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# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<b>THE ANALYSIS EFFECT QUALITY PRODUCT, PRICE AND QUALITY SERVICE, TOWARD CUSTOMER SATISFACTION AND LOYALTY</b> <i>NURWIGAS, M.S. IDRUS, HENING WIDI OETOMO &amp; KHUZAINI</i>	1
2.	<b>CHALLENGES OF GAUGING PRODUCTIVITY IN TEACHING IN HIGHER EDUCATION: A STUDY</b> <i>MADHAVI R, DR. EASWARAN IYER &amp; DR. SHAILAJA SHASTRI</i>	7
3.	<b>A COMPARATIVE STUDY OF FINANCIAL PERFORMANCE OF PNB AND HDFC BANK</b> <i>POOJA MAKEN &amp; DR. SHASHI SHEKHAR</i>	13
4.	<b>MARKETING STRATEGIES ADOPTED BY PATANJALI AYURVED LIMITED</b> <i>DR. RAJSHREE. R, SHIVALAXMI &amp; T. SUSHMA SADANAND</i>	16
5.	<b>ISSUES AND PROSPECTS OF MARINE FISHERIES SUB-SECTOR IN INDIA</b> <i>DR. ASHISH C. MEHTA &amp; HETAL D. TANDEL</i>	18
6.	<b>SERVICE QUALITY IN IT SERVICES: A CASE STUDY</b> <i>DR. MATHEW JOSEPH</i>	22
7.	<b>FUNDAMENTAL VICISSITUDES: A CASE OF SAARC COUNTRIES</b> <i>JASDEEP SINGH TOOR &amp; AMAN RANI</i>	29
8.	<b>MAPPING OF MUNICIPAL LOAN CAPACITY IN INDONESIA</b> <i>M MAULANA HAMZAH, LUKMAN M BAGA &amp; IMAM TEGUH SAPTONO</i>	33
9.	<b>SOLID WASTE MANAGEMENT: A CHALLENGING UNDERTAKING</b> <i>SHER SINGH</i>	40
10.	<b>AN ANALYSIS OF IMPACT OF GDP GROWTH ON HDI: A STUDY OF INDIA</b> <i>AMRITKANT MISHRA</i>	42
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	46

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## ISSUES AND PROSPECTS OF MARINE FISHERIES SUB-SECTOR IN INDIA

**DR. ASHISH C. MEHTA****ASST. PROFESSOR****G.H. PATEL POSTGRADUATE INSTITUTE OF BUSINESS MANAGEMENT****VALLABH VIDYANAGAR****HETAL D. TANDEL****ASST. PROFESSOR****NARAN LALA COLLEGE OF COMMERCE AND MANAGEMENT****NAVSARI****ABSTRACT**

*Fisheries, marine fisheries in particular, constitute an important sector of the Indian economy. It makes an important contribution to Indian economy in terms of employment, livelihoods, food security and foreign exchange earnings. It plays significant role in the development of coastal communities of India. The marine fishing sub-sector accounts for approximately one percent of national Gross Domestic Product (GDP). Fisheries constitute about 4.75 per cent of the agriculture GDP. This paper briefly describes the growth of marine fisheries in India. It reviews and identify key issues and opportunities and recommend some changes that could improve the productivity of marine fisheries sector and increase net benefits from the sector.*

**KEYWORDS**

marine fisheries, inland fisheries, fish production, gross domestic product, sustainable fisheries, informal source of finance, fisheries co-operative societies.

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**INTRODUCTION**

Fishing in India is a very important economic activity employing over 14 million people. According to Government of India figures, the marine sub-sector accounts for approximately 39 percent of the total national fish production. Inland fishing accounts for 61 percent of total fish production. India is the world's third largest fish producing nation and second in inland aquaculture. The marine fishing sub-sector accounts for approximately one percent of national Gross Domestic Product (GDP). It also forms an important component of the rural coastal economy, generating income, employment, livelihoods, and food security for an estimated 3.52 million people along the 8,118 km Indian coastline, who depend on fishing for their livelihoods. Close to 100 percent of working people in these small coastal communities are engaged in marine fisheries-related livelihoods.

**TABLE 1: MARINE FISHERIES RESOURCES OF INDIA – AT A GLANCE**

Marine Resources & Fisher Statistics	
Coastline (km)	8 118
Exclusive Economic Zone (million km <sup>2</sup> )	2.02
Continental shelf ('000 km <sup>2</sup> )	530
Fish Landing Centres (Nos.)	1376
Fishing villages (Nos.)	3 322
Fishermen families (Nos.) (NMFC, 2005)	764868
Fisher folk population (Nos.) (NMFC, 2005)	3574704

Source: Report of the Working Group for the XII Five Year Plan: 2012-17

**OBJECTIVES OF THE STUDY**

1. To study the prospects of Marine fisheries sub-sector in India.
2. To find the growth of marine fish production in India over the years.
3. To review and identify major issues of marine fisheries sub-sector in India.

**RESEARCH METHODOLOGY**

This paper is mainly exploratory in nature. For the study, secondary data has been used. The sources of secondary data are books, journals, various reports and websites.

## GROWTH AND PERFORMANCE OF MARINE FISHERIES IN INDIA

TABLE 2: MARINE AND INLAND FISH PRODUCTION IN INDIA

Year	In '000 Tonne			Growth (%)		
	Marine	Inland	Total	Marine	Inland	Total
1950-51	534	218	752	--	--	--
1955-56	596	243	839	11.61	11.47	11.57
1960-61	880	280	1160	47.65	15.23	38.26
1965-66	824	507	1331	-6.364	81.07	14.74
1970-71	1086	670	1756	31.8	32.15	31.93
1973-74	1210	748	1958	11.42	11.64	11.5
1978-79	1490	816	2306	23.14	9.091	17.77
1979-80	1492	848	2340	0.134	3.922	1.474
1980-81	1555	887	2442	4.223	4.599	4.359
1981-82	1445	999	2444	-7.074	12.63	0.082
1982-83	1427	940	2367	-1.246	-5.906	-3.151
1983-84	1519	987	2506	6.447	5	5.872
1984-85	1698	1103	2801	11.78	11.75	11.77
1985-86	1716	1160	2876	1.06	5.168	2.678
1986-87	1713	1229	2942	-0.175	5.948	2.295
1987-88	1658	1301	2959	-3.211	5.858	0.578
1988-89	1817	1335	3152	9.59	2.613	6.522
1989-90	2275	1402	3677	25.21	5.019	16.66
1990-91	2300	1536	3836	1.099	9.558	4.324
1991-92	2447	1710	4157	6.391	11.33	8.368
1992-93	2576	1789	4365	5.272	4.62	5.004
1993-94	2649	1995	4644	2.834	11.51	6.392
1994-95	2692	2097	4789	1.623	5.113	3.122
1995-96	2707	2242	4949	0.557	6.915	3.341
1996-97	2967	2381	5348	9.605	6.2	8.062
1997-98	2950	2438	5388	-0.573	2.394	0.748
1998-99	2696	2602	5298	-8.61	6.727	-1.67
1999-00	2852	2823	5675	5.786	8.493	7.116
2000-01	2811	2845	5656	-1.438	0.779	-0.335
2001-02	2830	3126	5956	0.676	9.877	5.304
2002-03	2990	3210	6200	5.654	2.687	4.097
2003-04	2941	3458	6399	-1.639	7.726	3.21
2004-05	2779	3526	6305	-5.508	1.966	-1.469
2005-06	2816	3756	6572	1.331	6.523	4.235
2006-07	3024	3845	6869	7.386	2.37	4.519
2007-08	2920	4207	7127	-3.439	9.415	3.756
2008-09	2978	4638	7616	1.986	10.24	6.861
2009-10	3104	4894	7998	4.231	5.52	5.016
2010-11	3250	4981	8231	4.704	1.778	2.913
2011-12	3372	5294	8666	3.754	6.284	5.285
2012-13	3321	5719	9040	-1.512	8.028	4.316
2013-14(P)	3443	6136	9579	3.674	7.291	5.962
2014-15(P)	3491	6577	10069	1.394	7.187	5.115

Source: Ministry of Agriculture, Govt. of India. (14268), (ON463) &amp; (16361)

FIG. 1

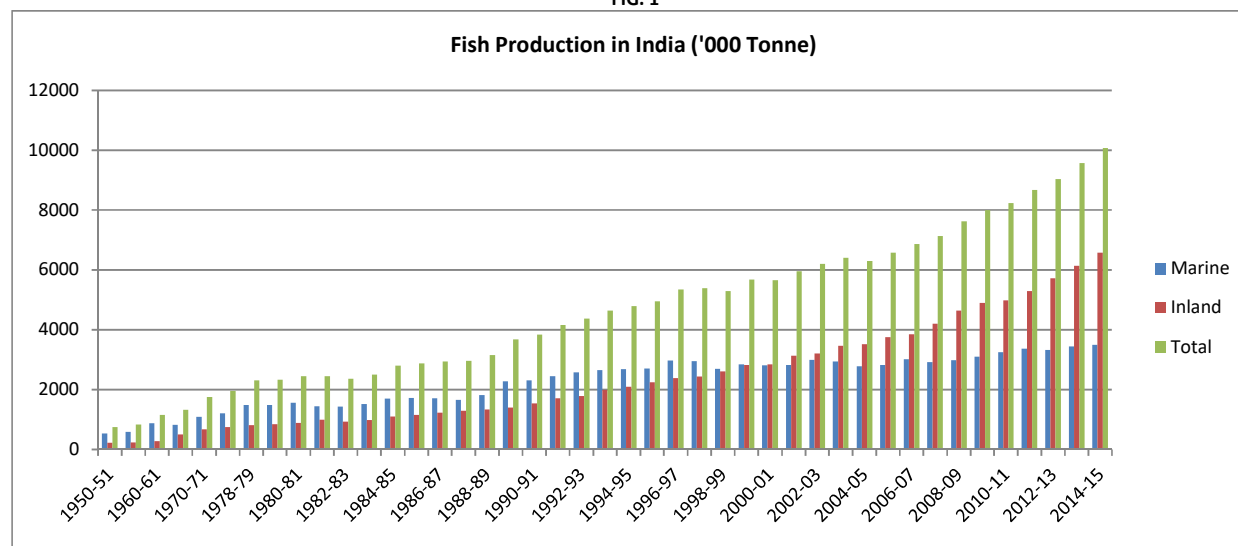
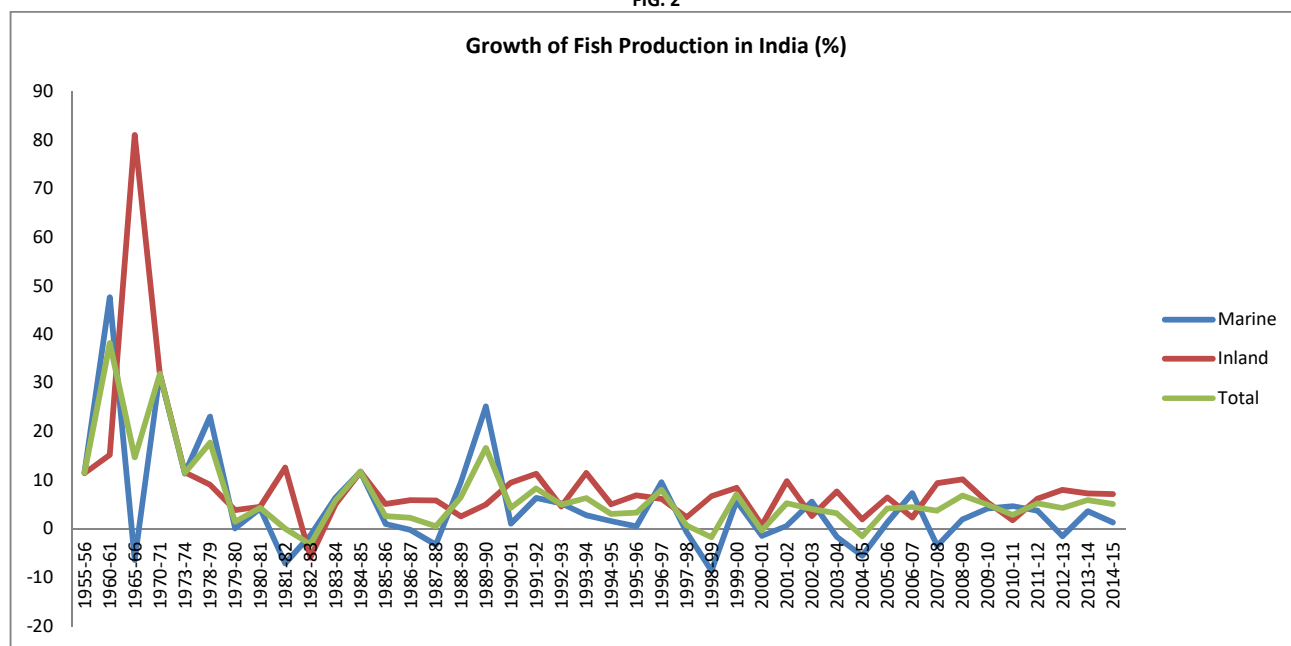


FIG. 2



## ISSUES OF MARINE FISHERIES SUB-SECTOR IN INDIA

### ISSUES OF SUSTAINABLE FISHERIES MANAGEMENT

Issues in marine fisheries management in India are: declining trend in catch and catch rates of commercially exploited stocks; overfishing due to open access/common property nature of coastal resources, the use of inappropriate technology, excess fleet size in terms of numbers; ecosystem/ diversity degradation affecting the productivity. In India there are basic regulatory and licensing regimes for fisheries management, augmented by seasonal fishing bans, mesh size, and limited use of zoning. However, Absence of suitable policies, institutions and regulatory mechanisms due to lack of appropriate and effective governance is also factor contributing to unsustainable fishery.

According to government of India, over 61 percent of marine capture fish stocks are already over-exploited, and most of the remaining stocks are fully exploited, leaving little or no scope for future expansion in inshore waters. Another factor contributing to declining fish stocks may be expanding coastal development activities, including land reclamation; construction of ports, bridges, roads, and buildings for industrial and residential purposes; oil and natural gas exploration; pollution from agricultural run-off containing chemicals, fertilisers and pesticides; and industrial effluents and urban sewage.

### ISSUES RELATED TO FISHERIES CO-OPERATIVE SOCIETIES

A number of fishery co-operatives in the country are helping their members and their family members to the extent of providing complete marketing infrastructure for the sale of the catch at remunerative prices. They satisfy investment needs of members such as purchase of boats and engines, purchase of nets and gears, marketing and processing equipment and plants. They also satisfy working capital requirement such as repair of boats and nets, purchase of diesel, marketing expense. They also provide loans to members. Cooperatives can enhance production, processing, storage, transport capacity and back up finance needs.

The poor performance of fisheries co-operative is due to absence of genuine co-operative leadership, lack of financial resources, incompetent management personnel and growth of vested interests. Generally, co-operative leadership comes from the middle men and economically, socially and politically dominating members of the village. These societies are not having adequate facilities for storage, processing, and marketing of fish.

There is a need to create an economically viable, technically sound and professionally managed fishery cooperative which should be capable of providing genuine support to fishers.

### ISSUES RELATED TO CREDIT FOR FISHERIES ACTIVITIES

According to a study conducted by Thiraphong Tangthirasunan (2007), credit to fisheries from the banking sector in India is only 1% of the total credit that goes to agriculture. Informal sources of credit continue to play significant role as the source of financing of fishermen.

It is difficult to obtain loan by poor fishermen since they don't have adequate property that can be offered as collateral. Since fishery business is seasonal, the repayment schedule for fishermen is inflexible. It is also very difficult to obtain formal credit by the people involved in fish marketing chain.

Majority of small scale fishers and traders prefer to take loan from informal sources such as traders, money lenders, merchants. They prefer informal sources for credit due to ease of access relative to more formal structures such as banks and other financial institutions.

A study conducted by Srivastava U.K., Reddy M. Darma, and Gupta V.K. (1982), on "Management of marine fishery industry" revealed that fishermen feel that the finance provided by the merchants is both cheaper and easier. Merchants are able to provide cheap finance because they are able to make it up by selling the fish from bonded boats. Fisherman, after having obtained a boat through institutional finance, needs money for repairs and maintenance. Often these entail a large expenditure. Financial institutions are reluctant to finance this activity.

### ISSUES RELATED TO MARKETING OF FISH

Domestic marine fish market chains in India are generally characterised by unhygienic conditions, poor handling of fish and loss of quality (from the boat to the final market), and a subsequent reduction in profits. While new developments in marketing channels such as mega-grocery stores are emerging in some larger cities, with modern fish handling practices and facilities, smaller-scale fishers are often unable to gain access to these marketing channels due to the poor quality of their product.

Major contributors to this problem are the lack of easily accessible and low-cost credit, and the affordability of basic infrastructure such as ice, cold storage, and transport that would enable fishers to maintain better quality and obtain higher prices. While demand for fish products in India is forecasted to rise significantly in the future, the small-scale fishers and traders do not have adequate information about market requirements and emerging market opportunities.

### ISSUES RELATED TO INFRASTRUCTURAL FACILITIES

In India, the infrastructural facilities for fisheries activities are inadequate. The on-shore infrastructure to be developed includes the landing centers and fishing harbours along with the requisite ancillary facilities. Domestic marine fish market chains in India are generally characterised by unhygienic conditions, poor handling of fish and loss of quality from the boat to the final market. Major contributors to this problem are the lack of basic infrastructure such as ice, cold storage, and transport facilities. There should be facilities for clean water, ice, and cold storages. Apart from the on-shore infrastructure, the boats would need to be suitably equipped with navigational and safety equipment, equipment for on-board preservation and handling of catch to bring fish in good condition to the shore.

**CONCLUDING REMARKS**

Majority of the small-scale fishermen are taking credit from non-institutional or informal sources which are costlier and exploitative. Therefore institutional credit should be provided to them at concessional rate. The major problem for getting institutional credit is inability of fishermen to offer adequate amount of collateral security. Credit programmes need to be designed so that they fulfil the criteria of timeliness, simplicity and flexibility. The credit system could be improved for those in the fishing sector by making repayment schedules tailored to the fishing season, i.e. with higher repayments in the open season and lower repayments in the closed season.

The fisheries co-operatives are not working properly and they are dominated by rich people. Government should actively take interest in and keep watch on functioning of the fisheries co-operatives. There is need to develop proper infrastructure for fisheries activities. For sustainable fisheries, efforts are directed towards formulation of suitable policy and its effective implementation. Fisheries management needs to be strengthened.

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