COVID-19 increased global demand for medical glove. 
EIC indicates that Malaysia gains more from export than Thailand.

1 June 2020

Key summary

- As one of Thailand’s leading export products, rubber glove generated approximately USD 1,200 million per annum. COVID-19 global pandemic is Thailand’s golden opportunity for rubber glove export. During the first 4 months of 2020, export value increased to USD 449 million, an increase of 16% from the same period in 2019.

- COVID-19 pandemic has generated high demand for medical glove. Malaysia is globally, the biggest producer of medical glove with production capacity of 125,000 million pieces per annum. In 2019, Malaysia’s actual production was 63,000 million pieces, reflecting the advantage in increasing production capability. Thailand’s production capacity is 25,000 million pieces per annum and in 2019, the actual production was 85% of total production capacity. EIC noted that if these 2 countries were to increase their medical glove production capability to the fullest, Malaysia would benefit more than Thailand.

- Thailand still has indirect benefit from the increasing export of concentrated latex to Malaysia for medical glove production. During the first 4 months of 2020, export of concentrated latex from Thailand to Malaysia was USD 176 million, an increase of 7%
Rubber glove is one of Thailand’s leading export products, gaining the country approximately USD 1,200 million per annum. The continuing growth in global demand for rubber glove and indications of further expansion into products that serve global trends mark an opportune time for rubber glove producers in Thailand to increase their production for global market. At present, Thailand is the second highest exporter of rubber glove after Malaysia. In 2020, with the global COVID-19 pandemic, it is considered a prime time for rubber glove export. During the first 4 months of 2020, Thailand's export number of rubber glove surged to the height of 7,321 million pairs, an increase of 23% from the same period in 2019. This propelled Thailand's export value of rubber glove during the first 4 months of 2020 to USD 449 million, an increase of 16% from the same period in 2019.

COVID-19 global pandemic generates high global demand for medical glove in 2020. During 2010-2019, average growth in global demand for rubber glove was 8% per annum, with supporting factors such as population growth and global trend in industrial sections - food, drinks, electronic and vehicles, and global trend in health section which shows an increasing demand in healthcare and an indication towards aging society in many countries.

Malaysian Rubber Glove Manufacturers Association (MARGMA), main organization that is a center for data on trade and investment in Malaysian rubber glove industry, forecasted total global demand of rubber glove for 2020 prior to COVID-19 pandemic to be 300,000 million pieces. By March 2020, after the global spreading of COVID-19 pandemic, MARGMA has adjusted total global demand of rubber glove for 2020 to 345,000 million pieces.

However, considering an increasing number of patients in May 2020 and the indication of wide spread COVID-19 pandemic in many parts of the world, EIC forecasted that total demand for global rubber glove in 2020 would be as high as 360,000 million pieces or an increase of 20% from normal situation forecast. This would be a result of increasing demand in medical rubber glove that surged to 60,000 million pieces or 57% from normal.

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1 An estimate in 2019
**Picture 1: Predicted global rubber glove demand**

Unit: billion pieces

Source: EIC analysis based on data from Malaysian Rubber Glove Manufacturers Association (MARGMA)

**EIC sited Malaysia and Thailand to benefit from medical glove export amidst COVID-19 pandemic.** With better production capacity, Malaysia has the edge over Thailand in supplying global market. At present, Malaysia and Thailand are the world’s biggest producers and exporters of rubber glove, with global rubber glove’s export market share of 62% and 13%, respectively. While others i.e. China, Indonesia, Belgium and Vietnam share the other 25% of total global export. Since January 2020 with the beginning of COVID-19 pandemic, both Malaysian and Thai rubber glove producers have been rapidly expanding their production capacity, especially medical glove, to meet increasing global demand.

As a leading global medical glove producer with production capacity of approximately 125,000 million pieces per annum, Malaysia’s actual production in 2019 was approximately 63,000 million pieces or 50% of its capacity which indicates a substantial capability to increase production. Thailand’s medical glove production capacity is at approximately 25,000 million pieces per annum with 2019 actual production of approximately 21,371 million pieces or 85% of total production capacity. Therefore, during the COVID-19 pandemic if both countries were to rapidly generate the production of medical glove, Malaysia’s medical glove industry would reap more than Thailand due to the higher production capacity and could easily supply the total increase of global medical glove demand.
Apart from increasing production and export of rubber glove, Thailand also indirectly benefits from exporting concentrated latex to Malaysia for the production of medical glove for export. Concentrated latex is the raw material for rubber glove production - medical, industrial and household. Thailand produces concentrated latex on average at 1.2-1.4 million tons per annum and is the biggest global exporter of concentrated latex with global market share of 76%, more than half was exported to Malaysia.

Though Malaysia produces a lot of natural rubber however its production is mainly cup lump as raw material for tires industry. The production of fresh latex converted into concentrated latex in Malaysia is limited. However, Malaysia emphasizes on the importance of rubber glove production development which is a down-stream product with high value-added and low risk in price fluctuation. Malaysia chooses to import concentrated latex, a mid-stream product from Thailand, instead of producing her own.

With COVID-19 pandemic, Thailand has benefited from increasing export of concentrated latex to Malaysia. During the first 4 months of 2020, concentrated latex export value to Malaysia was USD 176 million, an increase of 7% from the same period in 2019. Malaysia in need for increasing import of concentrated latex from Thailand to be used as raw material for the production of rubber glove, especially of medical category, has pushed the export price of concentrated latex from Thailand to Malaysia during the first 4 months of 2020 to USD 1,002 per ton or a 10% increase from the same period in 2019. EIC estimated that the value of export concentrated latex from Thailand to Malaysia during the rest of 2020 should substantially increase due to global spreading COVID-19 pandemic which will continually generate Malaysia’s import demand for concentrated latex from Thailand.
However, Thailand’s export of concentrated latex is still a mid-stream product. The export price of concentrated latex is also at risk along with the high fluctuation of global natural rubber price. In 2019 export value of Thailand’s concentrated latex was USD 1,122 million or 15% decrease, a continuation of downward adjustment from 2018 in which it had decreased by 11%. It was due to the low global concentrated latex price. Malaysia, in turn, imported concentrated latex from Thailand for production and export of natural rubber glove which are products with value-added and carry lower risk in terms of price fluctuation. As recorded, Thailand generally gained an income from natural rubber glove export at approximately USD 700 million per annum while Malaysia’s natural rubber glove products generated export income of more than USD 1,000 million per annum. Malaysia also imports concentrated latex from Thailand for the production of various down-stream products ranging from rubber product for sanitation and pharmacy to variety of consumer products i.e. condom, elastic and glue for domestic consumption and export. Malaysia’s gain could be considered as Thailand’s economic lost since we lack the ability to transform concentrated latex into export products with maximum added value.

**Picture 6: Malaysia’s and Thailand’s rubber gloves industries comparison**

<table>
<thead>
<tr>
<th>Rubber glove industry</th>
<th>Malaysia</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Rubber glove</td>
<td>Rubber glove and concentrated latex</td>
</tr>
<tr>
<td>Player</td>
<td>Various manufacturers</td>
<td>Not many manufacturers</td>
</tr>
<tr>
<td>Machine efficiency</td>
<td>20 million pieces /machine/month</td>
<td>7 million pieces /machine/month</td>
</tr>
<tr>
<td>Exporting market</td>
<td>Rely on US market, at an approximate rate of 33%</td>
<td>Rely on US market, at an approximate rate of 36%</td>
</tr>
</tbody>
</table>

**Strategic adjustment of Thailand**

1. Enhancing concentrated latex operators into the rubber glove production market
2. Promoting foreign direct investment in Thailand
3. Improving efficiency in production technology
4. Expanding rubber glove export market to other countries

Source: EIC analysis
EIC recommended that in order to alleviate production efficiency, government sector should support the R&D of rubber glove production alongside the improvement in quality that tailor to variation and variety of market trends. At present, BOI supports Thailand’s rubber glove industry by placing it under the manufacture of natural rubber products category which receives the benefit of 8-year exemption of corporate income tax and 21 manufacturers of rubber glove are under this investment promotion. EIC sited that apart from investment promotion of rubber glove industry, government sector needs to urgently enhance the R&D in rubber glove production technology in order to improve Thailand’s production efficiency for higher quantity and better quality. Also, in order to increase added export value, rubber glove production should be able to serve variety of specific demands and global trend, for example, light-weight rubber glove, disposable and eco-friendly rubber glove and better ventilation rubber glove.

In Malaysia, the main factor behind the robust growth in rubber glove industry is the government continual commitment in promotion. Malaysia places rubber products as one of the country’s strategic industries with its importance in enhancing GDP. Through variety of rules and regulations which include investment promotion by allowing 100% foreign shareholder and tax benefits. The policy has resulted in promoting investment in rubber glove industry to expand by leaps and bound. Malaysia produces and exports a wide variety of rubber glove products i.e. for medical use, industrial use and household use, using both natural rubber and synthetic rubber. Furthermore, Malaysia’s machineries for rubber glove production are 3-time more efficient than Thailand’s, with production capacity of 20 million pieces/machine/month. Whereas Thailand’s machineries capacity is at 7 million pieces/machine/month\(^2\). This shows Malaysia’s rubber glove industry competitive strength and capability to better react to the expanding global market demand.

EIC perceived that by promoting Thailand’s up-stream concentrated latex operators to the status of down-stream rubber glove operators together with the support of foreign direct investment will help alleviate the efficiency in production technology, enhance rubber glove production capacity as a whole and increase added value to the country’s economy. At present, Thailand’s rubber glove industry has only one big operator with 80% share of total production. Whereas in Malaysia, there are 4 main operators - Top Glove, Hartalega, Supermax and Kossan. Together, they hold 68% of the country’s total rubber glove production capacity. The remaining 32% is shared among a mass of middle and small operators. This shows a more disperse operators’ structure in Malaysia’s rubber glove industry.

From EIC perspective, promoting new operators into the rubber glove production market would help increase country’s total rubber glove production capacity, especially concentrated latex operators who regularly supply concentrated latex, transform from fresh latex, as main raw material for production of rubber glove. At the moment, there are 56 operators of concentrated latex in Thailand. 50 operators are Thai and the other 6 are of Malaysian, Chinese and Singaporean origin. If these concentrated latex producers could be alleviated to the level of rubber glove producers, it would help expand Thailand’s total rubber glove production capacity and increase export volume thus help increase added economic value.

\(^2\) Thai Rubber Glove Manufacturers Association
more so than the export of concentrated latex which has lower added value. Government sector might also promote foreign direct investment to enhance Thailand's production technology since efficiency of rubber glove machineries are also lower than Malaysia. This will help expand Thai rubber glove producers’ opportunity to gain production technological knowhow from abroad which will strengthen production technology and mechanical operation efficiency of Thai rubber glove.

**Thai rubber glove operators may consider market expansion to other countries to lower market sharing of same export market with Malaysia.** Malaysia’s and Thailand’s rubber glove export mainly rely on US market, at an approximate rate of 33% and 36% of total export respectively. While the US rely on imported rubber glove from Malaysia at 66% of total volume of country import and only 16% from Thailand, indicating a much stronger competitive position of Malaysia in US market than Thailand.

EIC sited that Thai operators should consider expanding their rubber glove export market to other countries. Prospective markets for Thai rubber glove are Denmark, Greece and Austria. Due to their high ratio of population usage of rubber glove, their preference in importing from variety of producing countries and Malaysia rubber glove still has relatively low market share. Therefore, Thai rubber glove operators still have an opportunity to penetrate these markets. These countries also enter an aged society which reflects increasing demand on medical services thus increase the demand for medical glove. However, population numbers in these countries are not significantly high, so operators might also consider expanding their export market to countries with large population base yet low rate of rubber glove usage. For instance, the Philippines is a potential export market with the number of populations at 110 million but the rate of rubber glove usage is only 10 pieces/person per annum. The Philippines’ progress in healthcare will be the factor that will support the continuation for increasing demand of rubber glove in the future.

**Picture 7: Market share of USA rubber glove import volume**

Unit: million pairs

<table>
<thead>
<tr>
<th>Year</th>
<th>Others</th>
<th>Thailand</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>245</td>
<td>254</td>
<td>252</td>
</tr>
<tr>
<td>2017</td>
<td>283</td>
<td>256</td>
<td>250</td>
</tr>
<tr>
<td>2018</td>
<td>318</td>
<td>259</td>
<td>230</td>
</tr>
<tr>
<td>2019</td>
<td>322</td>
<td>256</td>
<td>226</td>
</tr>
</tbody>
</table>

Source: EIC analysis based on data from Trade Map

**Picture 8: Glove consumption per capita and ratio of rubber glove import volume from Malaysia by countries**

Unit: pieces/year, %

<table>
<thead>
<tr>
<th>Country</th>
<th>Glove consumption per capita</th>
<th>Ratio of rubber glove import volume from Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>65%</td>
<td>16%</td>
</tr>
<tr>
<td>Thailand</td>
<td>53%</td>
<td>19%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>66%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Source: EIC analysis based on data from Hartalega and Trade Map
Amidst the COVID-19 pandemic situation, if Thailand could push the production and export volume of rubber glove to keep up with the global demand and if Thailand could maintain the export capability when the COVID-19 pandemic situation has weaken, then it will help build added value to up-stream products like fresh latex and mid-stream products like concentrated latex in the long run. The end result would be the income improvement of natural rubber plantations and the decrease in risk due the fluctuation of natural rubber price in the commodity market.


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