Supply chain industry research shows that the best commercial sector supply chains evolve through stages of maturity and improved performance\(^1\). Research on public health supply chains in developing countries illustrates that they also evolve through stages of maturity towards an integrated supply chain that links all people, information, and activities from the top-end (source of supply) to the bottom-end (customers seeking health services) of the supply chain\(^2\).

Evolution yields improved supply chain performance in the commercial and public health sectors

### Supply Chain Evolution Framework

<table>
<thead>
<tr>
<th>Ad Hoc Phase</th>
<th>Organized Phase</th>
<th>Integrated Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No formal logistics roles and processes</td>
<td>• Standardized systems designed and implemented</td>
<td>• People, functions, levels and entities linked under an interconnected organization</td>
</tr>
<tr>
<td>• Fragmented efforts across actors, who have limited understanding of the supply chain</td>
<td>• Logistics roles and processes defined and followed</td>
<td>• Supply chain managers are empowered, using information to manage the system and align actors</td>
</tr>
<tr>
<td>• Conduct system assessment, using process mapping, network optimization and costing analysis</td>
<td>• Sufficient resources mobilized</td>
<td></td>
</tr>
<tr>
<td>• Undertake system design for functions and products using segmentation analysis</td>
<td>• Optimize performance with analysis and tools</td>
<td></td>
</tr>
<tr>
<td>• Roll out logistics system by conducting training on developed SOPs and supervision guidelines</td>
<td>• Strengthen automated processes for data collection and sharing</td>
<td></td>
</tr>
<tr>
<td>• Conduct regular quantification of commodity needs</td>
<td>• Develop performance management indicators and incentives</td>
<td></td>
</tr>
</tbody>
</table>

### Drawing on commercial and public health experience, the supply chain evolution framework can help countries determine their current level of maturity and make a plan to strengthen their operations to achieve and track progress along the evolutionary trajectory\(^2\).

### Ad Hoc Phase

- No formal logistics roles and processes
- Fragmented efforts across actors, who have limited understanding of the supply chain

### Organized Phase

- Standardized systems designed and implemented
- Logistics roles and processes defined and followed
- Sufficient resources mobilized

### Integrated Phase

- People, functions, levels and entities linked under an interconnected organization
- Supply chain managers are empowered, using information to manage the system and align actors

### Evolution yields improved supply chain performance in the commercial and public health sectors

**Brazilian companies** demonstrate a **74%** correlation between supply chain maturity and performance.

**Bangladesh** invested in their public health supply chain through:

- **System design and implementation**
- **Strategy management and oversight**
- **Electronic information systems**

leading to greater integration, product availability, and use.

- **Stockout rates decreased**
  - **2000**: 8%
  - **2006**: 2%
  - **2000**: 8%
  - **2011**: 2%

**Contraceptive prevalence increased**:

- **2000**: 43%
- **2011**: 52%

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