

EXPORT PERFORMANCE OF FISH AND FISHERY PRODUCTS IN INDIA

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Abstract

Fish and fishery exports product is largest group in agricultural export products value for Rs. 47,620 crore in 2018-2019 and India is the second largest fish producer in the worldwide with a total production of 13.7 million metric tonnes in 2018-19 of which 65 % was from inland sector. This country is a fast-growing sector in fisheries, which is provides nutrition and food security to a large population of besides providing income and employment to more than 14.5 million people. This study the augmentation and instability of the Indian fish and fishery export products and its performance of last ten year. The result is increasing the seafood's exports.

Index terms: Export, performance, fisheries policy, fish products

Introduction

The world level is second largest fish producer our country the total fish production of 13.7 million MT in 2018-19 of which 65% was from inland sector. Further, Almost 50% of inland fish production is from culture fisheries, remaining 6.5 % of the global fish production. The sector has been showing a steady growth in the total gross value added and accounts for 5.23 per cent share of agricultural GDP. India was exported in various namely, frozen, dried, live items, chilled items and other forms. It is influenced by the demand, domestic production, consumer preference, trade agreements between countries and trade policies. They are many methods are used to calculate the instability (Wasim, 2007; Cuddy & Della, 1978; Ray, 1983; Coppock, 1962). In this study, an attempt has been made to analyze augmentation and instability of fish and fishery products exports and find out relationship between the growth and instability.

Review of literature

KARTHIKEYAN, R.(2018) The aim of the present research paper is to analyse Government welfare schemes and its impact on livelihood of fisher folk. This study highlighted the gap in between Government welfare schemes and livelihood status of fisher folk. This survey was conducted randomly selected fisher folk (N=926) in southern coastal districts of Tamil Nadu especially Thoothukudi, Tirunelveli, Kanyakumari and Ramanathapuram Districts. This study shows that majority (71.7%) of the fisher folk are registered. More than half (55.9%) of the fisher folk got relief from government after being hit by tsunami. This study also reveals that only 31% of the fisher folk get diesel at subsidized price. Majority of the children of fishermen who are Christians do not receive tsunami scholarship when compared to other religions. Ramanathapuram district is highly affected by tsunami. Fisheries department provides necessary information such as fishing availability, weather condition to protect fishermen from time to time.

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Objectives of the study

- To examine the concept of fisheries, growth and performance of fish and fishery product exports.

Material and methods

Research Design: This present study is of analytical and descriptive in nature.

Data Collection: The secondary data were collected from the various publications such as Reports on Marine Product Export Development Authority (MPEDA), Government of India, magazines, Business India, India Today, Business World, Business and Economic Survey and other websites were also referred to. For assessing the augmentation and instability the entire time period was 2009-10 to 2018-2019.

Data Analysis: The composed information is analyzed with the help of different statistical tools like Percentage analysis CAGR, AGR and regression analysis and is presented in the form of Tables.

Data Analysis and Interpretation

The following table 1 top fisheries state in India during the study period 2017-18.

**TABLE -1
TOP FISHERIES STATES IN INDIA**

S.No	States	Inland	Marine	Total
1	Andhra Pradesh	28.45	6.05	34.5
2	West Bengal	15.57	1.85	17.42
3	Gujarat	1.34	7.01	8.35
4	Kerala	5.34	1.51	6.85
	Tamil Nadu	1.85	4.97	6.82
	All India Production	89.02	35.88	125.9

Source: Fisheries Department, Government of India

The above table top fisheries states in India followed by the first rank for marine fish production in Gujarat (7.01), followed by Andhra Pradesh (6.05) while, Tamilnadu (4.97) and inland production by the first rank Andhra Pradesh followed by west Bengal and Kerala.

MARINE PRODUCTS IN INDIA

The following Marine Products including all variety of fishery products known commercially as shrimp, prawn, lobster, crab, fish, shell-fish, other aquatic animals or plants or part thereof. The Marine Products Export Development Authority (MPEDA) was constituted in 1972. The India's seafood export at 13, 77,244 tonnes earned Rs. 45, 106.89 crore in 2017-18.

TABLE -2

MARINE PRODUCTS (FISH-WISE)EXPORTS											
Item		2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Fr. Shrimp	Quantity in ton	130553	151465	189125	228620	301435	357505	373866	434486	565980	614145
	Value in Crore	4182.35	5718.13	8175.26	9706.36	19368.3	22468.12	20045.5	24711.32	30868.17	31800.51
	US\$ Million	883.03	1261.81	1741.2	1803.26	3210.94	3709.76	3096.68	3726.38	4848.19	4610.59
Fr.Fin Fish	Quantity in ton	260979	312358	347118	343876	324359	309434	228749	296761.88	353192	338933
	Value in Crore	2032.33	2623.89	3284.15	3296.86	4294.81	3778.5	3462.25	4460.9	4674.03	4916.82
	US\$ Million	430.94	583.48	683.5	617.59	708.63	619.66	529.85	672.47	733.17	699.09
Fr.Cuttlefish	Quantity in ton	63504	59159	54671	63296	68577	82353	65596	63320	69183	60210
	Value in Crore	923.83	1104.57	1346.72	1354.28	1386.98	1833.21	1636.11	1944.5	2356.46	1975.97
	US\$ Million	195.69	244.62	282.72	251.54	228.13	300.69	250.31	292.73	369.88	282.29
Fr. Squid	Quantity in ton	61445	87579	77373	75387	87437	69569	81769	99348	100845	101101
	Value in Crore	622.63	1010.57	1228.19	1378.08	1731.97	1275.25	1615.21	2575.29	2451.87	2506.99
	US\$ Million	132.24	223.67	262.72	256.9	284.6	209.84	247.53	388.64	385.01	359.71
Dried items	Quantity in ton	47053	79059	53721	72953	67901	70544	43320	61071	88997	95296
	Value in Crore	981.11	954.94	562.65	819.9	998	1010.16	725.58	871.74	1042.37	1323.45
	US\$ Million	208.72	212.22	117.66	152.81	167.89	165.52	111.57	199.77	163.53	189.58
Live items	Quantity in ton	5492	5208	4199	4373	5080	5488	5493	6703	7034	10179
	Value in Crore	139.14	142.15	154.61	197.89	281.85	301.51	308.81	403.75	286.11	388.88
	US\$	29.52	31.46	32.46	36.82	46.7	49.62	47.77	61.05	45.41	55.89

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	Million										
Chilled items	Quantity in ton	28817	21118	21278	26868	19755	31404	33150	31815	19501	17207
	Value in Crore	264.49	257.54	357.42	537.11	527.84	635.93	809.5	769.81	647.41	616.22
	US\$ Million	55.87	56.93	74.03	99.87	88.48	104.71	124.51	116.02	101.78	89.2
Others	Quantity in ton	80592	97145	114538	112841	109212	124947	113949	141442	172512	155487
	Value in Crore	902.64	1089.67	1488.24	1565.78	1623.5	2138.94	1817.87	2133.59	2780.48	3060.53
	US\$ Million	196.84	242.72	314.16	292.86	272.34	351.31	279.71	320.54	434.58	442.16
Total	Quantity in ton	678436	813091	862021	928215	983756	1051243	945892	1134948	1377244	1392559
	Value in Crore	10048.53	12901.47	16597.23	18856.26	30213.26	33441.61	30420.83	37870.9	45106.89	46589.37
	US\$ Million	2132.84	2856.92	3508.45	3511.67	5007.7	5511.12	4687.94	5777.61	7081.55	6728.5
Mean		276.5729	373.4557	456.3271	459.8271	676.4814	737.1143	629.7457	779.58	949.5671	898.05
S.D		298.1449	431.1737	606.9924	621.4268	1138.723	1324.022	1099.111	1315.151	1734.692	1651.106
C.V		107.7998	115.4551	133.0169	135.1436	168.3303	179.6224	174.5325	168.7	182.6824	183.8546

Source: The Marine Products Export Authority Development, https://mpeda.gov.in/MPEDA/marine_products_exports.php#

From the above table shows that the highest mean value of 949.567 in 2017 -2018 followed by 898.05, 779.58, 737.1143, 676.481 from 2018-19, 2016-17, 2014-15, 2013-14 and lowest mean value of 304.6929 from 2009-10. The best performance of average value is 1734.69 from 2017-2018. The Products (fish) - wise highest mean value of (2889.184) Fr. Shrimp followed by the (627.838) Fr.Fin Fish and third place (623.67) others fishes.

FISH PRODUCTION IN INDIA

The total production of fish and marine fish production, inland fish production, the annual growth rate of is exhibited table -3

TABLE -3
FISH PRODUCTION IN INDIA

(in Lakh tonnes)

Year	Marine	Annual Growth Rate	Inland	Annual Growth Rate	Total	All India Annual Growth Rate
2009-10	29.78	1.99	46.38	10.24	76.16	6.86
2010-11	31.04	4.23	48.94	5.52	79.98	5.02
2011-12	32.50	4.7	49.81	1.78	82.31	2.91
2012-13	33.72	3.75	52.94	6.28	86.66	5.28
2013-14	33.21	-1.51	57.19	8.03	90.40	4.32
2014-15	34.43	3.67	61.36	7.29	95.79	5.96
2015-16	35.69	3.66	66.91	9.04	102.60	7.11
2016-17	36.00	0.87	71.62	7.04	107.62	4.89
2017-18	36.25	0.70	78.06	8.99	114.31	6.21
2018-19	36.88	1.73	89.02	14.05	125.90	10.14
Mean	33.95	2.38	62.22	7.83	96.17	5.87
S.D	2.35	1.97	14.04	3.21	16.21	1.95
CV	6.94	82.65	22.56	40.99	16.85	33.15

Source: State Government/Union Territory Administration/ Handbook on Fisheries Statistics 2018.

From the above table shows that fish production in India, the highest mean value (62.22) of inland fish production followed by marine fish production (33.95) and highest annual growth rate of 2011-12 followed by 2010-11, 2012-13 in marine production lowest AGR of 2013-14 while, the inland production of the highest AGR of (14.05) in 2011-12 followed by 2009-10, 2015-16 and 2013-14. The lowest value is AGR for inland fish production from 2011-12.

EXPORT OF MARINE PRODUCTS IN INDIA

"Fisheries are a fast-growing sector our country, which provides nutrition and food security to a large population of the country besides providing income and employment to more than 14.5 million people". The following table export of marine products in India.

Table-4
EXPORT OF MARINE PRODUCTS IN INDIA

Year	Quantity (Tonnes)	Value (Crore)	Unit Value (Tonnes)	Unit Value Index	AGR	
					Quantity	Value
2009-10	602835.34	8607.94	142790.92	5730.58	11.29	12.95
2010-11	678436.07	10048.53	148113.14	5944.17	12.54	16.74
2011-12	813090.85	12901.47	158671.89	6367.92	19.85	28.39
2012-13	862021.41	16597.23	192538.46	7727.08	6.02	28.65
2013-14	928214.67	18856.26	203145.42	8152.76	7.68	13.61
2014-15	983755.56	30213.26	307121.60	12325.60	5.98	60.23
2015-16	1051243.49	33441.61	318114.75	12766.79	6.86	10.69
2016-17	945891.90	30420.83	321609.99	12907.06	-10.02	-9.03
2017-18	1134948.09	37870.90	333679.62	13391.45	19.99	24.49
2018-19	1377243.70	45106.89	327515.69	13144.07	21.35	19.11
Mean	602835.34	8607.94	142790.92	5730.58	11.29	12.95
S.D	678436.07	10048.53	148113.14	5944.17	12.54	16.74
CV	813090.85	12901.47	158671.89	6367.92	19.85	28.39

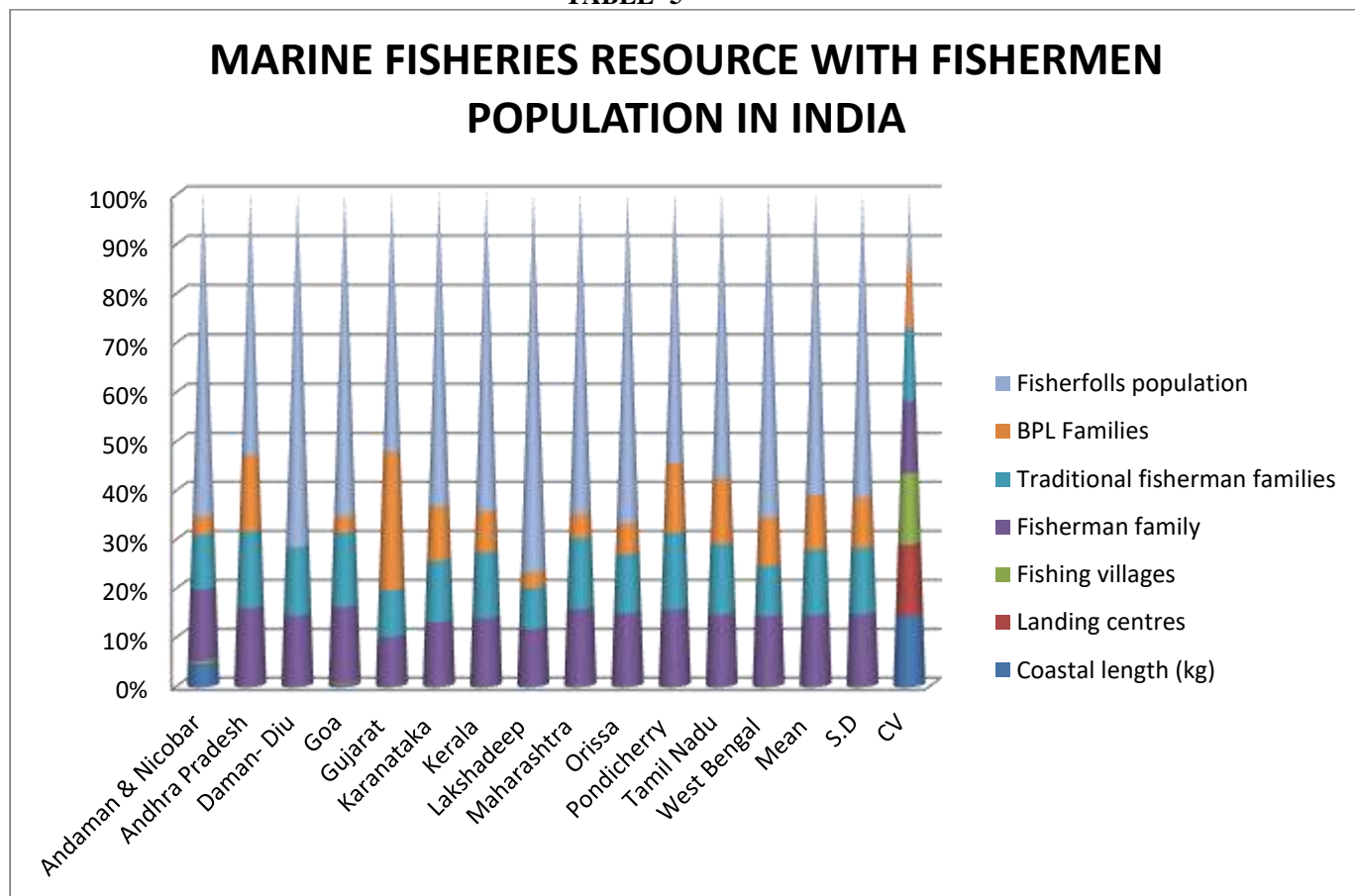
Source: Marine Products Exports Development Authority, Kochi

From the above table 4 Show that the Exports of Marine fish production in India. The highest mean value of AGR (Quantity 11.29) followed by (Value 12.95). The Standard Deviation value of AGR(Quantity 12.54) followed by (

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Value 16.74) and Covariance value of AGR(Quantity 19.85) followed by (Value 28.39) exports marine fish production is best performance of 2014-15 from value of Annual Growth Rate of 60.23. The following table marine fisheries resource with fishermen population in India .The study period is 2017-18.

TABLE -5



Source: State Government/Union Territory Administration/ Handbook on Fisheries Statistics

From the above table 4.9 Show that the Marine Fisheries Resource with Fishermen Population in India. The highest Coastal length Andaman & Nicobar followed by Gujarat Tamilnadu, Andhra Pradesh and lowest coastal length for Daman –Diu, Pondichery. Traditional fisherman families are the highest population Andhra Pradesh and Tamilnadu. The covariance is coastal Length (179.98), Landing centres (179.00), Fishing villages (179.09), Traditional fisherman families (179.62), BPL Families (180.27) and Fisher folls population (178.83). The highest population and fisheries place for overall India from Lakshadweep followed by Daman- Diu, Orissa and Tamilnadu. The following table shows that the relationship between the world level fish production and Indian fish production.

Table-6
RELATIONSHIP BETWEEN THE WORLD LEVEL FISH PRODUCTION AND INDIAN FISH PRODUCTION- Regression Analysis

Hypothesis:

There is no relationship between the world level fish production and Indian fish production.

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square	R2 Square
	B	Std. Error	Beta				
World	.448	.788		.568	.585	7.98	.636
India	.029	.008	.798	3.740	.006		

Source: Computed

It is observed from Table -6 that the coefficient of determination (R²) of the Model was .636 which indicated that 63.6 percent of the variation in the fish production was explained by independent variables. The F-test shows that the estimated regression function was statistically significant at the one per cent level. The regression constant has a positive value and it was statistically significant at the five per cent level.

Conclusion

This study, it concluded that the growth and instability of Indian seafood exports declined in terms of quantity, value and unit value. The trade witnessed the take-off phase during the 1990s which is attributed to trade liberalization. The exports were progressively increasing in quantity and value. The Indian fish and fishery product exports have been higher in the recent test which resulted from the significant increase in domestic production. However, the growth rate of Indian fish and fishery products export may also be increased by up scaling of domestic aquatic animal production through intensive farming practices including the cage culture.

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