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## Problems and satisfaction of pump exporters in international market: An analytical study in Coimbatore city

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### Abstract

The Indian pump industry serves all sectors of the country's economy, besides the household sector. The pump manufactured in India comes from the three industrial sectors namely small, medium and large scale industries and from organized and unorganized segments. Coimbatore city have maximum potential in manufacturing and trading their pumps worldwide. Globalization has also brought a remarkable positive impact on pump industry in Coimbatore district. Present study helps to evaluate the problems and satisfaction of pump exporters, taking into account the challenges involved and possibilities to thrive further.

**Keywords:** Pump exporters, Export trade, Industries and Pump manufacturers

### 1. Introduction

Pump is the second most common dynamic machine after the electric motors. The pump manufactured in India comes from the three industrial sectors namely small, medium and large scale industries and also from organized and unorganized segments. Coimbatore district have maximum potential in manufacturing and trade their pumps in international market. Globalization has also brought a remarkable positive impact on pump industry in Coimbatore. Indian pump manufacturers are facing competition from the gray market and foreign counterparts. In the recent years, the Indian pump industry is forced to be proactive with foreign players who come up with the superior variant of pumps to the market. The Indian pump industry is looking up for overseas opportunities. This study aims to analyse the awareness on EXIM policies, promotional methods, level of satisfaction, channel of distribution and problems and risks faced by pump exporters in Coimbatore city.

### 2. Materials and Methods

The data for the present study were collected from 60 respondents from Coimbatore city through well-structured questionnaire. For the present study, Snow Ball Sampling technique was employed to identify the respondents. Convenience sampling method was adopted to collect the primary data. The secondary data for the study were obtained from books, journals, magazines, published and unpublished theses and websites. The statistical tools applied for the present study was simple percentage analysis, chi square analysis and ranking.

- **Null Hypothesis [Ho] 1:** There is no significant relationship between the age of the respondents and the problems faced by pump exporters.
- **Null Hypothesis [Ho] 2:** There is no significant relationship between educational qualification of the respondents and the problems faced by pump exporters.
- **Null Hypothesis [Ho] 3:** There is no significant relationship between the years of experience and problems faced by pump exporters.
- **Null Hypothesis [Ho] 4:** There is no significant relationship between generation of the respondents and the problems faced by pump exporters.

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### 3. Results and Discussion

#### 1. Personal profile of the respondents

Respondents personal profile were analysed based on the age, education, industrial experience, generations and forms of organization.

**Table 1:** Personal profile of the respondents

S. No.	Particulars	No. of respondents	Percentage (%)	
1	Age	Below 35 years	11	18.33
		36-45 years	29	48.34
		Above 45 years	20	33.33
		Total	60	100
2	Education	School level	0	0
		UG level	08	13.33
		PG level	24	40.00
		Professional	28	46.66
		Total	60	100
3	Industrial experience	Less than 5 years	0	0
		5 – 10 years	17	28.33
		10 – 25 years	20	33.33
		More than 25 years	23	38.34
		Total	60	100
4	Generation	First generation	14	23.33
		Second generation	26	43.34
		More than two generations	20	33.33
		Total	60	100
5	Forms of organisation	Sole proprietorship	30	50
		Partnership	17	28.33
		Private Ltd Co	08	13.34
		Public Ltd Co.	05	8.33
		Total	60	100

Source: Primary data

The table 1 reveals the personal profile of the respondents. Majority (48.34%) of the respondents' were between 36 and 45 years old, 33.33 percent were above 45 years and 18.33 percent were below 35 years. With regards to educational qualification, 46.66 percent of the respondents were professional degree holders, 40 percent were PG degree holders, 13.33 percent UG degree holders and no one came under category of school education. Majority (50%) of the respondents were professionals.

Majority (38.34 %) of the respondents were more than 25 years of industrial experience, 33.33 percent were 10 to 25 years, 28.33 percent were 5 to 10 years and none of them comes under the category of less than 5 years. Most of the (38.34%) respondents were more than 25 years of business experience.

In relation to generation of the respondents, 43.34 percent of the respondents were doing this business for second generation, 33.33 percent of the respondents were more than two generation and 23.33 percent were first generation. From this analysis it can be concluded that most of the (43.34%) respondents were doing this business for second generation.

Regarding the forms of organization, 50 percent of the respondents were sole proprietors, 28.33 percent of the respondents were partnership form, 13.34 percent of the respondents were private limited company and 5 percent public limited company.

#### Chi-square test

Chi-square test has been adopted to test the significant association between the personal variable and the problems faced by pump exporters. The personal variable considered for the study is age, educational qualification, years of experience and generation of the respondents.

#### Age of the respondents and problems faced by pump exporters

Calculated value	Table value	Level of significance	S/NS
16.39	15.5	5%	S

Source: Computed S: Significant NS: Not Significant

The above table deals with the Null hypothesis [Ho] 1. Since the calculated chi square value (16.39) is greater than the table value (15.5) the null hypothesis was rejected. Hence there is no relationship between the age, educational qualification, years of experience and generation of the respondents.

#### Educational qualification and problems faced by pump exporters

Calculated value	Table value	df	Level of significance	S/NS
23.45	21.0	12	5%	S

Source: Computed S: Significant NS: Not Significant

The above table deals with the Null hypothesis [Ho] 2. Since chi square value (23.45) is greater than the table value (21.0) the null hypothesis is rejected.

#### Years of experience of the respondents and problems faced by pump exporters

Calculated value	Table value	df	Level of significance	S/NS
22.35	21.0	12	5%	S

Source: Computed S: Significant NS: Not Significant

The above table deals with the Null hypothesis [Ho] 3. Since the calculated value of chi square (22.35) is greater than the table value (21.0) the null hypothesis is rejected.

#### Generation of the respondents and export problems of pump exporters

Calculated value	Table value	df.	Level of significance	S/NS
32.33	15.5	8	5%	S

Source: Computed S: Significant NS: Not Significant

Above table deals with the Null hypothesis [Ho] 4. Since calculated value of chi square (32.33) is greater than the table value (15.5) the hypothesis is rejected.

**2. Membership in trade associations:** Respondents were members of the pump exporters in trade associations such as Codissia, CII, FICCI, IPMA and SIEMA.

**Table 2:** Membership in trade associations

S. No	Trade associations	No. of respondents	Percentage (%)
1	Codissia	25	41.67
2	Cii	14	23.33
3	Ficci	07	11.67
4	Ipma	04	6.66
5	Siema	10	16.67
Total		60	100

Source: Primary data

The table 2 shows that the membership of the pump exporters in trade associations, majority of the (41.67 %) of the respondents were members in CODISSIA, 23.33 percent in CII, 16.67 percent in SIEMA, 11.67 percent in FICCI and 6.66 percent in IPMA. It is inferred that most of the respondents were members in CODISSIA.

### 3. Level of awareness on EXIM policies and measures

Awareness level of the respondents were analysed regarding the EXIM policies and measures.

**Table 3:** Level of awareness on EXIM policies and measures

S. No	Level of awareness	No. of respondents	Percentage (%)
1	Aware	52	86.67
2	Unaware	08	13.33
Total		60	100

Source: Primary data

The table 3 shows that the majority ( 86.67 %) of the respondents were aware of EXIM policies and measures and 13.33 percent of the respondents were unaware of the policies.

### 4. Mode of payment

Mode of payment receipts in export trade were analysed

**Table 4:** Mode of receipt of the respondents in export

S. No	Mode of payment	No. of respondents	Percentage (%)
1	Collection of bills	04	6.67
2	Clean payment	46	76.67
3	Letter of credit	10	16.66
4	Others	0	0
Total		60	100

Source: Primary data

The table 4 shows that majority of (76.67 %) of the respondents recommended for clean payment, 16.67 percent of respondents were choose for letter of credit, 6.67 percent of the respondents were recommended for collection of bills.

**Table 5:** Types of finance preferred by exporters

S. No	Types of finance	No. of respondents	Percentage (%)
1	Pre shipment followed by post shipment in rupees	08	61.53
2	Pre shipment followed by discount bills	03	23.07
3	Foreign currency followed by rediscounting	01	7.70
4	Forfeiting	01	7.70
Total		13	100

Source: Primary data

The table 5 shows that 61.53 percent of the respondents prefer pre shipment credit in rupees, 23.07 percent pre shipments followed discounting of export bills, 7.70 percent foreign currency followed by rediscounting of bills and the same percent preferred forfeiting. The analysis concludes that majority of the (61.53%) respondents preferred pre shipment credit followed by post shipment credit in rupees.

### 6. Types of pumps manufactured

Various types of pumps such as submersible pumps, mono bloc pumps, jet pumps and others are manufactured by pump exporters.

**Table 6:** Types of pumps manufactured

S. No	Types of pumps	No. of respondents	Percentage
1	Submersible pumps	37	61.67
2	Mono Bloc pumps	12	20.00
3	Jet pumps	08	13.33
4	Others	03	5.00
Total		60	100

Source: Primary data

Table 6 reveals that the types of pumps manufactured by the pump exporters. It shows that 61.67 percent of the respondents manufacture submersible pumps, 20 percent of the respondents manufacture mono bloc pumps, 13.33 percent of the respondents manufacture jet pumps and 3 percent of the respondents manufacture other type of pumps. So, the majority of the (61.67%) respondents manufacture submersible pumps.

**Table 7:** Methods of pricing of pumps in international market

S. No	Pricing of pumps	No. of respondents	Percentage (%)
1	Marginal cost pricing	07	11.67
2	Market oriented export pricing	12	20
3	Low price for product and high price for spare parts	04	6.67
4.	Cost of production + margin	37	61.66
Total		60	100

Source: Primary data

The above table reveals the methods of pricing of pumps in international market. It clears that 61.66 percent of the respondents opt for cost of production + margin pricing, 20 percent of the respondents preferred market oriented export pricing, 11.67 percent of the respondents adopt marginal cost pricing and 6.67 percent of the respondents offered low price for product and higher price for spare parts. The analysis concludes that majority of the (61.66%) respondents prefer cost of production + margin pricing for international trade.

### 8. Channel of distribution of pumps

Pumps are exported by various distribution channels such as direct export, commission buying agents, export agents and others.

**Table 8:** Channel of distribution of pumps in international market

S. No	Channel of distribution	No. of respondents	Percentage (%)
1	Direct export	35	58.33
2	Commission buying agent	06	10
3	Export agents	16	26.67
4	Others	03	5
Total		60	100

Source: Primary data

Table 8 shows that the channel of distribution of pumps in international market, it reveals that 58.33 percent of the respondents select direct export as a channel of distribution, 26.67 percent export through export agents, 10 percent through commission buying agent, 5 percent others and no percent export mergers. From the analysis it is inferred that majority of the (58.33%) respondents select direct export as channel of distribution of pumps in international market.

### 9. Satisfaction level of the respondents on pump export in international market

Level of satisfaction of the respondents towards international pump export market were analysed.

**Table 9:** Level of satisfaction of the respondents on trading of pumps in international market

S. No	Level of Satisfaction	No. of respondents	Percentage (%)
1	Highly satisfied	13	21.67
2	Satisfied	47	78.33
3	Neither satisfied nor dissatisfied	0	0
4	Dissatisfied	0	0
5	Highly dissatisfied	0	0
Total		60	100

Source: Primary data

Table 9 reveals that the level of satisfaction on trading of pumps in international market, it shows that 78.33 percent of the respondents were satisfied, 21.67 percent highly satisfied and no respondents came under the categories of neither satisfied nor dissatisfied, dissatisfied and highly dissatisfied. So it is inferred that majority of the (78.33%) respondents were satisfied with the trading of pumps in international market.

### 10. Promotional methods adopted

Various methods adopted for promotional activity by the exporters were analysed.

**Table 10:** Types of promotional methods adopted in international market

S. No	Promotional methods	No. of respondents	Percentage (%)
1	Direct mailing	10	16.67
2	Personal selling	18	30
3	Exhibitions, Advertisements and trade fairs	32	53.33
Total		60	100

Source: Primary data

Table 10 reveals that the types of promotional methods adopted in international market. It is evident that 53.33 percent of the respondents select exhibition, advertisements

and trade fairs as promotional methods, 30 percent preferred personal selling, 16.67 percent adopted through direct mailing. So it is concluded that the majority of the (53.33%) respondents adopt exhibition, advertisement and trade fairs as the promotional tool for international market to trade their pumps.

### 11. Problems faced by the exporters during production

Various problems like labour insufficiency, raw material shortage, shortage of power supply, Strike/Lockout and machinery fault were faced by the respondents during production of pumps were analysed.

**Table 11:** Problems faced by respondents during production

S. No	Problems	No. of respondents	Percentage (%)
1	Labour insufficiency	04	6.67
2	Raw material shortage	12	20.00
3	Shortage of power supply	43	71.66
4	Strike/Lockout	0	0
5	Machinery fault	01	1.66
Total		60	100

Source: Primary data

Table 11 explains the problems faced by the respondents during production of pumps. 71.66 percent of the respondents face shortage of power supply during production, 20 percent of the respondents suffered by raw material shortage, 6.67 percent suffered by labour insufficiency, 1.66 percent faced problem due to machinery fault and none of the respondents comes under the category of strike. Majority of the (71.66%) respondents face shortage of power supply problem during production.

### 12. Types of risk

Various types of risk such as commercial risk, political risk, exchange rate fluctuation risk, credit risk and legal risk faced by the respondents were analysed.

**Table 12:** Types of risk faced by the respondents in export trade

S. No	Types of risk	No. of respondents	Percentage (%)
1	Commercial risk	27	45
2	Political risk	02	3.33
3	Exchange rate fluctuation risk	12	20
4	Credit risk	19	31.67
5	Legal risk	0	0
Total		60	100

Source: Primary data

Table 12 analyses the types of risk faced by the respondents in export trade, 45 percent of the respondents were face commercial risk, 31.67 percent of the respondents were face credit risk, 20 percent of the respondents were face exchange rate fluctuation risk, 3.33 percent of the respondents were face political risk and no one face the legal risk. From this analysis it is understood that most of the (45%) respondents were faced commercial risk in export trade.

### 13. Problems faced by respondents during export of pumps

At the time of export, the respondents were faced so many problems such as export restrictions, inspection and control during clearance, customs procedure and documentary

requirements and transparency and access to trade regulations were analysed.

**Table 13:** Problems faced by respondents during export of pumps

S. No	Problems	No. of respondents	Percentage (%)
1	Export restrictions	08	13.3
2	Inspection and control during clearance	18	30
3	Customs procedure and documentary requirements	24	40
4	Transparency and access to trade regulations	10	16.67
	Total	60	100

**Source:** Primary data

Table 13 shows that the problems faced by the respondents during export of pumps were analysed. Majority (40%) of the respondents face difficulties in customs procedure and documentary requirements, 30 percent of the respondents face inspection and control during clearance, 16.67 percent of the respondents face transparency and access to trade regulations and 13.33 percent of the respondents face export restrictions. Most of the (40%) respondents face customs procedure and documentary requirement problems during export of pumps.

### Ranking

**Table 14:** Factors influencing in pricing decision

S. No	Factors	Weighted average Score	Rank
1	Cost of Production	3.68	2
2	Currency fluctuations	4.11	3
3	Government measure like taxes and duties	8.44	5
4	Product quality/ features	2.05	1
5	Customers needs and tastes	7.02	4
6	Customers' ability to pay	10.16	6
7	Nature of competition	11.66	7
8	Gray market appeal	12.00	8

**Source:** Primary data

Table 14 shows that, to ascertain the factors influencing in pricing decision the respondents were asked to assign the rank. The ranks were assigned 1 for the most important factor and 2 for the next important factor. Similarly, the least important factor was given the lowest rank. From the above table it can be inferred that the pump manufactures considered product quality/features and cost of production is the most important factors and gray market appeal is the least important factor to determine the price for their products.

### 4. Conclusion

Coimbatore is an important hub for manufacturing and export of pumps in international market and have immense potential in manufacturing and trading of pumps for present generation. In essence, it abounds with challenges, opportunities and flexibilities which are due to highly competitive impact of competitors of other part of the world. The challenges are a few; the opportunities are many and the flexibilities are more to meet with. In international market the countries like UAE, USA, UK and Italy has huge potential than others. So, the Pump exporters of our country

tap the export potentials of these countries by improving the quality of their products through research and development. And also they should try to connect their small and medium enterprises to large scale to produce the mass production by increasing their capital and by employing more number of employees. As a result they would be able to give tough competition to other exporters in international market.

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