

**THE OPEN UNIVERSITY OF SRI LANKA
COMMONWEALTH EXECUTIVE MASTER OF BUSINESS/PUBLIC
ADMINISTRATION (CEMBA/CEMPA) PROGRAMME**



LEVEL 9

MSPA453/MCP1653 – STRATEGIC MANAGEMENT

FINAL EXAMINATION - 2021

**DURATION – THREE (03) HOURS [ANSWERS SHOULD BE COMPLETED AND
UPLOADED WITHIN THREE (03) HOURS]**

Date: 21st August 2021

Time: 9.30 am - 12.30 pm

Instructions:

- 1. Answer all questions.**
 - 2. Answers should be focused and methodical.**
 - 3. Write legibly.**
 - 4. State your student registration number on every page of the answer scripts. Put down the page number and assemble in order before submission. Safely keep your answer scripts with you to submit to the University when requested.**
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Read the case of Solex Engineering Enterprise and answer all the questions given at the end.

SOLEX ENGINEERING ENTERPRISE (SEE)

The company:

Solex Engineering Enterprise (SEE) is a Sri Lankan organization formed as a partnership by two brothers in 1980. They had a keen interest to explore into new paths in the mechanical engineering discipline. They started with manufacturing water pumps to the local market.

Initially SEE marketed its products under different labels. In 1995 they expanded operations and moved to a better location, approximately 7km from Colombo with a production facility covering an area of 10,000 m², in the industrial area of Peliyagoda, and started their own marketing under the brand name “SOLEX”.

The company is taking all their efforts to provide a total pumping solution to its customers while maintaining strict internal quality standards in the manufacturing process. SEE too provides an efficient after sales service, for home and industry customers.

Business activities

At present SEE has become one of the leading water pump manufacturers in Sri Lanka with the brand Solex in Sri Lankan centrifugal water pump market, securing No. 2 position for the last twenty years. They enjoy over 30% share of the domestic centrifugal electric water pump market in highly brand conscious water pump market in Sri Lanka. SEE feels that they could achieve this position due to their innovative approach towards customer satisfaction and the dedication of their employees influenced by the unique company culture.

At present SEE markets a wide range of centrifugal water pumps, i.e., end suction pumps, submersible pumps, high pressure pumps and tailor made pumps powered by electricity and kerosene and diesel engines, water and gully bowsers, cylinder sleeves, brake drums, woodworking machines, ferrous and non-ferrous castings to local and foreign markets. The R & D teams started working on air compressors, household appliances and automotive batteries.

Solex offers a range of domestic water pumps to the market with varying performance levels to suit the needs of the customers. Output of these pumps vary with the volume of output as well as the height of the water that it can deliver. For those who need to get water from the sources deeper than 9-meter height, Solex advice their customers to fix the systems with a 'deep valve' accessory kit.

SEE has achieved a turnover of Rs. 1000 million during the year 2006 with its nearly 500 employees and the turnover has been increasing since then except for minor fluctuations of sales due to Sri Lankan economic situations.

The water pumps market in Sri Lanka

There are different types of water pumps in Sri Lanka categorized according to the type of usage, for example, domestic, agricultural, and industrial purposes. Sri Lankan market is filled with locally manufactured and imported water pumps. The domestic water pumps market is the largest in the industry and therefore the competition in this sector is very high.

The brands available in the Sri Lankan water pumps market are Jinasena (from Jinasena Group), Solex, Singer (Singer group), Arpitem (from Arpico), inGco and Z-Ion / PE+ (from Maharaja Group). Some of these water pump brands are directly imported and a local organization markets them providing a warranty for their customers. Jinasena is the most reputed brand name in the local water pump market for decades. Jinasena has been producing its pumps since 1932. Jinasena pumps obtained ISO 9001/2015 certification for the entire range of water pumps manufactured by them. This brand has earned a priceless goodwill for the excellence in product quality and after sales services. It had secured the largest market share for domestic and agricultural water pump market for decades and Solex became the largest competitor for Jinasena in the market.

Arpico supermarket chains (belong to Richard Peiris Group) started selling domestic water pump range through its supermarket chains as well as through few selected hardware stores. Similarly, Singer group offers a wider range of water pumps than Arpitem water pumps. However, the range of water pumps

sold by Singer is much less than those of Solex and Jinasena. Singer offers its water pumps to its customers highlighting its unique easy payment packages offered to buyers. The imported water pumps have been available in the local market for a long period, since early 1980s, but any established brand name cannot be identified in Sri Lankan market. In mid 1990 the water pump market was full of low-priced Chinese made water pumps and in early 2000 the Indian made pumps too entered the market. These low priced entries have secured more than 1/3rd of the local market for water pumps. Subsequently due to the devaluation of Sri Lankan currency the prices of these imported pumps rose, but imported pumps still hold a substantial share of the market competing with local brands with its low price. It is also noted that buyers of imported water pumps find it difficult to get after sales services including necessary spare parts. From the viewpoint of the customers, they still prefer the locally made pumps and in the long term they seemed to be cost effective than the imported products, (after sales services, availability of spare parts, durability, and power consumption.) as per the retailers' opinion.

In year 2007, Jinasena Limited started offering polymer-based water pump under Jinasena brand name at a lower price than conventional pumps made of metal. They went ahead with marketing campaigns stating that polymer water pumps are better considering health aspects since no harmful metals get into water through the pump. As of today, it is sought by customers where water conditions are different, for example those who reside in coastal areas and lands with hard water.

Regarding the present situation in domestic water pump market, Marketing Manager of SEE stated that the water pump industry was currently under severe pressure due to the influx of inferior quality, cheap Chinese pumps. "These cause a significant loss to the consumer in the long run, in terms of electricity, cost of repairs, etc. We thought it fit to introduce this five-year warranty, in a bid to protect the local consumer and industry, and to enhance the demand for locally made water pumps and to curb the dumping of substandard products in Sri Lanka."

Technology wise, SEE offers industrial pumps ranging up to 50hp motors models whereas Jinasena produces their industrial pumps with 100 hp motors. SEE believes this is the most efficient way to improve its position in industrial pumps market. Further, SEE improved its capability to produce water pumps for customers with special needs, meeting their unique requirements which includes, varying capacities and use of specific raw materials as well.

The recent development noted in the Chinese made water pumps as well as many other products is the constant increase in their prices. Because of this the Sri Lankan made products find it comfortable to compete with market prices. This has affected the imported water pumps market shares seriously. Many manufacturers find it is more cost effective to manufacture within the country compared to the imports when the value addition can be done locally. As a result, more and more manufacturers have started manufacturing their required components locally rather than importing them, if it is possible to meet the price and quality.

As of 2011, the main pipe borne water producer in Sri Lanka is the National Water Supply and Drainage Board (NWSDB) and had 322 water supply schemes island wide producing 490 Mn of cubic meters of water per annum. It had catered for approximately 1.4 Mn water supply connections. Further,

there were 3,500 community managed schemes providing pipe borne water in Sri Lanka. As of 2020, the Water Supplies and Drainage Board supplied water to 2.4 million commuters covering 41% of the Sri Lankan population. There are projects in operation to increase this capacity to increase this by an additional 110,000 new domestic drinking water connections and it is on the way, as of today, despite the constraints caused due to Covid pandemic. The water pump industry has been looking into this situation that directly concerns the use of water pumps for carrying water to their household domestic water tanks. However, it is also noted that many households experience the need for overhead water tanks to store water at domestic levels for continuous availability of water at their households.

Present business activities of Solex

“SOLEX” markets a complete range of centrifugal water pumps, covering most of the aspects of Sri Lankan water pump market. The company has established a strong, loyal dealer network with over 800 dealers to penetrate the retail water pumps market and has established links in the industrial and supplier markets. The company has its marketing team with necessary technical expertise to look after the retailer network and the industrial customers.

Production facility and capacity

SEE has a fully automated ferrous and nonferrous foundry occupying 3000m² and a machine shop of 7000m² with a work force over 200 people. They use modern technologies to meet the stringent quality standards specified by their industrial and retail customer base for its large portfolio of products, and is capable of producing top quality cast iron, non-ferrous products from 0.5 kg to 500.0 kg per item. The foundry has a production capacity of 400 M.T. per month.

The products are always subject to stringent tests at the foundry laboratory to ensure the consistency of the mass production and to support the TQM. At present Solex has obtained ISO 9001/2015 certification for its domestic water pumps.

SEE started making their own dies and moulds in 1990 using conventional methods for simple products and moved to manufacture dies and moulds for complex products using 5 Axis CNC (computerized numerical control) machining centres and CNC lathe machines supported by modern CAD/CAM software.

SEE formed a strategic business unit to cater to the die and mould industry in the recent past taking the rapid market development into account. During its first year the SBU has been able to develop a good client base due to the higher level of quality. SEE produces die and mould for the leading water pump manufacturers in Sri Lanka.

Further, to face high cost in importing electric induction motors of good quality due to escalating foreign currency rates, SEE started manufacturing their own induction motors to replace them with imported makes. Some of the raw materials for manufacturing motors as well as water pumps are imported and there are many suppliers to SEE. The materials purchased locally also have multiple suppliers.

At present electric motors, one of the major components of a water pumps, has become expensive as Chinese suppliers have started increasing price. Further they have imposed limitations through higher minimum order quantities for the buyer orders. These conditions have increased the cost of relevant subassembly components when sourced from Chinese suppliers. The company understands that the suppliers are reliable in terms of quality of products they supply. Further, it was noted that the cost of international shipping of these items are on the rise. SEE has noted that all these factors ultimately resulted in price increase for their buyer and SEE products are becoming less competitive.

SEE industrial water pumps were confined to 25 horsepower motor capacity and recently have started to increase the capacity of the water pumps with 50 horsepower motors expecting to cater to extended industrial user market.

As per energy saving requirements, electric water pumps are now fitted with variable speed drive (VSD) devices that are demanded by present day customers. In the local water pump market this has become a need as the competitors started introducing water pumps with such devices. This device lowers energy consumption to suit the energy requirement of the electric motor of the pump. With R&D initiatives, SEE started fixing VSDs to their high-capacity electric motors as well.

Sri Lankan economic situation:

Due to Covid 19 pandemic situation global economies have gone into recession. Most of the industrial sectors report downward operational levels and unemployment rates in many countries have gone up. Along with pandemic situation it was estimated that most major economies will lose at least 2.9% of their gross domestic product over 2020.

The COVID-19 pandemic impacted many of Sri Lankan industries resulting in Sri Lanka's economy contracted by 3.6 percent in 2020. The affected industries include tourism, construction, transport, and export processing.

Due to decline in foreign currency income and to maintain essential services and supplies, the Government has taken several measures to limit importations. Further, since foreign exchange availability at commercial banks is limited, importers find it difficult to obtain letters of credits to import their goods through their banks. Though the restrictions on imports were imposed, foreign currency inflows have been insufficient to meet external liabilities, hence reserves declined to an 11-year low in February 2021. Due to shortage of foreign currency, and increase in balance of payment of Sri Lanka, the exchange rate depreciated by 6.5 percent from January through March 2021 and is declining further as of August 2021. The present situation on difficulty in importing goods will prevail until forex inflows improve in Sri Lanka. This economic situation is not only applicable to Sri Lanka, but common for many developed and other countries. Hence, people usually tend to deviate away from consuming luxury goods and tend to go for intermediate and essential goods. This situation has made importation of water pumps as well as electric motors and other accessories for water pumps much difficult, and more expensive in Sri Lankan Rupee terms.

On the other hand, China is facing difficulties in getting their supplies due to its global political situation. This situation resulted in increased cost of manufacturing for Chinese manufacturers. Further, to reduce the cost, Chinese manufacturers started imposing much higher minimum order quantities for buyer orders. The stated minimum order quantities specified by Chinese manufacturers increased the cost of inventory, specially holding cost of electric motors as well as accessories, for Sri Lankan water pumps manufactures. One of the options available to Sri Lankan manufacturers is to increase the manufacturing of electric motors within Sri Lanka.

Due to similar reasons, Chinese made water pumps importers to Sri Lanka are also discouraged. This resulted in price hike in all imported water pumps in the Sri Lankan market.

(Sources: industry news, publications of Solex engineering enterprise, publications of Central Bank of Sri Lanka, Census and Statistics dept. and Water Supplies and Drainage Board)

Attempt all questions:

- a) Identify a suitable mission and two major goals for Solex Engineering Enterprise. [10 marks]
- b) Identify two long term and two short term objectives for SEE in light of expanding SEE business lines. Which internal and external factors would you consider in this decision? [20 marks]
- c) If you wish to pursue blue ocean strategies rather than red ocean strategies for the SEE, introduce possible directions and strategies for the company. Justify your options. [20 marks]
- d) Carryout an industry analysis using Michael Porters 5 forces industry analysis model with the available information. Using the analysis express your opinion on further investment in this organization. [30 marks]
- e) Based on your opinions on a), b) and d) above, express your opinion on the SEE pursuing (i) integration strategies and (ii) diversification strategies. Give justifications. [20 marks]

Note: State the assumptions you have used when answering this question.

(End of the question paper)