan amount at the first phase would be ₹10000/- per individual, subsequently ₹15000/- and ₹20000/-. The interest charged for the loan was only six per cent, repayable within 24 months. The loan amount would be credited to the bank account of the respective SHG opened in a nationalised bank. This scheme has been availed by 161461 members belonging to 1643 SHGs and the fund utilised was ₹ 24913.35 lakh as on 31st March 2013.

B. Women Empowerment Programme

Matsyafed offers a number of schemes for empowering the women of the fisher households like Ornamental Fishery Development schemes for the

women belonging to the backward classes of the coastal districts. It also provides financial assistance to undertake production and marketing of value added fish and fishery products. The financial assistance availed by women of marine fisher households are presented below:

C.1 Interest Free Loans

Interest free loan scheme commenced in the year 2008-09 providing working capital to the fish vending women with the intension of curbing the outflow of hard-earned income to money lenders, who charge exorbitant interest ranging from 24 per cent to 120 per cent for the loan. As per the scheme, a group of 5 fish vending women received in the initial phase the loan amount of ₹5000/- and in the subsequent phases the loan amount would be enhanced to ₹10000/-, ₹15000/- and then ₹20,000/- on closure of each loan availed with the loan repayment period of one year. Interest Free Loan was financed by NBCFDC/NMDFC and the Government of Kerala. Until an year ago the loan amount was directly paid to the beneficiary, but now it is paid through bank account of the beneficiary. So far, 55,508 members under 274 societies have enjoyed this scheme and the fund utilization of the scheme as on March 31, 2013 was ₹11066.66 lakh.

C.2 SHGs & Micro Finance

One of the several challenges faced by the fisher households were non-availability of the institutional credit for meeting even the life-cycle financial needs. Matsyafed addressed this issue by the formation of the SHGs groups to inculcate thrift and savings among the fisher households and to save them from the debt trap of money lenders and mushrooming microfinance institutions who charge 24 per cent to 60 per cent interest for the loan taken for life cycle needs. The scheme is hassle-free and takes into account the capacity and financial behaviour of the members. Under the scheme, the phase of financial assistance was limited to ₹5000/- repayable within 18-24 months. Based on the credit score acquired by the activity group, a second phase of financial assistance of ₹15,000/- would be sanctioned. Now, the fourth phase of ₹20000/-has been

distributed to members. As per the recently published data by Department of Fisheries in 2013, ₹24913.35 lakh has been disbursed to 161461 members belonging to 362 societies under this scheme.

C. Commercial Activities

Matsyafed has been undertaking commercial activities to ease the livelihood struggles of fishermen by providing quality fishing gears, OBMs, lubricant oil at a fair price. But the fishermen were found dissatisfied about the quality of the gear and the OBM sold by Matsyafed. Till recently, the OBMs provided was that of Suzuki Motors from Japan and due to the frequent repairs, fishermen were compelled to procure Yamaha OBMs from the private parties paying high price compared to OBMs provided by Matsyafed. And now, Matsyafed has given the choice to choose either Suzuki Motors or Yamaha engines. When the original purpose of providing quality fishing inputs to the fishermen at lower price should be kept in mind while insisting the fishermen to procure fishing implements from the commercial units of Matsyafed in order to avail the subsidy offered under various schemes implemented by national agencies, governments, and federations.

E. Welfare Activities

E.1 Fishermen Personal Accident Insurance Scheme

The scheme provides compensation of Rs. 5 Lakh to the dependents of fishermen who die in accidents. It was ₹3,00,000 till 2014-2015. In addition to that if the fishermen having school-going children, two of them would get ₹ 5000 per child and ₹2500 for the ambulance expenses. If the accident leads to disability of 50 per cent or more the compensation will be ₹2,50,000/- along with hospital expenses limited to ₹75000/- or the actual expense whichever is less. The compensation under the scheme would be disbursed in the form of cheque.

E.2 Matsyafed Input Security Scheme (MISS)

It is a scheme to provide compensation for the loss due to accidents and natural calamities to the crafts and engines based on the amount of loss incurred. One of the pre-requisites insisted in this scheme is that the fishing implements should be acquired under Matsyafed schemes and have taken insurance for the fishing implements at the time of purchase of vessels and engines. Compensation amount is disbursed in the form of cheque. So far Matsyafed has assisted 258 beneficiaries with fund amounting to ₹ 57.87 lakh.

4.4.2.3 Kerala Fishermen's Welfare Fund Board (Matsyaboard)

Safety nets, stands for social security measures and schemes devised to mitigate the possible adverse effects of reform measures on the poor, a kind of social protection provided to the vulnerable sections of the society to support and to include them in the process of development. Generally it is translated in the form of subsidy for the basic life cycle requirements and special schemes for the aged people, facing disability due to accident and other reasons like unemployment, sickness and natural calamities (Chu & Gupta, 1998). The World bank defined safety nets as non-contributory measures fashioned to provide regular and predictable support to the vulnerable sections of the society (World Bank, 2015). Kerala Fishermen's Welfare Fund Board came into existence in 1986 as a formal social security institution to implement the welfare schemes framed for the registered fishermen and women of Kerala realising the risk they assume in this sector and the socio-economic backwardness they face due to the irregular/seasonal nature of the occupation. Matsyaboard has its headquarters in Thrissur and to coordinate the state level activities, it has five regional offices in five districts in Kerala. As a last link to the target group, it has 54 fisheries offices at lower level.

Matsyaboard's safety nets comprised of schemes for fishermen's medical care, life insurance, maternity benefit, promoting education of the fishermen's children, employment injury pension, old age pension and props to meet some of the life-cycle needs and emergency needs of the family. Over the

years, Matsyafed has implemented various welfare schemes. John Kurian and Antonyto Paul classified them as protective schemes and promotional schemes. These social security schemes were framed after the recommendation of the 102nd convention of International Labour Organisation on Minimum Standard for Social security Security(ILO, 2012). Matsyaboard commenced with just two welfare schemes, but at the time of its silver jubilee, it could implement 26 schemes (Mohankumar, 2011). The major source of finance for implementing these schemes are contribution from the fishermen, fishing input owners and sea food exporters. (Department of Fisheries,Kerala). Unfortunately, the reluctance shown by the sea food exporters slow down the smooth implementation of the welfare meausres for the fishermen. From 1999, Matsyaboard has taken up an added financial burden of extending some of the welfare measures for the allied workers who share the ripple effects of resource depletion and reduction in the fish production together with their counter parts. Table 4.13 presents the coverage of the safety net spread by the Matsyaboard including the newly installed schemes under Aam Admi Bima Yojana (AABY) intended to provide social safety offered for the households falling below the poverty line and other identified household marginalized groups and rural landless households. Under the scheme, a few more measures came into force from 01.01.2013.

Table 4.13
Social Safety Net of Matsyaboard

Year of Commencement	Schemes Implemented	Amount(Old figures in Bracket)	Routed through
1986-87	Group Insurance		
	Accidental Death /Missing of Fishermen (revised)	• 500000/-(3,00,000)	Cheque
	Funeral Expenses of the Fishermen	• 2000/-	Cheque
	Permanent Total Disability(revised)	• 5,00000/-(2,50000)	Cheque
	Permanent Partial Disability(revised)	• 2,50000/-(1,50000)	Cheque
	Medical Expenses(revised)	• 25,000/-(20,000)	
	Financial Assistance for Children at the Death of the Fisherman	• 5000/- each for two children	Cheque
	Schemes for Medical Care		
1990-91	Fatal Diseases	₹ 50000	
	Emergency Needs		
	Death while Fishing or Immediately thereafter (revised)	• 50000/-(20000)	Cheque
1986-1987	Death of Fishermen due to Any Reason(revised)	• 10000/-(5000)	Cheque
1986-1987	Death of Dependents of Fishermen	₹ 600/-	
1986-1987	Financial assistance to the dependence for the death of fishermen	₹ 15000/-	Cheque
	Schemes to Support Life-cycle Needs		
1986-1987	Marriage of the daughter of fishermen(revised)	• 10000/-(1500)	Cheque
	Pension Schemes		
1987-1988	Old Age Pension	₹ 600/-(400)	Bank A/C
	Widow Pension	₹ 600/-(400)	Bank A/C
	Invalid Pension	₹ 100/-	

Year of Commencement	Schemes Implemented	Amount(Old figures in Bracket)	Routed through
	Schemes for Educational Promotion		
1990-91	SSLC Cash Awards:		
	Full A+	₹ 5000	Cheque
	9 A+	₹ 4000	Cheque
	8 A+	₹ 3000	Cheque
	Who Pass from Fisheries Technical School	₹ 3000	Cheque
2012-13	Scholarship for Higher Education:		
	Plus Two Cash Awards/ V HSC Cash Awards	₹ 5000 each for group	Cheque
1996-97	Maternity Benefit scheme	₹ 750/-	Cheque
1990-91	Family Planning Scheme	₹ 500/-	Cheque
1995-96	Chairman's Relief Fund	₹ 5000/-	Cheque
	Cash awards for Sports achievements		
2010-2011	National Level	First Prize ₹ 8000/- Second Prize ₹ 5000/- Third Prize ₹ 3000/-	Cheque
	State Level	First Prize ₹ 5000/- Second Prize ₹ 3000/- Third Prize ₹ 2000/-	Cheque
2012-13	Thanal(Financial Inclusion)	₹ 1350 per year	Bank A/C
	Under Aam Admi Bima Yojana		
2014-15	Death(Due to any reason)	• 30,000	Bank A/C
	Accident(Any time)	• 25,000	Bank A/C
	Permanent Disability	• 37,500	Bank A/C
	Partial Disability	• 35,000	Bank A/C
	Yearly Scholarship for children Studying Class IX,X,XI &XII	• 1200 per year per child	Bank A/C

Source: Compiled by the researcher from the Matsyaboard Magarekha (2009) & (2016)

A brief analysis of the Table 4.13 further revealed that the number and types of schemes implemented by the Matsyaboard meet the international standards, but the amount of each scheme seems to be very meagre to meet the predicted needs. Until 2012-2013, the financial assistance offered under several schemes followed the rate which was fixed in the year 2008-2009. Another major drawback that observed in the implementation of the scheme was lack of adequate administrative staff in fisheries offices. Moreover, the staff who man the fisheries offices come on deputation and as a consequence officers feel overburdened and complete their tenure without any creative initiatives for the promotion of the target group. Most of the fisheries offices have not been furnished enough to gather a meeting of a fishing unit of 5-8 fishermen. The work load of the single manned fisheries officers could be easily grasped with least effort by a simple analysis of the Table 4.14 presented below:

Table 4.14
Work Load of the Fisheries Officers and the Social Safety Nets of
Matsyaboard

Details of the Word Load of Administrative Staff	Numbers
Marine Fisheries Offices with One Manned Offices	43
a) Marine Fisheries Villages	222
b) Inland Fisheries Villages	133
Total Fisheries Villages	355
Vessel Owners (Excluding the Thermocole vessels)	30776
Number of Registered fishermen:	
a)Active Fishermen	234904
b)Allied Workers	74141
Total Fisher Fishermen	309045
Computed from the Information Given Above	
Office Per Fisheries Villages	8.26
Officers per Fisheries Villages	8.26
Officers per Vessels Owners to be Served	715.72
Officers per Active Fishermen to be Served	7187.09

Source: Compiled from Marine Fisheries Statistics 2013, Department of Fisheries, Kerala.

Table 4.14 indicated that a fisheries officer who links the target group with the promotional institutions has to cater 8.26 fisheries villages in Alappuzha and 715.72 vessel owners and 7187.09 active fishermen. Add to the cup of woe, when the deputed officers get back to their relieved offices, they find the vacancies not filled promptly and left unmanned for an year or given as additional duty to other officers. Hence, the fisheries officers buried in the work, are forced to accept help offered by some well-informed persons of the locality in accomplishing their duties on time, and gradually, they play games with sensitive information about the schemes and they pocket a portion of the money the fishermen under various schemes as commission and bag the credit of giving such benefits to the fisher households.

Table 4.15
Coverage of Welfare Schemes for Registered Fishermen and Allied Workers

Year	Number of Beneficiaries	Growth (%)	Amount Disbursed(₹)	Growth (%)	Schemes implemented
2005-06	37028	...	105811968	...	19
2006-07	42620	86.88	69906313	151.36	19
2007-08	37415	113.91	87651450	79.75	19
2008-09	273012	13.70	76485600	114.60	19
2009-10	276140	98.87	178412904	42.87	24
2010-11	283167	97.52	..		15
2011-12	284367	99.58	...		15
2012-13	288321	98.63	...		15
Allied Workers Welfare Schemes					
Year	Number of Beneficiaries	Growth (%)	Amount Disbursed		Schemes Implemented
2005-06	953	...	3920931	...	10
2006-07	2227	42.79	3257521	120.37	10
2007-08	2157	103.25	813375	400.49	11
2008-09	57928	3.72	5232133	15.55	10
2009-10	66100	87.64	15291630	34.22	11
2010-11	91	72637.36	...		
2011-12	69	131.88	...		
2012-13	726	9.50	...		

Source: Compiled from Marine Fisheries Statistics, Department of Fisheries (various issues).

4.5 Marine Fisheries Sector in Alappuzha

Fishing villages in Alappuzha are situated 1 to 8 kilometers from the rail road and much closer to the active fish markets which enjoys easy selling of bulk catches. Nine out of fourteen districts of Kerala that border the Arabian sea, Alappuzha has the highest length of coastline of 82 kms. Fishermen in Alappuzha have been engaged mainly in pelagic fishing, targeting mackerel, seer fishes, oil sardine, tunas and anchovies and other crustaceans like prawns, lobsters and shrimps. There are also a few fishermen engaged in demersal fishing, but they are very few. The traditional crafts operating along the coast of Kerala include Dugout Canoes, Plank Built Canoes, Marine Plywood Canoes, Fibre Glass Canoes and Thermocole vessels. Alappuzha fishery has been very peculiar in its type of fishing, size of the craft used, sharing pattern of profits, frequent mud bank formation during monsoon, increased use of ring-seines and direct selling methods by the Non-Motorised sector. The prominent crafts found in Alappuzha include 60-65 feet fitted with IBMs using ring seine gears which mostly found in southern and northern parts of fisheries villages and fishing trawlers which are engaged in deep sea fishing have been found in Thottappally, Purakkad and Ambalappuzha. And in the case of Non-Motorised sector, Catamaran has become part of history in Alappuzha but the newly emerged one-man operating Thermocole vessels have become cost-effective compared to Motorised and Mechanised crafts having the option for multiple fishing hours during the day and possibility of direct selling of the catch. Fishermen in Alappuzha who were quick to experiment the IBMs and Mini-trawlers slowly realised that small is beautiful in terms of production cost and maintenance.

One of the difficulties faced by the fishermen in Alappuzha is the absence of sufficient landing centres, inboard vessels and boats mainly depend on Kollam and Ernakulam harbours and it increases the production cost of the fishermen by transporting the crew fishermen from the place of residence to the nearby landing centres in Kollam (Ayiramthengu) and Ernakulam (kalamukku) incurring ₹2500/- per day. Fishing units of Southern part of Alappuzha make

use of Thottappally fishing harbour and Northern part of Alappuzha depend on Ernakulam, but the small vessels make use of the landing centre in the Chappakadavu in Chellanam (Ramdas, 2012). The temporary landing centres function with its own unwritten rules like outside customers were not allowed to participate in the beach auction; which has been restricted by the commission agents. Fish landing centres in Arthunkal and the Valiyazheekal give a ray of hope to the fishermen of Alappuzha.

4.5.1 Fisher Population in Alappuzha

Fisher population of Alappuzha consists of marine sector and inland sector fisher households. As per the data given by the Kerala Fishermen's Welfare Fund Board Regional office, Alappuzha, there are ten fisheries offices to cater the fisher population living in 30 marine fisheries villages and 24 inland fisheries villages. Fisher households are presented under ten fisheries Offices. Out of the ten fisheries offices, two are designated as 'inland'. The current position of Fisher population is presented in the Table 4.16.

Table 4.16

Fishermen's Abstract for the Year 2012, Alappuzha Region

Sl No	Fisheries Offices	Total No of FM as on 01.10.11	No of FM deleted	No of FM added	Total No of FM as on 01.10.12	Male	Female	No of Family	SC	ST
1	2	3	4	5	6	7	8	9	10	11
1	Kalikkad	3854	154	121	3821	3774	47	3033	34	-
2	Thottappally	3140	82	110	3168	3166	2	2100	0	-
3	Ambalappuzha	8889	389	378	8878	8773	105	6662	117	-
4	Thumpoly	3957	503	168	3622	3622	0	2998	-	-
5	Chennavelly	5543	217	108	5434	5433	1	4128	-	-
6	Thaikal	5025	623	75	4477	4477	0	2651	29	-
7	Muhamma (Inland)	10843	183	387	11047	7497	3550	7106	354	-
8	Kayamkulam	1604	86	182	1700	1576	124	1510	17	-
9	Vaikom(Inland)	4738	159	168	4747	2881	1866	2062	260	30
10	Kumarakom (Inland)	2095	94	38	2039	1887	152	1651	69	13
	Total	49688	2490	1735	48933	43086	5847	33901	880	43

Source : Kerala Fishermen's Welfare Fund Board Regional office, Alappuzha.

4.5.2 Marine Fishermen Profile of Alappuzha from 2005-2006 to 2012-13

It is an attempt to understand the growth rate of fisher population in Alappuzha. It is surprising to see that in 2012, the fisher population grew by 41.35 per cent indicating that irrespective of educational advancement in the State, people are moving into this risky sector. Table 4.17 exhibits the growth rate of marine fisher population in Alappuzha from 2005-06 to 2013-14.

Table 4.17
Growth Rate of Marine Fisher Population in Alappuzha
(2005-06 to 2013-14)

Year	Fisher Population	Growth Rate	Active Fishermen	Growth Rate	% of Active Marine Fishermen to the Marine Population	Fisher Families	Growth Rate
2005-06	117432	....	31158	...	26.53	31158	...
2006-07	118960	1.30	34309	10.1	28.84	25131	-19.34
2007-08	120104	0.96	28942	-15.6	24.1	22869	-9.00
2008-09	121218	0.93	23168	-20.0	19.11	17656	-22.80
2009-210	122292	0.89	28033	21.0	22.92	21926	24.18
2010-2011	123332	0.85	30670	9.4	24.87	21812	-0.52
2011-2012	107204	-13.08	27146	-11.5	25.32	19310	-11.47
2012-2013	107743	0.50	38795	42.9	36.01	27295	41.35

Sources: Department of Fisheries, Kerala; Estimated Figures based on Census Figures of 2001 & 2011

4.5.3 Fishing Crafts Operating in Alappuzha

While presenting the profile of marine fisher population of Alappuzha, it is essential to mention about the number of registered vessels operating from Alappuzha. Fisher Population in Alappuzha own 4.23 per cent of Mechanised crafts and 18.30 per cent of the Motorised crafts in Kerala. The number of Non-Motorised crafts in Alappuzha cannot be compared with other coastal districts because the Non-Motorised crafts mainly made out of Thermocole, are not registered with Department of Fisheries, Kerala. Table 4.18 depicts the number of crafts registered from Alappuzha.

Table 4.18**Registered Crafts in Kerala and Alappuzha as on 31 March 2013**

Types of Crafts	Kerala	Alappuzha	% of Kerala
Mechanised	3425	145	4.23
Motorised	25542	4673	18.30
Non-Motorised (including Crafts made out of Thermocole)	1799	127 (4500)	...
Total	30766	9318	....

Source: Compiled from Department of Fisheries, Kerala & Deputy Directorate of Fisheries, Alappuzha

4.5.4 Financial Requirements of Marine Fisher Households in Alappuzha

4.5.4.1 Financial Requirement for Fishing Inputs

The capital intensive fisheries sector has become too difficult to commence and maintain. To set up a fishing boat unit operating beyond the territorial waters, requires ₹80 lakh to ₹1.25 crore to set up. And in the case of inboard vessels, the cost ranges from ₹80 lakh to ₹1 crore. In the case of Motorised sector the initial investment ranges from ₹25 to ₹40 lakh. The recent trend in Alappuzha observed is that many of the fishermen have purchased the fishing unit as a second-hand one, paying half or two third of the price. But the problem faced by the fishermen was frequent repair of the vessels, webbings and engine. Annual maintenance of webbing of an inboard itself takes 30 days work by 15-20 fishermen. Persons mending the nets must be paid ₹500 per day if they are of the same fishing units and of the place and for those from outside Alappuzha should be paid ₹600/- to ₹1000/- per day. To be brief, the expenditure of the Motorised sector has become three times more than that of the income. In the case of Non-Motorised sector the initial investment is limited to ₹30,000 to ₹50,000. Non-Motorised fishermen households seem to earn more than the Motorised and Mechanised Sector and also regular income ranges from ₹500- ₹600 per day. Even if they pay ₹100 to the helper, the take home money would be ₹300/- ₹400/-. Non-Motorised fishermen conduct direct selling and do more than one fishing operation in a day.

Table 4.19

Financial Requirements of Mechanised, Motorised and Non-Motorised Sectors

A. Mechanised Vessels (Boats)							
I	Capital Investment	Unit (No.)	Amount(₹)	II	Working Capital		
				a)	Operational Expenses (per voyage,5-6 days)	Unit	Amount (₹)
1	Boats (Hull)	1	40,00,000	1	Petrol (@ ₹ 67.70 per Litre)	200 Litres	13540
2	Gear with 427 HP	1	18,00,000	2	Diesel(@ ₹ 63per Litre)	3000Litres	189000
3	Board (2 x2)	2	120000	3	Lubricant Oil(@ ₹ 270 per Litre)	10Litres	2700
4	Webbings (Minimum 8-10 sets)		470000	4	Food Expenses		3750
5	Store with 1500 tonne capacity	...	6,00,000	5	Bata ₹ 500 per day & Tea	6 persons	3750
6	Other Accessories (Steel Rope, Winch, Pullies, Baskets)		550000	6	Other Miscellaneous Expenses(ice, water, rent)		
7	Wireless	1	126000	7	Ice (₹ 75/-One Block Broken Ice)	150 blocks	11250
8	GPS	1	22000	8	Water	2000 Litres	500
9	Eco-Sounder	1	55000	9	Port Expenses(₹ 60 per day)		60
10	Life Saving Equipments	1	2,50,000	10	Kadavu kaval (₹ 200 per day)		200
				11	Commission(6 Per cent)		....
					Total Operating expenses for voyage		224750
				II	Development expenses		
					Maintenance of Craft, Engine & Gears		700000
					Insurance Premium		1850
					Contribution to the KWFB		11350
	Total Capital Expenditure		79,93,000		Total Working Capital Expenditure		937950

A.1 Inboard Vessels						
1	Mother Vessel	1	650000	Daily Operational Expenses	Unit(Litrs)	Amount per Day
2	Carrier Vessels	1	250000	Kerosene @ ₹ 75/- per Litre	100	7500
3	Outboard Engines	2	250000	Diesel/Lubricant Oil ₹ 63 per Litre	250	15750
4	Gear (Webbing)	1 to 2		Food Expenses/Bata		5500
	Choodavala (₹ 900 per Kg)	1300	117000	Other Miscellaneous Expenses(Ice, Water and Rent)		1500
	Thanguvala (₹ 800 per kg)	1500	120000	Transportation Expenses		5000
	Coolie for Repairing the Gear(webbing)		150000	Total		35927
5	Accessories (Winch, Ring, Rope, Weight, Floating Balls)		800000	Development Expenses		
6	Wireless	2	126000	Maintenance of Craft, Engine & gears		700000
7	GPS	1	22000	Insurance Premium		1850
8	Eco-Sounder	1	46000	Contribution to the KWFB		11350
	Total capital Expenditure		8381000	Port Fee		15000
	B. Motorised Vessels	Unit (Nos)	Amount(₹)	Total Working Capital Expenditure		728200
	Capital Investment			Working Capital		
	Mother Vessel(Ranges from ₹ 3lakh to 10 lakhs)	1	10,00,000	Daily Operating Expenses		
	Carrier Vessels	1	2,50,000	Kerosene (100-125 Litres)	100	7500
	Outboard Engines(₹ 1,26,000 per engine)		0	Petrol @ ₹ 67.70/-per Litre	7	441
	with 9.9 HP)(₹ 175000 per engine with 24 HP)	3	3,01,000	Diesel @ ₹ 63/-per Litre	5	300
	Accessories(Ring, Rope, Weight, Floating balls)	...	200000	Lubricant Oil @ ₹ 270/- per Litre	2	540
	Wireless	1	22000	Food Expenses/Bata		2500
	GPS	1	22,000	Other Miscellaneous Expenses(₹ 100 per Block)	10	750
	Eco-Sounder	1	28000	Transportation Expenses		2500
	Gear(Webbing) (2-3 sets)		0	Development Expenses		
	Chooda Vala(₹ 900 per Kg)	750	9,00,000	Maintenance of Craft, Engine & Gears		400000

	Thangu Vala(₹ 700 per kg)	650	7,00,000		Insurance Premium		150
					Contribution to the KWFB& Licence Fee		11350
	Total Capital Expenditure		34,23,000		Total Working Capital Expenditure		427031
	C. Non- Motorised Vessels						
	Capital Investment				Working Capital		
	Thermocole Vessel (₹ 5000/- to ₹ 7000/-)		5000		Daily Operation Expenses		Nil
	Webbings (3-4 Sets)		35000		Development Expenses		
	Accessories (Weight, Ring ,Rope and Float)		3500		Maintenance of Vessel & Webbings		15000
					Insurance		150
					Contribution to Matsyaboard		100
	Total Capital Investment		43500		Total Working Capital Expenses		15250

Source: Compiled from the Primary Data and Focus Group Discussion with the Target Group.

4.5.4.2 Fuel Consumption

Fuel price, which constitutes 75 per cent of the operating cost is the major hurdle to which the fishermen battle as they survive. When a season comes to end, every fishing unit would close their account with an item called 'Enna kadam', Literally means '*Debt related to Oil*' a debt incurred to purchase kerosene from the black market, which comes up to ₹1.50,000/- to ₹5,00,000/- in the case of Motorised sector and it is much more in inboard vessels as it comes around ₹7,00,000- ₹10,00,000/-. During the days of poor catch, the fishing units were unable to adjust the money spent for fuel from the sale proceeds and they have to borrow fund for the next voyage too. It has become a constant struggle for the owner cum fisher to run a fishing unit these days. There were unreported incidents that a fisherman who owned an inboard vessel tried to end his life twice due to the mounting debts. In a Motorised fishing vessel with 25 to 30 crew, use three OBMs. Generally two OBMs are fitted in the mother vessel (one with 25 HP and other one with 9.9 HP) and a 9.9 HP OBM is fitted in the carrier. The daily consumption of kerosene in these vessels would range from 100 to 120 Litres.

Kerosene supplied by Kerala State Civil Supplies Corporation is just 129 Litres for engine with less than 10 HP per month per permit and fishermen were getting 450 litres when the scheme was introduced. The reason cited for the reduction in quantity is non-availability; but in the black market supply has no shortage. Currently in Karnataka, 400 litres of kerosene is provided under this scheme (Enkalath, 2013). In the case of inboard vessels operating with 40-60 crew, the kerosene consumption per day would go up to 200 Litres and they are entitled to 160 litres of kerosene from the PDS. The subsidized price of kerosene provided by Government was ₹18/-per litre. A fraction of the actual requirement of fuel alone are provided under this scheme, and fishermen are forced to get the required fuel from the black market for ₹75/- per litre.

The interesting point is that the money lenders of the area provide finance to the fishermen in exchange of the engine permit. Money lenders buy kerosene with the engine permit at a subsidised price of ₹18/- per Litre and sell it to the same fishermen group for ₹75/- per litre. There are families living on this business alone as they sell 750-1000 litres per day for ₹75/-per litre (Mathew S., 2013). Recently Government has commenced to distribute the subsidized kerosene through Matsyafed (Government of Kerala, Department of Fisheries, 2015) and the subsidy amount would be transferred to the bank account of the beneficiaries.

4.5.5 Sources of Finance Depends on

The schemes implemented by the various promotional agencies for fisher community though commendable, lack adequacy which push them to the money lenders from the time of setting up of a fishing unit itself. Major sources fishermen depend on for finding the balance amount beyond the loan sanctioned by Matsyafed are own source, relatives and friends, money lenders and commission agents. Micro finance institutions are also resorted through other family members like homemaker of the house, mother and neighbours. Number of Microfinance players are mushrooming in the coastal belt day by day, due to the tempting profit and 100 per cent repayment through cohesive method adopted for collecting back the loan. Out of the 13 Micro finance institutions seven of them have taken root in Alappuzha coastal belt (Sa-Dhan, 2014). SKS Microfinance Ltd (Swayam Krishi Sangam), ESAF Microfinance and Investment Pvt. Ltd now turned ESAF Small Finance Bank, Ujjivan Finance Service Ltd, Dora Microfinance, FREED, Janashree Microfinance Ltd, Muthoot Finance Ltd and Self Help Groups which falls under various NGOs are the prominent ones catering to the fisher holds for years. An earlier study conducted by Matsyafed, revealed that 82.8 per cent of the respondents were depending upon the money lenders for meeting the balance amount beyond the sanctioned loan amount (Matsyafed, 2006). Besides the occupational financial needs, fisher households were depending on informal sources. Each and every fisher household has been indebted to more than three informal sources at a

time. A few also have taken loans from co-operative societies too. Recent report said that as per the ‘Operation Kubera’ launched to control the illegal money lending, 3200 cases were registered and 2140 persons were arrested in this regard for illegally holding the documents worth ₹4.67 crore.

4.6 Financial Literacy Initiatives among Fisher Households in Alappuzha

German and Forgue has defined financial literacy as the knowledge acquired through formal education or by practice, to manage one's own personal financial needs (Ravikumar, Sivakumar, Jawaharlal, & Palanichamy, 2013). Invitation to set up Financial Credit Counselling Centres (FLCC) by RBI came in by 2007 with the Annual Policy Statement of 2007-08 (UNDP, 2012), as a first phase, at least one FLCC in a district was the target. The scheme was officially inaugurated in Kerala on 30th November 2009. As a second phase, Block-wise FLCC were allotted to various sponsor banks in 2012, the target was achieved by 31st March 2014 (SLBC,Kerala, 2015). Out of the 12 FLCs, three are in the urban areas, six are located in the Semi-urban areas and three are in the rural areas (SLBC,Kerala, 2015). The ongoing target of this scheme is to have FLC in every village. As an initiative of RBI to inculcate financial literacy among the low- income group, Muthukulam Grama Panchayath has been selected as the Model financial literacy Village by RBI and has conducted three financial literacy camps for different target groups like Kudumbasree members, Anganawadi teachers etc. The beneficiaries were of the programme was limited to 100 or 122 members. NABARD also has organised financial literacy programmes through district cooperative banks.

4.6.1 A Snapshot of the Financial Literacy Centres in Alappuzha

The first FLCC was set up by Federal Bank Ltd, handholding with a prominent NGO named Gandhi Smaraka Grama Seva Kendram (GSGSK) in Alappuzha, near Kanjikuzhy on 11 January 2010 (SLBC, 2012). Federal Bank Ltd has also sponsored three FLCs in Alappuzha. These FLCs organise financial literacy programmes in association with GSGSK. Later, SBT, the

Lead Bank of the district opened a FLCC on 27th March 2010 (SBT opens credit counselling centre, 2010). By June 2013, there were only five FLCs functioning in the district of Alappuzha (FLCs - Status & Progress Report as at June 2013.pdf, 2013). The FLCs are appointed and are paid ₹15000/-per month by the sponsor banks. A retired banking personnel is given the responsibility of instilling financial literacy among the people. They take awareness sessions for Kudumbasree members at neighbourhood groups, Ward level Area Developmental Societies and Community Development Society members and also address Panchayath level meetings. On an average level they conduct 6 to 7 classes per month. They also provide face to face counselling to the people who come to the FLC. Currently, Financial Literacy Centre Counsellors are not given any training or systematic syllabus to deal with; they make use of their career experience as a banking personnel. The topic dealt by the FLC counsellors are banking procedures, emerging schemes of governments, significance of having an insurance policy and financial responsibilities.

NABARD had sanctioned ₹8,80,000/- as grant under Financial Inclusion Fund and had released ₹4,40,000/- for the year 2013-14 to the District Cooperative Bank, Alappuzha. Ambalappuzha Block has been allotted to District Cooperative Bank for financial inclusion and financial literacy activities but the amount utilised was only ₹1,95,194/-. 'SEVANA-FLC' commenced its activities only from 16th August 2013. By 31st March 2014, they had given face-to face counselling to 149 individuals and 15 outdoor activities have been organised and the beneficiaries of the outdoor programme were 526 (NABARD, Regional Office, 2014).

4.7 Financial Inclusion Model Feasible to Fisher Households.

Nachiket Mor committee on '*Comprehensive Financial services for small Scale Business and low income household*', January 2014, fixed six time bound target. The committee, envisioned adequate formal credit, convenient

and suitable financial products and services and the availability of sufficient access points, for secure and full financial services.

- *Universal Electronic Bank Account*: Each Indian citizen above the age of 18 years, would be entitled to secure full banking service by January 1, 2016 .
- *Access Points within 15 minutes walking distance for Payment Services and Deposit Products at Reasonable Charges*: Intended to provide easy access to financial services
- *Sufficient access to affordable formal credit to low-income and small business units by January 1 2016*: And set a benchmark to assess the credit growth as Credit to GDP ratio, which should be at least 10 per cent and this rate would be increased by 10 per cent every year which will reach 50 per cent by January 1, 2020.
- *Universal Access to a Range of Deposit and Investment Products at Reasonable Charges*: Convenient access to all by Government regulated institutions. It aims at attaining a goal of Total Deposit and Investment to GDP ratio 15 per cent at District level and this ratio would keep increasing every year by 12.5 per cent to reach 65 per cent within four years.
- *Universal Access to a Range of Insurance and Risk Management Product at Reasonable Charges*: To provide convenient access to suitable insurance and risk management by regulated institutions. It targeted to have a Total Term Insurance Sum Assured to GDP ratio of at least 30 per cent at district level and reach to 80 per cent within four years sustaining the growth rate by 12.5 per cent every year.
- *Right to Suitability*: To protect the right of low-income households and small-business houses to avail suitable financial services, with informed consent and legal redressal if needed.

Fisher households with low and seasonal income have unique financial requirements. Availability of adequate institutional credit to the fisher folk has been studied by different agencies like FAO, SIFFS etc. FAO has produced a management guideline in providing revolving loans and credit programmes for fisher communities. It proposed to do a spade work to convince the fisher community about the difference between grants and loans, steps to be taken in case of willful default, loan recovery arrangements and the legal proceedings (FAO, 1986). However, it should remind the service-providers to know the socio-economic background of the fisher borrowers and to have constant follow up after giving financial assistance. FAO study concluded to say that a deep relationship with the borrower and his family would help the banking personnel to comprehend his income, his investment and spending pattern with greater accuracy.

Nachiket Mor Committee envisions adequate formal credit, convenient and suitable financial products and services, availability of sufficient access points for secure and full financial services through the financial inclusion drive. Affordability, adequacy and suitability are the qualitative dimensions of financial inclusion put forward by this committee for meaningful financial inclusion in India. These dimensions should be discussed before formulating a viable model of financial inclusion for the fisher households. A model proposed would place client needs at the centre, reaching to the fisher households in the fisheries villages with the smart integration of the technology and collaboration with multiple institutions offering a wide range of products and services.

Fisher households are well-aware that higher rate of interest is charged by the money lenders and microfinance institutions in comparison to the interest charged by the formal financial institutions. But the terms and conditions of the banks make the fisher households to keep a distance from the formal financial institutions. In order to reduce this distance, adequate loans could be provided taking into account cash flow of the fisheries sector and flexibility in repayment conditions. Fishing industry is capital intensive, huge

investment may not be possible by fishermen with less or poor asset possession to offer to banks for raising loans. But the right to avail suitable financial products, which encompasses a broader concept of financial inclusiveness as ‘distributional objectives’ rather than mere poverty reduction tool (Ahluwalia, 2007). Principal criterion followed by fishermen in deciding the sources of finance is the availability of adequate sum to meet the need. Most of the time, money lenders provide hassle-free credit to the working capital requirements of fishermen. Overdraft facilities could be provided to the credit worthy clients to meet the emergency like sudden repair of engine and webbings. Suitability was considered in terms of regional language, working hours and location of the service points. Working hours should be suited to their occupation, as the fishermen reach back to the place of residence from landing centres in Ernakulam and Kollam by 4.00 p.m in the evening. They have to wait for another day to make a visit to the bank. And finally, fisher household in Mararikulam, Azheekal, Thyckal and Pallithode fisheries villages have to travel more than 7-8 kilometers to reach to the bank in Arthunkal, Thanky and Pattanakad bank which is ‘15 minutes walking distance from the residents’ concept of Nachiket more committee (Chauhan, 2014).

Conclusion

‘Inclusiveness’ was a concern for India since Independence. It was spelled out in terms of social objectives by the policy makers from the very beginning of the Five Year Plans of India. But still, India was prompted to give thrust for ‘faster and more inclusive growth’ by ensuring financial access to all especially low-income households and weaker sections of the societies only with the Eleventh Five Year Plan. The policy makers, regulators and the other players need to share the same dreams and plans to achieve this target. It demands a mentality of change regarding the current banking services in order to ensure financial inclusion among low-income group like the fisher households. An approach of supply-driven ‘one-size fits for all’ should give way for customized and flexible terms and conditions. In the case of fisher households credit should be linked with source of income, knowing the

customer personally on his income, needs and risks. It calls for various stakeholders including Governments, promotional agencies and formal financial institutions to save the fisher households from the private money lenders. The effectiveness of financial inclusion efforts of commercial banks for marine fisher households could be assessed in terms of the responsiveness, affordability and suitability of financial products and services commercial banks offer to the marine fisher households.

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