STUDY ON EXPORT PERFORMANCE OF FISH PRODUCTS IN INDIA

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ABSTRACT:

The fishing industry includes any industry or activity concerned with taking, culturing, processing, preserving, storing, transporting, marketing or selling fish or fish products. It is defined by the Food and Agriculture Organization as including recreational, subsistence and commercial fishing, and the harvesting, processing, and marketing sectors. The commercial activity is aimed at the delivery of fish and other seafood products for human consumption or as input factors in other industrial processes. Directly or indirectly, the livelihood of over 500 million people in developing countries depends on fisheries and aquaculture. The State of World Fisheries and Aquaculture (SOFIA) report projects that by 2030 combined production from capture fisheries and aquaculture will grow to 201 million tonnes. That's an 18 percent increase over the current production level of 171 million tonnes.

EXPORT PERFORMANCE OF MPEDA:

MPEDA is a unique organization under the Government of India having close co-ordination with all stakeholders in the entire value chain of seafood export. MPEDA regulates the industry by registering Exporters, Processing Plants, Peeling sheds, Frozen Storages, Fishing Vessels and other entities under the MPEDA Act, 1972. The export oriented Aquaculture Farms and Hatcheries are also enrolled and allotted with Unique ID. The registered/enrolled entities are technically and financially assisted by MPEDA to meet the stringent parameters of traceability and quality prescribed by the important markets such as European Union, USA and Japan. MPEDA coordinates with the governments of the importing countries for meeting their statutory requirements and facilitate export of seafood from India.

STATEMENT OF THE PROBLEM:

The problems and prospects of the sector can be analysed from the following view points

- What is the significance of the fish marketing in our in our economic development?
- What are the various types of fish products and its contribution to export?

OBJECTIVES:

- To analyze the overall performance of fish products exported from India.

RESEARCH METHODOLOGY:

SAMPLE DESIGN:

The study is made for the purpose to find the export performance of fish from India. The data for the study is selected based on convenience.

METHOD OF DATA COLLECTION:

The present study is based on secondary data collection method and on the time series data from 1996-2019 for fish.

The required data is collected from

- Ministry of commerce
- MPEDA
- RBI
- WTO
- World bank

TOOLS AND TECHNIQUES:

- Growth rate
- Percentage analysis
- Standard deviation
- Coefficient of variation

PERIOD OF THE STUDY:

The study covers the period of 23 years ranging from 1996-2019.

REVIEW OF LITERATURE:

Farahana Akter made a study on "The Export Trend of Shrimp Industries in Bangladesh: An Analysis". They have focused to analyse future investments in fish (especially shrimp) production and export market facilities in Bangladesh and to determine how an export-Marketing research report is prepared from field work. The study was based on both primary and secondary data. The "Time range" is processed in this study. The study reveals that, it is clear that shrimp is the "White Gold" in Bangladesh and it has a great potentiality in the export earnings of Bangladesh than any other country of South-Asia.

Awal, Haque And Imam made a study on "Growth And Instability Of Frozen Food, Shrimp And Fish Export From Bangladesh". They have focused to analyse the growth rate of frozen food, Shrimp and fish and instability of export earnings. The growth rate calculation is made in this study. The study reveals that the present circumstances of this sector demands different institutional supports desperately from different angles to enhance the marketing activities and to strengthen the competitive position in the international market with a view to ensuring more contribution to our economy.

HS CODE	0301			0302			0303			0304		
YEAR	VALUE	GR	%	VALUE	GR	%	VALUE	GR	%	VALUE	GR	%
1996	94.2		0.50	4,006.05		0.77	75,363.32		1.41	7,198.60		0.60
1997	191.45	103.24	1.01	3,053.86	-23.77	0.59	96,931.03	28.62	1.81	5,164.78	-28.25	0.43
1998	268.6	40.30	1.42	3,394.78	11.16	0.65	57,967.19	-40.20	1.08	4,984.68	-3.49	0.42
1999	230.51	-14.18	1.22	5,715.80	68.37	1.10	80,889.33	39.54	1.51	6,785.80	36.13	0.57
2000	383.88	66.54	2.03	5,841.09	2.19	1.13	1,29,313.30	59.86	2.42	6,637.40	-2.19	0.55
2001	666.67	73.67	3.53	6,164.71	5.54	1.19	1,12,233.16	-13.21	2.10	8,661.99	30.50	0.72
2002	695.95	4.39	3.68	4,552.56	-26.15	0.88	1,31,104.14	16.81	2.45	7,408.63	-14.47	0.62
2003	1,283.07	84.36	6.79	9,641.24	111.78	1.86	56,964.52	-56.55	1.07	6,637.40	-10.41	0.55
2004	631.78	-50.76	3.34	9,165.37	-4.94	1.77	78,592.72	37.97	1.47	7,812.77	17.71	0.65
2005	544.36	-13.84	2.88	9,868.98	7.68	1.90	1,07,175.89	36.37	2.00	11,993.61	53.51	1.00
2006	1,863.28	242.29	9.86	13,486.04	36.65	2.60	1,39,184.34	29.87	2.60	23,648.60	97.18	1.98
2007	670.25	-64.03	3.55	11,884.82	-11.87	2.29	1,21,333.50	-12.83	2.27	18,078.95	-23.55	1.51
2008	884.56	31.97	4.68	13,125.35	10.44	2.53	97,180.75	-19.91	1.82	28,961.75	60.20	2.42
2009	573.16	-35.20	3.03	17,030.78	29.75	3.28	2,58,399.52	165.90	4.83	49,019.79	69.26	4.09
2010	502.34	-12.36	2.66	16,391.61	-3.75	3.16	2,77,313.81	7.32	5.19	53,362.34	8.86	4.46
2011	665.71	32.52	3.52	24,931.61	52.10	4.81	3,40,250.43	22.70	6.36	28,961.75	-45.73	2.42
2012	625.83	-5.99	3.31	40,448.70	62.24	7.80	3,47,373.55	2.09	6.50	1,02,915.16	255.35	8.60
2013	2,023	223.29	10.71	58,585.16	44.84	11.29	4,70,331.01	35.40	8.80	78,298.94	-23.92	6.54
2014	931.79	-53.95	4.93	54,992.83	-6.13	10.60	4,07,639.60	-13.33	7.62	86,183.09	10.07	7.20
2015	750	-19.51	3.97	57,401.20	4.38	11.07	3,61,378.18	-11.35	6.76	1,01,981.41	18.33	8.52
2016	1,349.87	79.98	7.14	50,902.60	-11.32	9.81	4,55,186.75	25.96	8.51	1,13,780.94	11.57	9.50
2017	1,305.59	-3.28	6.91	31,206.04	-38.69	6.02	4,72,764.75	3.86	8.84	1,61,042.47	41.54	13.45
2018	1,070.29	-18.02	5.66	43,006.16	37.81	8.29	4,83,764.03	2.33	9.05	1,84,813.35	14.76	15.44
2019	689.72	-35.56	3.65	23,929.79	-44.36	4.61	1,88,523.77	-61.03	3.53	92,782.61	-49.80	7.75
Total	18896.11			5,18,727.13			53,47,158.59			11,97,116.81		
Average	787.34			21,613.63			2,22,798.27			49,879.87		
SD	489.12			18968.387			153644.39			53107.68		
CV	0.62			0.88			0.69			1.06		

HS CODE	0305			0306			0307		
YEAR	VALUE	GR	%	VALUE	GR	%	VALUE	GR	%
1996	1,641.41		0.47	2,68,741.51		1.08	39,083.98		0.90
1997	1,637.80	-0.22	0.47	2,99,745.89	11.54	1.21	38,566.97	-1.32	0.89
1998	2,124.96	29.74	0.61	3,23,955.02	8.08	1.31	40,271.21	4.42	0.93
1999	2,806.06	32.05	0.80	3,56,233.74	9.96	1.44	51,704.27	28.39	1.19
2000	3,194.45	13.84	0.91	4,37,643.96	22.85	1.77	45,966.30	-11.10	1.06
2001	3,545.71	11.00	1.01	3,97,200.09	-9.24	1.60	52,248.36	13.67	1.20
2002	3,283.70	-7.39	0.94	4,65,457.64	17.18	1.88	63,824.21	22.16	1.47
2003	6,114.85	86.22	1.75	4,23,462.51	-9.02	1.71	62,956.98	-1.36	1.45
2004	5,058.74	-17.27	1.45	4,12,738.89	-2.53	1.67	76,405.62	21.36	1.76
2005	4,403.77	-12.95	1.26	3,99,389.30	-3.23	1.61	95,817.89	25.41	2.21
2006	5,500.14	24.90	1.57	4,20,027.60	5.17	1.70	1,04,063.20	8.61	2.40
2007	4,534.86	-17.55	1.30	3,50,189.63	-16.63	1.41	91,666.69	-11.91	2.11
2008	6,701.66	47.78	1.92	3,52,847.50	0.76	1.42	96,120.93	4.86	2.22
2009	10,710.46	59.82	3.06	3,86,442.94	9.52	1.56	1,36,075.94	41.57	3.14
2010	7,515.44	-29.83	2.15	5,13,155.77	32.79	2.07	1,86,652.54	37.17	4.30
2011	11,277.91	50.06	3.23	8,39,100.40	63.52	3.39	2,77,367.45	48.60	6.39
2012	8,345.35	-26.00	2.39	10,08,157.32	20.15	4.07	2,99,261.64	7.89	6.90
2013	21,975.35	163.32	6.29	19,66,830.54	95.09	7.94	3,41,956.21	14.27	7.88
2014	19,841.68	-9.71	5.68	22,97,262.20	16.80	9.27	3,39,917.57	-0.60	7.84
2015	34,129.46	72.01	9.77	20,31,775.80	-11.56	8.20	3,49,776.63	2.90	8.06
2016	47,678.15	39.70	13.64	25,33,135.96	24.68	10.22	4,87,267.45	39.31	11.23
2017	48,690.67	2.12	13.93	31,63,349.69	24.88	12.77	5,38,617.55	10.54	12.42
2018	66,741.11	37.07	19.10	30,79,801.28	-2.64	12.43	5,22,404.05	-3.01	12.04
2019	22,009.72	-67.02	6.30	20,47,494.01	-33.52	8.26			
Total	3,49,463.41			2,47,74,139.19			43,37,993.64		
Average	14,560.98			10,32,255.80			1,88,608.42		
SD	17610.71			974175.62			167956.99		
CV	1.21			0.94			0.89		

ANALYSIS AND INTERPRETATION:

The above table shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs. 94.2 lakhs and it is raised to 689.72 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2006(242.29) as positive and -3.28 in 2017 as negative growth. The percentage has been increased from 0.50 to 3.65 from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 489.12. The average of live fish export is 787.34. The coefficient of variation for export of fish is 0.62%. In future, there is a chance for increase in value of fish export. The above table shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs. 4,006.05 lakhs and it is raised to 23,929.79 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2003(111.78) as positive and -3.75 in 2010 as negative growth. The percentage has been increased from 0.77 to 4.61 from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 18968.387 . The average of fish export is 21,613.63. The coefficient of variation for export of fish is 0.88%.

The above table (4.6) shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs. 75,363.32 lakhs and it is raised to 1,88,523.77 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2009(165.90) as positive and -11.35in 2015 as negative growth. The percentage has been increased from 1.41 to 3.53from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 153644.39. The average of fish export is 2,22,798.27. The coefficient of variation for export of fish is 0.69%. The above table shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs7,198.60 lakhs and it is raised to 92,782.61 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2012(255.35) as positive and -2.19 in 2000 as negative growth. The percentage has been increased from 0.60 to 7.75 from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 53107.68. The average of fish export is 49,879.87. The coefficient of variation for export of fish is 1.06%.

The above table shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs. 1,641.41 lakhs and it is raised to 22,009.72 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2013(163.32) as positive and -0.22 in 1997 as negative growth. The percentage has been increased from 0.47 to 6.30 from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 17610.71. The average of fish export is 14,560.98. The coefficient of variation for export of fish is 1.21%. The above table shows the total export of fish from India during 1996-2019. In the year 1996 export value of fish stood at Rs. 2,68,741.51 lakhs and it is raised to 20,47,494.01 lakhs in 2019. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2013(95.09) as positive and -2.53 in 2004 as negative growth. The percentage has been increased from 1.08 to 8.26 from 1996 to 2019. The standard deviation quantifies the amount of variation in export value of fish is Rs. 974175.62. The average of fish export is 10,32,255.80. The coefficient of variation for export of fish is 0.94 %.

The above table shows the total export of fish from India during 1996-2018. In the year 1996 export value of fish stood at Rs. 39,083.98 lakhs and it is raised to 5,22,404.05 lakhs in 2018. While computing growth rate for fish, it is found that twenty four years exports showed both positive and negative growth. It achieved peak level of growth in 2011(48.60) as positive and -0.60 in 2014 as negative growth. The percentage has been increased from 0.90 to 12.04 from 1996 to 2018. The standard deviation quantifies the amount of variation in export value of fish is Rs. 167956.99. The average of live fish export is 1,88,608.42. The coefficient of variation for export of fish is 0.89%.

FINDINGS:

Export of live fish (0301) during the year 1996 was 0.50% and it increased in the year 2019 to 3.65%. Average export of tea during the year was at 787.34. Standard deviation of live fish was around 489.12. Co-efficient of variance was 0.62% on total exports of the live fish.

- Export of fish, fresh or chilled, excluding fish fillets and other fish meat of heading 0304 (0302) during the year 1996 was 0.77% and it increased in the year 2019 to 4.61%. Average export of tea during the year was at 21,613.63. Standard deviation of live fish was around 18968.387. Co-efficient of variance was 0.88% on total export.
- Export of fish frozen excluding fish fillets and other fish meat of heading no 0304 (0303) during the year 1996 was 1.41% and it increased in the year 2019 to 3.53%. Average export of tea during the year was at 2,22,798.27. Standard deviation of live fish was around 153644.39. Co-efficient of variance was 0.69% on total exports.
- Export of fish fillets and other fish meat (whether or not minced), fresh, chilled or frozen (0304) during the year 1996 was 0.60% and it increased in the year 2019 to 7.75%. Average export of tea during the year was at 49,879.87. Standard deviation of live fish was around 53107.68. Co-efficient of variance was 1.06% on total exports.
- Export of fish dried salted or in brine; smoked fish cooked or not before or during the smoking process; fish meal fit for consumption (0305) during the year 1996 was 0.47% and it increased in the year 2019 to 6.30%. Average export of tea during the year was at 14,560.98. Standard deviation of live fish was around 17610.71. Co-efficient of variance was 1.21% on total exports.
- Export of Crustaceans w/n in shell, live, fresh, chilled, frozen, dried salted/in brine; Crustaceans , in shell, cooked by steaming of boiling, w/n chilled, frozen, dried, salted/in (0306) during the year 1996 was 1.08% and it increased in the year 2019 to 8.26%. Average export of tea during the year was at 10,32,255.80. Standard deviation of live fish was around 974175.62. Co-efficient of variance was 0.94% on total exports.
- Export of molluscs w/n in shell, live, fresh, chilled, frozen, dried, salted/in brine ; aquatic invertebrates excl Crustaceans and molluscs live, fresh, chilled, frozen (0307) during the year 1996 was 0.90% and it increased in the year 2019 to 12.04%. Average export of tea during the year was at 1,88,608.42. Standard deviation of live fish was around 167956.99. Co-efficient of variance was 0.89% on total exports.

SUGGESTIONS:

EXPORTS

There is need to produce value added fishery and fishery based products, specialized packaging and modified techniques are needed to be adopted. Low value species should be used to prepare value added products in order to reduce wastage.

MARINE PRODUCTION

Over exploitation of fishery stocks should be prevented, efforts are required to reduce harvest and post harvest losses. While handling, loading and unloading.

AQUACULTURE DEVELOPMENT

- To enable aquaculture farmers with latest knowledge, and information, subsidy on feed, ice, transportation, insurance scheme would result in higher returns.
- Setting up PCR labs and good hatcheries to get tested good quality seeds, would improve the production, and enable the aquaculture operator to benefit in the long run.

GOVERNMENT

- Up Grading Of Fishing Harbours To International Standards Is Must For Sustaining Expanding Our Marine Product.
- The government has to take several steps to ensure quality assurance at all levels of the supply chain, right from production to export.
- Efforts should be made to develop sea food processing hubs in clusters in order to ensure higher productivity and mass production to match greater export demand.

CONCLUSION:

MPEDA plays a vital role in export of marine products. MPEDA is the nodal agency for the holistic development of seafood industry in India to realise its full export potential as a nodal agency. To improve the export of marine products, Government of India should focus on new standards for fishing vessels, storage premises, processing plants and conveyances.

MPEDA's focus should be mainly on Market Promotion, Capture Fisheries, Culture Fisheries, Processing Infrastructure & Value addition, Quality Control, Research and Development.

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