
A study on trade barrier and export intention of shrimp with special reference to Chennai

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Abstract: In a shrimp exporting the SIMP (Seafood import monitoring program), Turtle excluding device, Antidumping, Price fluctuations are the most trade barrier in global market. This paper examines the perspective of trade barriers in exporting shrimp to the other country. This study revealed major trade barrier information on exporting shrimp to US and EU.

Keywords: Barriers, Turtle excluding device, Innovation, Seafood import monitoring program, Antidumping, Price fluctuations.

INTRODUCTION

Exporting refers to the act of manufacturing and then selling or exchanging products or services abroad in one country. Exporting is typically achieved by either direct or indirect networks by the company that makes the product or provides the service. Exporting is only one of the strategies used by firms to engage in markets outside of their home country. Throughout history, exports have played an important role in global trade and, in particular, the United States has always been heavily dependent on exports. Even before its Declaration of Independence, for much of its trade, the United States depended on exports to Europe of cotton, tobacco, and other agricultural products. An export tariff is a tax levied on a commodity exported from a country. To create economic barriers to trade, governments use tariffs. Tariffs increase the average price of goods, restricting the production and selling of those goods.

Specifically, an export tariff raises the cost of exporting domestic goods abroad. Export tariffs tend to be very unpopular because they are considered to harm domestic industry. Most possibly, a government economist would use an export tariff if the country faced widespread inflation. Export tariffs are used in certain instances to ensure that a country retains a fair amount of an essential commodity. One form of protectionism, an economic strategy in which a government limits trade to protect its own markets and individuals, is an export tariff. Usually, policymakers tend to use import tariffs as economic security measures because they increase the price of buying their goods from foreign firms. On the other hand, export tariffs increase costs for domestic firms to export their goods.

Imports are international goods and services purchased by another country's residents, corporations, and government. A trade deficit exists if a nation imports more than it exports. That generates a trade surplus if it imports less than it exports. If a country has a trade deficit, to pay for the additional imports, it must borrow from other countries.

Our research idea is based on the rich knowledge acquired by our peer teams across the university.(A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020; Danda et al., 2009; Danda and Ravi, 2011; Dua et al., 2019; Ezhilarasan et al., 2019; Krishnan and Chary, 2015; Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018; Narayanan et al., 2012, 2009; Neelakantan et al., 2013, 2011; Neelakantan and Sharma, 2015; Panchal et al., 2019; Prasanna et al., 2011; Priya S et al., 2009; Rajeshkumar et al., 2019; Ramadurai et al., 2019; Ramakrishnan et al., 2019; Ramesh et al., 2016; Venugopalan et al., 2014)

Currently we are working on "A Study on Trade Barrier and export intention of shrimp with special reference to Chennai".

LITERATURE REVIEW

1. (Anjani Kumar, 2004): Fisheries exports have registered a tremendous growth during the period 1987-2000, and the export basket of fisheries products has become reasonably diversified. Export of frozen fish recorded the highest annual growth but shrimps and prawns constituted the major category of exports, capturing an impressive 5 per cent of the world export market. Trade reforms of the 1990s seem to have further facilitated the export of fish and fish products from India and the feared import surge after the opening up of the economy is still not visible. Measures of relative competitive advantage reveal that India has become reasonably

competitive in recent years but it must vigorously take up various sanitary and phyto-sanitary measures, consistent with WTO guidelines, in order to give exports a further boost. However, there is a concern that these measures are being increasingly promulgated with the deliberate purpose of shielding domestic producers from international competition.

2. (Keithly and Poudel, 2008): The effectiveness of the anti-dumping trade in the patterns of an importing nation. The first theme is whether the anti-dumping measures result in a reduction of imports between the targeted countries ('named' countries in general). This problem is commonly referred to as the 'deflection' of exchange. The second theme is whether supply reductions by named countries are partially or fully offset by supply increases by non-named countries (generally referred to as trade diversion). Two other concerns, in addition to these two topics, have gained increased publicity. The first issue is whether the launch of an anti-dumping inquiry is capable of impacting imports, even before a decision is taken. The second issue is whether the affirmative dumping findings are related to the macroeconomic circumstances of the country seeking relief and whether the anti-dumping petition filings are deliberately time to better ensure the affirmative findings and higher studies
3. (Cudmore, 2009): environmental altered hydrology of the area, destruction of mangroves, estuaries and seasonal lagoons resulting in decreases in biodiversity and loss of ecosystem services they provide; degraded quality of water (runoff of enriched water from ponds); impacts on fisheries resulting from catches associated with the collection of post larvae of shrimp used to store the ponds shown in the picture. Estimates of direct destruction of the mangrove ecosystem range from 20 to 40 km square due to shrimp farm development. Mangroves will vanish within 20 years if mitigation steps are not enforced. Although this new shrimp farming industry has provided new employment opportunities, other industries have been negatively affected. Fast growth has deprived fishermen, farmers, others access to mangroves, estuaries and seasonal lagoons.
4. (Rahman and Hossain, 2009): The problems and prospects of shrimp production and marketing is on the basis of secondary information was carried out from July to October 08. Shrimp farming has emerged one of the important economic activities. Shrimp aquaculture in coastal areas plays a major role providing employment, income and food security to remote coastal people where alternative livelihood options are limited. Shrimp culture system is extensive to improved extensive type with total production of 55000 mt of brackish water shrimp and 12000 mt of freshwater shrimp. The shrimp culture has led to many social and environmental problems. In export markets, shrimps are great but many challenges remain ahead because of increasing requirements of quality, food hygiene and development of technological and trade barriers in large shrimp markets in USA and EU countries.
5. (Anders and Caswell, 2009): The United States mandated a Hazard Analysis Critical Control Points (HACCP) food safety standard for seafood in 1997. Panel model results for 1990 to 2004 suggest that HACCP introduction had a negative and significant impact on overall imports from the top thirty-three suppliers. While the effect for developed countries was positive, the negative effect for developing countries supports the view of "standards as barriers" versus "standards as catalysts." A different perspective emerges from individual country-level analysis. Regardless of development status, leading seafood exporters generally experienced a positive HACCP effect, while most other smaller trading partners faced a negative effect.
6. (Bermúdez-Almada, 2012): During the development cycle, both in the larval and growth phases, antibiotics are widely used in aquaculture. Environmental and human health issues, including bacterial tolerance, disease persistence in the aquatic environment, and impacts on the biogeochemical composition of sediments, are correlated with the use of antibiotics in aquaculture. The accumulation of antibiotic residues in the edible tissues of shrimp may also alter human intestinal flora and cause food poisoning or allergy problems.
7. (Amagliani et al., 2012): Salmonella has been found worldwide in different types of seafood. From harvest to consumption, salmonella can contaminate seafood. To protect public health, seafood protection regulation through HACCP is imperative. The FDA reports that certain packages of frozen shrimp sold nationwide are being recalled because they could be tainted with salmonella.
8. (Wang and Reed, 2015): The investigation and impositions of U.S. antidumping duties in 2004 on imported shrimp distorts a named country's exports to third markets. They constructs a panel of bilateral, disaggregated product-level data for annual trade flows of subjected shrimp between the six named countries (Brazil, China, Ecuador, India, Thailand, and Vietnam) and four major importers (EU, Indonesia, Japan, and Malaysia) between 1999 and 2010. The trade flows were reoriented to other destination markets when U.S. anti-dumping duties were levied against their shrimp products
9. (Cmfri, 2019): CMFRI issues advisory as US ban on wild-caught shrimp hits exports Proposal of separate fisheries department to lift exports With export of Indian wild caught shrimp to the United States being affected alleged non compliance with the US regulations to protect sea turtles, the Central Marine Fisheries Research Institute (CMFRI) has issued an advisory urging the fishing regulators to make the use of turtle excluder devices (TED) mandatory on all trawl nets used by trawl vessels. According to the Marine Products Export Development Authority (MPEDA), the export of wild-caught shrimp has been affected since July, 2018, due to the restrictions imposed by the US State Department. India was the top producer of aquaculture

shrimps in the world at more than 6 lakhs tonnes last fiscal year, when exports of seafood, primarily shrimps, earned the country Rs 45,000 crore in foreign currency.

10. (Prince and Prasad, n.d.): Shrimp export is the mainstay of Sea Food Export Industry in India. Indian Sea food Export Industry is primarily dependant on shrimp export due to its high value realisation as compared to other sea food varieties exported from the country. USA is the largest importer of shrimp exported from India. However, India face several constraints in exporting shrimps to USA from time to time which affects the volume and value of the shrimp trade between these countries. The present study is an attempt to identify the major constraints faced by Shrimp Exports from India to USA. It was identified that the enforcement of Seafood Import Monitoring Programme (SIMP), Ban on Wild Shrimp Exports, Imposition of Anti- dumping Duty and Border Rejections on Shrimp Exports have a major impact on the shrimp exports from India.

RESEARCH METHOD

The research design employed here is Descriptive research design. This type of research is usually conducted to study a problem that has been clearly defined yet. It has been noted that descriptive research is the initial research, which forms the basic of more conclusive research. It even help in determining the research design, sampling methodology and data collection method.

The first hand information which is being collected by the researcher is called primary data. In this study, the primary data was collected through structured questionnaire with various measures. Besides the primary data, the secondary data was also collected for the study. Websites, books were referred for this purpose from the library to facilitate proper understanding of the study.

A structured questionnaire which contains few multiple-choice questions. The questionnaire was divided into various sections like demographic variables, and factors related to US ban wild shrimp and based on what reason the ban occurs. The five-point Likert scale was selected as the response mode for the questionnaire. For each of the measurements the respondents are asked to tell whether and how strong they agree or disagree with the suggestion that is made. This is done by choosing a strongly disagree, disagree, neutral, agree, strongly agree. This was done in this research. A structured questionnaire was issued to the shrimp exporter. The researcher employed survey techniques to collect the data.

DATA ANALYSIS

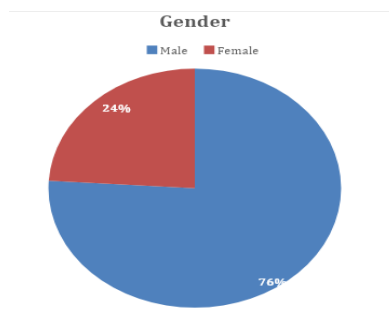


Fig.1: The figures 1 shows the frequency analysis of gender of respondents. It is clear that majority of the respondents are male (76 %) and female (24 %).

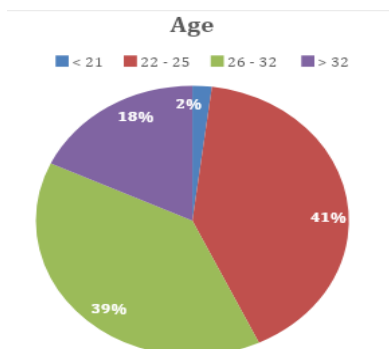


Fig.2: Figure 2 shows the frequency analysis of age of respondent. It is clear that majority of the respondents are 22-25 (41 %), 26-32 (39 %), > 32 (18 %) and < 21 (2 %)

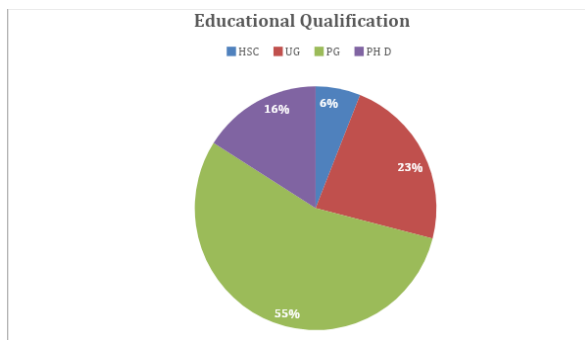


Fig.3: Figure 3 shows the frequency analysis of educational qualifications of the respondents. From the table it is clear that majority of respondents are PG (55 %), UG (23%), PhD (16 %) and HSC (6 %).

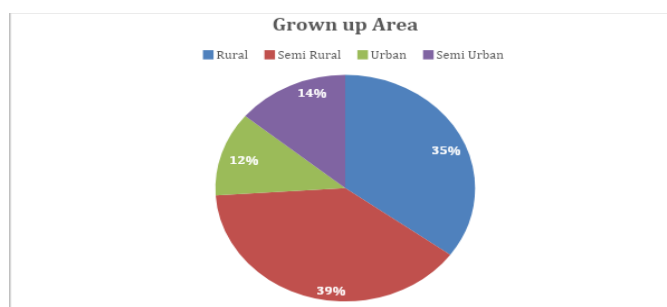


Fig.4: Figure 4 shows the frequency analysis of grown up area of the respondents. From the table it is clear that majority of respondents are semi rural (39 %), rural (35 %), semi urban (14 %) and urban (12 %).

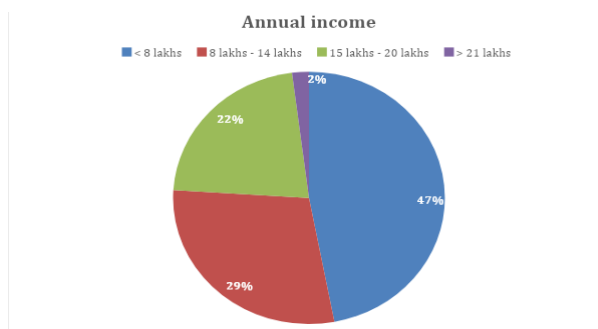


Fig.5: Figure 5 shows the frequency analysis of annual income of the respondents. From the table it is clear that majority of respondents are < 8 lakhs (47 %), 8 lakhs - 14 lakhs (29 %), 15 lakhs - 20 lakhs (22%) and > 21 lakhs (2 %).

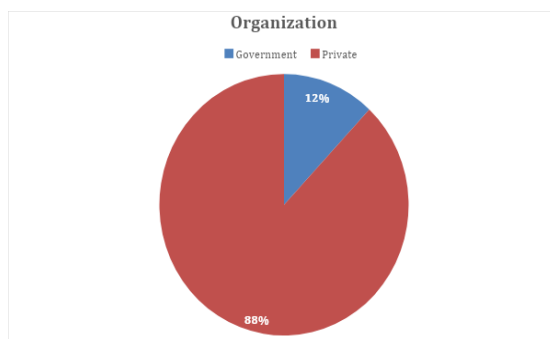


Fig.6: Figure 6 shows the frequency analysis of types of organizations. From the table it is clear that majority of respondents are private organization (88%), government organization (12 %).

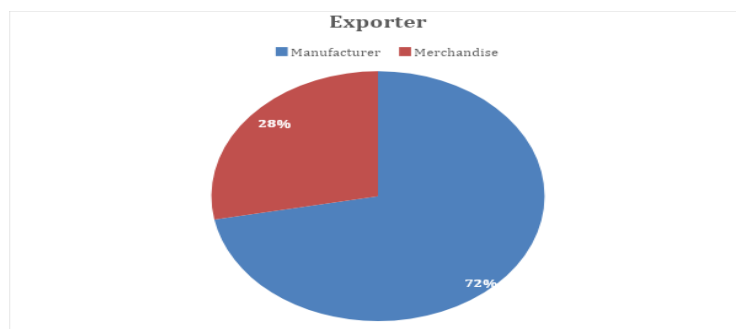


Fig.7: Figure 7 shows the frequency analysis of types of organizations. From the table it is clear that the majority of respondents are manufacturer exporter (72 %), merchandise exporter (28%).

Table 1: One Way Anova Analysis

	Sum of Square	Df	Mean square	F	Sig
Between Groups	5.134	3	1.711	2.738	0.54
Within Groups	29.380	47	.625		
Total	34.514	50			
	Sum of Square	df	Mean Square	F	Sig
Between Groups	1.219	3	.406	.573	.635
Within Groups	33.296	47	.708		
Total	34.514	50			
	Sum of Square	df	Mean Square	F	Sig
Between Groups	1.172	3	.391	.550	.650
Within Groups	33.343	47	.709		
Total	34.514	50			

From the table the one-way anova analysis of age VS intention. From the analysis it is clear that both the 'p' values of intention (0.54) are greater than 0.05. It is interpreted that there is a significant difference among the Age with respect to intention. The one way analysis of annual income vs intention. From the analysis it is clear that both the 'p' values of intention (0.635) are greater than 0.05. It is interpreted that there is a significant difference among the annual income with respect to intention. The one-way anova analysis of educational qualification VS intention. From the analysis it is clear that both the 'p' values of intention (0.650) are greater than 0.05. It is interpreted that there is a significant difference among the educational qualifications with respect to intention.

Table 2: ANALYSIS OF T TEST

S.NO	FACTOR	T-VALUE	SIGNIFICANCE
1	INTENTION	1.014	.229

The independent t-test analysis of Gender vs Intention. It is visible that the p-value (.229) is greater than 0.05 which means that there is no significant difference between the gender with respect of intention.

Table 3: REGRESSION TEST

MODEL	R	R SQUARE	ADJUSTED R SQUARE	SIGNIFICANCE
1	.538 ^a	.289	.227	.73034

MODEL SUMMARY

The R value represents the simple correlation and is 0.538 ("R" column), which indicates the degree of correlation. The R² value .289 (the "R square" column) and .227 (Adjusted "R" square column) indicates how much of the total variation in the dependent variable can be explained by the independent variable. The adjusted R square value 0.289 which indicates 28 % of the variance in dependent variable has been explained by independent variables.

Table 4:

MODEL	SUM OF SQUARE	df	MEAN SQUARE	F	SIGNIFICANCE
REGRESSION	9.978	4	2.494	4.677	.003 ^b
RESIDUAL	24.536	46	.533		
TOTAL	34.514	50			

ANOVA TEST

The regression model predicts the dependent variable significantly well. Here the 'p' value (0.003) which is lesser than 0.05. (it is a good fit for the data).

Table 5:

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.682	.657		1.037	.305
	SIMP	.316	.192	.260	1.651	.106
	Price fluctuations	.031	.179	.028	.173	.864
	Anti-dumping duties	.207	.132	.228	1.569	.123
	Barriers	.257	.226	.185	1.137	.262

REGRESSION ANALYSIS

The above table indicates regression analysis with B & Beta value for the independent and dependent variable which are assumed. As a rule of thumb, we say that a b coefficient is statistically significant if its p value is lesser than 0.05. From the analysis it is found all the SIMP (.260), Antidumping duties(.228), Barriers (.185), Price fluctuations (.028) having positive linear relationship with the intention.

CONCLUSION

This study shows the intention of exporting shrimp with the problem is based on the export shrimp ascertain the relationship between them. Exporting and importing is one of the major part of business in all country. Exporter and importer focus of all barrier, SIMP, and price fluctuation. Due to some particular reason all barrier, SIMP, antidumping and price fluctuation are the ban of wild shrimp.

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