

A STUDY ON EXPORT PERFORMANCE OF MOTOR AND PUMP INDUSTRY IN INDIA

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INTRODUCTION

Exports has a vital role to play in the economic development of a nation .It is an important key factor in deciding the sustained rate of economic growth of the country.Export is very essential for any nation as it provides ample employment opportunities, brings efficient industrialization. Enable to earn foreign exchange and solve Bop problems .India's export has a manifold increase since june1991, due to liberalization, globalization and privatization and this had led to a paradigm shift in the Indian economy sfrom import substitution-led growth to export-led growthIndian pump Industry at present met the pump requirements of 95% of applications. Now a days pumps are purchased based on life cycle cost analysis. Hence, user will have to keep a track record of all the pumps for expenditure on utilities consumption, spare parts consumption, maintenance etc. and give feedback to consultants and manufacturers. For any technical problem, the user should contact consultant if they do not get satisfactory services from manufacturer.

REVIEW OF LITERATURE

The review of literature plays a vital role in each study and needless to say in this study, literature regarding the define problem has been collected and reviewed appropriately.

Sergey Berzin's "submersible pumps for wastewater application"¹article report on submersible centrifugal pumps meet many of today's requirement for wastewater pumping operations. Highlight their advantage and he discusses the solution to maximize cost – effectiveness and performance in pumping stations.

Bullentin of JSIYE Journal "Improvement the Performance of High Speed Pumps"²The article reports on the improve the performance of high specific speed pumps at low flow rates. We develop the new type propeller pumps which have a part of narrow passage in front of the impeller blades. The improvement of these impeller blades helpful to increase the discharge values of motor and pumps and to reduce the power consumptions.

1. Sergey Berzin's "submersible pumps for wastewater application"
2. Bullentin of JSIYE Journal "Improvement The Performance Of High Speed Pumps"

STATEMENT OF THE PROBLEM:

India being a net exporter of motor and pumps for the earnings by way of exports will lead to the import of capital goods, which will pave way for the increased investment resulting in technological advantages, eventually leading to improve production and efficiency. To accelerate the pace of economic development, reliance on international trade becomes desirable to muster foreign exchange for the annual growth rate of economies of developing countries like India motor and pump export seem to be the engine of the growth of exports. A study about the performance of export in motor and pump Industry is important for India. The present study on the export performance of motor and pumps will examine the Indian motor and pump Industry in the world market

OBJECTIVES OF THE STUDY:

- To estimate the growth of export of motor and pump Industry in India.
- To estimate the future trend of motor and pump Industry in India.
- To estimate the country wise export growth and trend of motor and pump Industry in India.

SCOPE OF THE STUDY

India is one of the largest and consistent supplier of motor and pump. We have submersible centrifugal etc., India is one of the producer of

motor and pump in the world. The total motor and pump production and per capita consumption is on the increasing trend then a need has come into study Indian motor and pump export and suggested alternative measure for the future growth is development.

RESEARCH METHODOLOGY

DATA & SOURCES OF DATA:

The study is based on secondary data. The required data are collected from Journals, Magazines, Articles, and Websites and so on

PERIOD:

The study period covers five years from (2005-2006 to 2009 to 2010) and (2006-2007 to 2010-2011)

DATA ANALYSIS

Data collected from various sources and were edited and tabulated. Analysis of data is done by using statistical techniques are

- Trend analysis,
- Growth rate.

LIMITATION OF THE STUDY:

- The study is restricted to only over a five year period
- Analysis is made only for the past data. So the future variation in the price will be Effect the study.
- Difficulty was get the accurate information
- The information collected for the study is entirely secondary in nature

MOTOR AND PUMP INDUSTRY IN INDIA

The first electric motor in India was manufactured in Coimbatore in 1930 and thereafter the motor pump Industry expanded rapidly there. Today 60% of India's requirements of domestic and agricultural pump sets are made in Coimbatore. The Southern India Engineering Manufacturers' Association (SIEMA) (established in 1952) has 215 members, most of whom manufacture motors and pumps of various types. Indian pumps are made according to the specifications of the Bureau of Indian Standards (BIS). Coimbatore (with 1.2 million populations) is also famous for Textile machinery manufacture and is rated sixth in the World. It is called the "Manchester" of South India due to the presence of hundreds of spinning mills, cloth and garment manufacturing units in and around Coimbatore. Besides Coimbatore, Ahmadabad, Baroda, Calcutta and Dew as are the other places where agricultural pump industries are situated. Similarly Rajkot, Agra and Kolhapur are famous for oil engines and Rajkot alone accounts for 50 percent of engine production.

TYPES OF MOTOR PUMPS

- Centrifugal Pumps
- Submersible Pump
- Mono Block Pump
- Reciprocating Pump
- Rotary pumps

➤ Diaphragm pump

INDIAN COMPANIES IN THE GLOBAL MARKET

The globalization of Indian economy has developed keen interest in the International pump community. With the excellent engineering expertise available in the country along with cheap labour, it is not workable to import pumps here and market. Design modifications are always required due to poor power supply and other ground realities. To overcome this, International players are planning to set up a manufacturing base here and cater other markets in South East, Far East, Africa and Middle East and also for buy backs and re-export. Setting up of a joint venture with major foreign equity share is more beneficial and a long term strategy. There are many other companies who are exporting centrifugal, submersible and even special application pumps. Since growth is not forthcoming in India, manufacturers are taking keen interest in exports, where they get better margin.

EXPORT OF MOTOR AND PUMP FROM THE YEAR (2014-2019)

YEAR	EXPORT SALES IN US\$	X	X ²	XY	TREND VALUES
2014-2015	4936.8	-2	4	-9873.6	4421.22
2015-2016	5394.3	-1	1	-5394.3	4884.74
2016-2017	3276.0	0	0	0	5348.26
2017-2018	6365.3	1	1	6365.3	5811.78
2018-2019	6768.9	2	4	13537.8	6275.32
TOTAL	26741.3	0	10	4635.2	26741.32

The equation for straight line trend $Y=A+BX$
Substitute the value in the equation

$$A = \frac{\sum Y}{N} \quad A = \frac{26741.3}{5} = 5348.26$$

$$B = \frac{\sum XY}{X^2} = \frac{4635.2}{10} = 463.52$$

$$Y = 5348.26 + 463.52(-2)$$

INTERPRETATION:

The above table implies the trend movement of motor and pump export for the period 2014-2019. The trend value was highest in the year 2018-2019 was 6275.32 while compared to other year. Hence there was a continuously increase in motor and pump export.

TREND PROJECTED VALUE OF EXPORT FROM (2014-2019)

YEAR	TREND VALUES IN US\$
2014-2015	6738.82
2015-2016	7202.34
2016-2017	7665.86
2017-2018	8129.38
2018-2019	8592.9

INTERPRETATION:

The above table implies the future trend movement of motor and pump export. The trend value in the year 2018-2019 was 8592.9. The value of export is increased year by year. The value shows 8129.38 in 2017-2018. The current movement in the value is 6738.82(2014-2015)

GROWTH OF MOTOR AND PUMP EXPORT IN INDIA

(2014-2019)

YEAR	GROWTH RATE
2014-2015	0
2015-2016	9.27

2016-2017	39.26
2017-2018	94.3
2018-2019	6.34

INTERPRETATION:

The above table implies the growth of motor and pump export for the period 2014-2019. The trend value was highest in the year 2018-2019 was 6.34 while compared to other year. Hence there was a continuously increase in motor and pump export.

GROWTH OF MOTOR AND PUMP EXPORT TO USA

YEAR	GROWTH RATE
2014-2015	0
2015-2016	5.25
2016-2017	23.53
2017-2018	7.07
2018-2019	54.82

INTERPRETATION:

The above table implies the growth of motor and pump export to USA for the period 2014-2019. The trend value was highest in the year 2018-2019 was 54.82 while compared to other year. Hence there was a continuously increase in motor and pump export.

GROWTH OF MOTOR AND PUMP EXPORT TO AUSTRALIA

YEAR	GROWTH RATE
2014-2015	0
2015-2016	14.42
2016-2017	25.56
2017-2018	57.38
2018-2019	7.65

INTERPRETATION:

The above table implies the growth of motor and pump export to Australia for the period 2014-2019. The trend value was highest in the year 2018-2019 was 7.65 while compared to other year. Hence there was a continuously increase in motor and pump export.

FINDINGS

- ❖ The growth rate of motor and pump for the period 2014-2019. The growth rate was highest in the year 2018-2019 (i.e.) 6.34% while compared to other year. Hence there was a continues growth in motors and pumps.
- ❖ During the year 2018-2019 the trend analysis of export is 6275.32 in US\$
- ❖ The export growth was continuously increased in the export to USA in the year 2018-2019 was 54.82% .
- ❖ The export growth was continuously increased in the export to Australia in the year 2018-2019 was 7.65% .

SUGGESTIONS

- ✓ To decrease the cost of productions bringing more productivity our Indian exporters should bring in many new technologies in the productions to show they are equally good to the international.
- ✓ The Indian government may take necessary step to help the Indian motor and pump exporters in implementing the international marketing strategies and to enter the international market as global exports.
- ✓ The government to reduce the tariff and customs duty and to encourages the domestic exporters and help them to export their product in international market.
- ✓ The country should stop import of motor and pump to give advices to producer on exclusive value for the purpose of export.

CONCLUSION

Motor and pump Industry play a major role in the development of an economy. This is more so in the case of the developing countries like India where there is immense scope for the increased trade. It can expand its market in the global economy and can be recognized as a global completers to the exporters of the other countries and prove to be equally good in the export. Indian pump manufacturers are on a sustained growth path backed by strong upswing in fluid handling industries, irrigation and urban infrastructure projects. However, demand for pumps from the domestic (household) and agriculture market is lackluster. Fortunately, this was more than offset by high demand growth

witnessed in industrial and infrastructure sector. With Industry and infrastructure sustaining the uptrend, this market condition favor's the organized Industry players with strong order inflow

The Indian pump manufacturers have an added advantage in catering to the global market needs. As Indian pump manufacturers have proved themselves in the quality front when comparing to Chinese pump manufacturer. The Indian pump Industry has been given global recognition.

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WEB SITES:

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WWW.GOOGLE.COM

WWW.YAHOO.COM

WWW.INDIAN PUMP MANUFACTURES ASSOCIATION .COM