Summary of findings

- Human resources and inventory were the most frequently reported challenges in December 2021.
- Management Information System (MIS)/systems and distribution/transportation are the other major categories under which challenges were frequently reported in December 2021.
- More holistic solutions that take into account the development of strong data management, MIS and systems for effective operations and monitoring, and ensuring regular supply through improved transportation and distribution are required to solve the problems facing supply chains.
- In terms of efforts planned for the 1st quarter of 2022, respondents also signalled the importance of advocacy efforts as part of their activities to address current and future challenges. More attention to this needs to be paid.
- For the 1st quarter of 2022, funding shortages and price increases were the most frequently reported challenges.
- For the 1st quarter of 2022, as per the SWOT analysis (refer Table 1), there is overall optimism towards the increasing external opportunities and internal strengths.
- Going forward, there appears to be a need to support standardisation and capacity building on KPIs for measuring supply chain performance and resilience.

Purpose of the survey

- To serve as a quarterly barometer of health supply chain concerns among the ~900 strong community of professionals working in procurement and supply chain enrolled in the Supply Chain Emergency Outbreak Response Platform developed by WHO South East Asia Regional Office (WHO SEARO) and Empower School of Health.
- Sense any early signals of impending challenges or changing trends and identify new concerns among the community.
- The results of the survey will be used to support the community through platform networking, tools, training, etc. for overcoming the identified challenges and concerns.
- To feedback the information to the community; through quarterly surveys, we expect to capture trends of issues as perceived by the community.
**Respondent profiles**

- There were 43 respondents from 20 countries including 4 SEAR countries (Bangladesh, India, Indonesia and Nepal).
- Most of the respondents are from West Africa (14), East Africa (13) and SEAR (11).
- Almost 84% of the respondents were male.
- Female respondents (n=7) are spread out across all regions.

**Results**

**Threats/challenges related to supply chain faced by the respondents**

- The community reported threats and challenges in the last quarter of 2021 in all areas; however, the most frequently reported were threats/challenges leading to/affecting 1st Shortages & stockouts, 2nd HR & training, and 3rd transport & distribution. At the other extreme, processes and infrastructure pose little challenge.

**Actions adopted or plan to adopt in next quarter to overcome these threats/challenges**

- Respondents are working in diverse areas to overcome the previous challenges:
  - Empowering the workforce via the provision of training, coaching and mentorship were the most frequently adopted measures.
  - Data supported improvements such as better and more regular record keeping, application of new analytics to data, improving data quality and visibility for decision making, and optimizing forecasting and quantification techniques.

- Advocacy efforts were frequently reported; respondents shared their efforts to participate in policymaking forums across the health system to raise awareness of the constraints in the supply chain, and champion adherence to procurement regulations.

- We highlight other actions taken by respondents to address the reported challenges:
  - E-procurement; conversely perhaps other entries suggested the use of local products
  - Outsourcing to experienced suppliers
  - Infusing supply chain strategic thinking in the whole process by creating a director of supply chain with equal responsibility with finance, and removing supply chain under finance
  - Advocacy to overcome infrastructure gaps

**Major threats/challenges anticipated in the next quarter (1 Jan 2022 – 31 March 2022).**

- Different from the current challenges faced by respondents, funding shortages, and price increases are by far the most frequently reported concerns for the next quarter.
- Current concerns regarding human resources & training, stock shortages and stockouts were also reported as issues for the next quarter.
How resilience is being measured

Respondents produced a large array of indicators that they use to assess the resilience of their operation. As such, multiple classifications are possible; a clear pattern emerges though with hard/quantitative indicators (e.g., stockout rate, order fill rate, inventory turnover, freight bill accuracy, inventory days of supply, customer order cycle time, forecast accuracy, wastage rate) and others of a soft/qualitative nature (e.g., transparency in the tendering process, customer and partner satisfaction, supplier performance). The choice of different indicators may be related to the respondents’ areas of work (e.g., manning warehouses vs. customer service); however, several respondents reported both hard and soft indicators.

Survey methodology

- The survey was conducted remotely through an online questionnaire on google forms.
- On 8th December 2021, all the members on the platform were sent google form links to their e-mail IDs registered on the platform. The survey was closed on 16th Jan 2022.
- Personal data was anonymised and kept confidential following standard Empower School of Health Data confidentiality protocols.
- Results from questions asking for preferences are weighted (first preference's weight: 3, second preference: 2, third preference: 1). Results are shown as “weighted frequency”.

Table 1: Perspectives about the supply chain operations for the next quarter (1 January 2022 to March 2022) in terms of its Strengths-Weaknesses- Opportunities- Threats (SWOT) for all respondents and SEAR.

All respondents

<table>
<thead>
<tr>
<th>Area</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>External opportunities</td>
<td>8 (28.6%)</td>
<td>5 (17.9%)</td>
<td>15 (53.6%)</td>
<td>28</td>
</tr>
<tr>
<td>External threats</td>
<td>13 (33.3%)</td>
<td>11 (28.2%)</td>
<td>15 (38.5%)</td>
<td>39</td>
</tr>
<tr>
<td>Internal strengths</td>
<td>5 (13.5%)</td>
<td>13 (35.1%)</td>
<td>19 (51.4%)</td>
<td>37</td>
</tr>
<tr>
<td>Internal weaknesses</td>
<td>17 (47.2%)</td>
<td>16 (44.4%)</td>
<td>3 (8.3%)</td>
<td>36</td>
</tr>
</tbody>
</table>

SEAR respondents

<table>
<thead>
<tr>
<th>Area</th>
<th>Decrease</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>External opportunities</td>
<td>2 (25.0%)</td>
<td>1 (12.5%)</td>
<td>5 (62.5%)</td>
<td>8</td>
</tr>
<tr>
<td>External threats</td>
<td>3 (30.0%)</td>
<td>4 (40.0%)</td>
<td>3 (30.0%)</td>
<td>10</td>
</tr>
<tr>
<td>Internal strengths</td>
<td>1 (10.0%)</td>
<td>5 (50.0%)</td>
<td>4 (40.0%)</td>
<td>10</td>
</tr>
<tr>
<td>Internal weaknesses</td>
<td>5 (55.6%)</td>
<td>3 (33.3%)</td>
<td>1 (11.1%)</td>
<td>9</td>
</tr>
</tbody>
</table>

Optimism, with 46% of all possible responses, is the most prevalent perception among our respondents (that reported external opportunities and internal strengths will increase, and threats and weakness will decrease in the next quarter).

Twenty-one percent of the responses reflected a pessimistic perception (informed by responses reporting increased external threats and internal weaknesses and decreasing strengths and opportunities).

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