Presentation – Promoting Trade in Vaccines and Related Supplies and Equipment

Purpose: Information
Submitted by: Policy Support Unit, APEC Secretariat
Promoting Trade in Vaccines and Related Supplies and Equipment

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APEC Policy Support Unit (PSU)  
Policy Brief on Promoting Trade in Vaccines and Related Supplies and Equipment (May 2021)

- Looks at trade policy issues affecting trade in vaccines and related goods, in particular those for COVID-19 vaccines

- 42 products from WCO/WHO and OECD lists for vaccine production, distribution and administration, and COVID-19 diagnostic are included in report.

- Publicly available at: [https://www.apec.org/Publications/2021/05/Promoting-Trade-in-Vaccines-and-Related-Supplies-and-Equipment](https://www.apec.org/Publications/2021/05/Promoting-Trade-in-Vaccines-and-Related-Supplies-and-Equipment)
Trade in vaccines and related supplies and equipment is very significant worldwide.

A majority of this trade is explained by disinfectants, medical consumables and equipment related to vaccines, followed by vaccines, test kits and apparatus for diagnostic testing.
Trade in vaccines for human use (HS 300220) has increased

- **Exponential growth** in trade in vaccines for human use.
- **Trade liberalization** has been **critical**. # of economies with MFN tariff on vaccines > 5% = 73 in early 1990s, 8 in 2019.
- Important to **keep trade open** for vaccines and its related goods.

Source: ITC Trade Map, World Integrated Trade Solution (WITS)
Vaccine supply chain is complex. Trade facilitation is very important as well.

Main sources of APEC imports of supplies and equipment necessary for production, distribution and administration of vaccines, 2019 (Share in APEC imports)

- **Freezing equipment**: China 31%, USA 15%, Mexico 15%
- **Cold boxes**: USA 30%, China 22%, Japan 11%
- **Aluminum Salts**: China 28%, USA 22%, Indonesia 13%
- **Sorbitol**: China 33%, Indonesia 20%, France 15%
- **Vaccine carriers**: USA 21%, Mexico 19%, Germany 12%
- **Needles**: Mexico 22%, USA 21%, Ireland 11%
- **Syringes**: USA 21%, China 12%, Mexico 11%
- **Thimerosal**: India 20%, Argentina 18%, Germany 16%
- **Alcohol solution**: Mexico 44%, USA 20%, Brazil 18%
- **Sterols**: China 34%, USA 16%, Japan 16%
- **Dry ice**: USA 28%, Israel 10%, China 9%
- **Antibiotics**: China 37%, Italy 10%, India 10%
- **Formaldehyde**: USA 38%, Canada 23%, Chinese Taipei 13%
- **Vials**: China 33%, Mexico 16%, USA 8%

Source: ITC Trade Map. APEC PSU Calculations. Image from Shutterstock
### Products in the vaccine supply chain with MFN average tariffs in APEC > 5%

Average **MFN tariffs on vaccines are low** in APEC (0.8%), but **12 products** in the vaccine supply chain have **average MFN tariff rates > 5%**

<table>
<thead>
<tr>
<th>#</th>
<th>HS Code</th>
<th>Description</th>
<th>Average MFN Tariff (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>220710</td>
<td>Alcohol solution. Undenatured, containing by volume 80% or more ethyl alcohol</td>
<td>77.2</td>
</tr>
<tr>
<td>2</td>
<td>220890</td>
<td>Alcohol solution. Undenatured, 70% ethyl alcohol</td>
<td>29.5</td>
</tr>
<tr>
<td>3</td>
<td>220720</td>
<td>Alcohol solution. Denatured ethyl alcohol, of any strength</td>
<td>14.6</td>
</tr>
<tr>
<td>4</td>
<td>841840</td>
<td>Freezers of the upright type, not exceeding 900 l capacity</td>
<td>8.5</td>
</tr>
<tr>
<td>5</td>
<td>841830</td>
<td>Freezers of the chest type, not exceeding 800 l capacity</td>
<td>8.2</td>
</tr>
<tr>
<td>6</td>
<td>841850</td>
<td>Furniture incorporating refrigerating or freezing equipment</td>
<td>6.8</td>
</tr>
<tr>
<td>7</td>
<td>701090</td>
<td>Vials or phials</td>
<td>6.3</td>
</tr>
<tr>
<td>8</td>
<td>392310</td>
<td>Cold boxes for storage or distribution</td>
<td>5.8</td>
</tr>
<tr>
<td>9</td>
<td>841869</td>
<td>Other freezing equipment</td>
<td>5.6</td>
</tr>
<tr>
<td>10</td>
<td>481950</td>
<td>Other packing containers, including record sleeves</td>
<td>5.3</td>
</tr>
<tr>
<td>11</td>
<td>481960</td>
<td>Box files, storage boxes of paper or paperboard</td>
<td>5.3</td>
</tr>
<tr>
<td>12</td>
<td>401699</td>
<td>Stoppers</td>
<td>5.1</td>
</tr>
</tbody>
</table>

**Any vaccine liquid is useless without other products** that are part of the production, distribution and administration of vaccines
## COVID-19 Vaccine Production
*(million doses as of 03 March 2021)*

<table>
<thead>
<tr>
<th>Economy</th>
<th>Vaccines</th>
<th>Share</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>413.0</td>
<td>100.0%</td>
<td>All</td>
</tr>
<tr>
<td>China</td>
<td>141.6</td>
<td>34.3%</td>
<td>CanSino, AstraZeneca, Beijing/Sinopharm, Sinovac</td>
</tr>
<tr>
<td>United States</td>
<td>103.0</td>
<td>24.9%</td>
<td>Pfizer/BioNTech, Moderna</td>
</tr>
<tr>
<td>Germany/Belgium</td>
<td>70.5</td>
<td>17.1%</td>
<td>Pfizer/BioNTech</td>
</tr>
<tr>
<td>India</td>
<td>42.4</td>
<td>10.3%</td>
<td>AstraZeneca, Bharat/ICMR/NIV</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>12.2</td>
<td>3.0%</td>
<td>AstraZeneca</td>
</tr>
<tr>
<td>Netherlands/Belgium</td>
<td>10.5</td>
<td>2.5%</td>
<td>AstraZeneca</td>
</tr>
<tr>
<td>Russia</td>
<td>10.5</td>
<td>2.5%</td>
<td>Gamaleya Research Institute</td>
</tr>
<tr>
<td>Switzerland</td>
<td>5.5</td>
<td>1.3%</td>
<td>Moderna</td>
</tr>
<tr>
<td>Korea</td>
<td>1.6</td>
<td>0.4%</td>
<td>AstraZeneca</td>
</tr>
<tr>
<td>Others</td>
<td>15.2</td>
<td>3.7%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Airfinity

- **COVID-19** production ramping up quickly in APEC region and Europe
- **Production levels still short** to cover global demand: 14.2 billion doses needed globally and **5.2 billion doses required in APEC**. (NOTE: assuming two doses are needed for full vaccination)
- **Global market of all types of vaccines (for any disease)** in 2019 was equal to 5.5 billion doses.
Issues affecting COVID-19 vaccines

• **Complex supply chain.** COVID-19 vaccine is sensitive to disruptions in any of its components. Cold chain equipment and storage required, even in communities away from main urban centres.

• **High MFN tariffs** for some vaccine-related products.

• **Export restrictions and prohibitions** on COVID-19 vaccines and related supply and equipment could affect supplies to the APEC region.

• **Bottlenecks in intellectual property rights** could affect plans to expand vaccine production in the short term.

• **Good Manufacturing Practice** is a **requirement** to produce any vaccine. **Divergences in protocols** among economies could complicate plans to ramp up vaccine production of COVID-19.
Policy Recommendations

APEC economies should discuss initiatives on:

- **Trade liberalization**: Reduction or elimination of tariffs on vaccines and related goods. Commitment to refrain from implementing unnecessary export restrictions and prohibitions affecting those goods.

- **Trade facilitation**: Keep supply lines open. Strategies to diversify procurement of vaccines and their components. Investments in cold chain equipment and storage.

- **Intellectual property**: Technology transfer initiatives. Licensing IP rights to 3rd parties. Discuss an APEC common position to proposal at WTO on temporary waiver on certain TRIPS obligations. Partnerships between academia, government and private sector.

- **Standards and conformance**: Ensure domestic regulations incorporate WHO guidelines. Mutual recognition of inspections and approvals to ensure quality assurance of vaccines in one economy is also valid for other economies.
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