Reviewing the Ongoing COVID-19 Pandemic: The Importance of Supply Chain Resilience

1. The coronavirus (COVID-19) pandemic has created unprecedented economic difficulties for East Asia Summit (EAS) Member Countries (EASMC). The advent of the delta variant has put significant pressure on even the less-affected EASMC countries during 2020, including the members of the Association of Southeast Asian Nations (ASEAN). Lockdown measures have hindered the movement of goods and services in these countries and have compelled firms to change their management methods. Further, the COVID-19 pandemic is becoming endemic in the EAS region. It is necessary for EASMC to prepare for a new normal where we co-exist with the virus. EASMC must work together to overcome this pandemic crisis by executing and supporting the Implementation Plan of the ASEAN Comprehensive Recovery Framework.

2. One critical lesson from the COVID-19 experience for the EAS region is that although the pandemic may have exposed some vulnerability in the region’s value chains, it has also deepened and accelerated the resolve to work together to mitigate the shocks, with governments keeping markets open for trade and investment.

3. ERIA’s studies have found that:
   i. The pandemic has not disrupted the production systems and trade patterns in the EAS region yet;
   ii. ASEAN Member States (AMS) have maintained their relative importance in the world trade network; and
   iii. A vigorous private dynamism has been observed in the EAS region during the pandemic, showing that firms that managed to rapidly rearrange their supply chains in response to COVID-19 shocks are more likely to perform well and have a better outlook.

4. The COVID-19 pandemic provides EASMC with an opportunity to re-think their global value chain strategies and enhance supply chain resilience in the region.

5. One possibility is to secure the supply chains of essential materials and goods, including vaccines, to prevent shortages of these products in the EAS region. This involves not only creating the supply chains necessary to combat the pandemic but also to facilitate the much-needed investment in essential goods and sectors to support the post-pandemic economic recovery.
6. Another possibility is to accelerate digitalisation that had already been underway using digital technologies such as track and trace technology, big data and blockchain. As per the ERIA survey\(^1\), only 23% of the firms chose digitalisation measures during this pandemic, which means there is still a considerable potential for supply chain resilience through digitalisation. For example, the use of digital technologies to facilitate trade during the pandemic should be continued beyond the pandemic.

7. As such, urgent policy actions, with strong support by the markets, are needed in the EAS including strengthening cooperation to facilitate supply chain automation and management; promoting e-commerce and digital investment; enhancing data governance; and developing digital literacy and skills.

8. The rise of protectionism in the East Asian region during the pandemic must also be addressed. One replicable initiative to keep markets open for trade and investment is the Memorandum of Understanding on the Implementation of Non-Tariff Measures on Essential Goods under the Hanoi Plan of Action on Strengthening ASEAN Economic Cooperation and Supply Chain Connectivity in Response to the COVID-19 Pandemic signed by ASEAN in November 2020, which placed a moratorium on restrictive trade measures that are not consistent with the WTO Agreement on essential goods.

9. EASMC should keep in mind the necessity of reducing non-tariff measures for a resilient economy. In view of the disruption of services flows, EASMC should also take into consideration the benefits of services facilitation, including the implementation of the ASEAN Investment Facilitation Framework (AIFF).

**Looking Ahead after Overcoming the COVID-19 Pandemic: Establishing a Circular Economy**

10. In enhancing the resilience of supply chains, EASMC must step up efforts not only to build stronger and smarter supply networks but also to balance between resilience, efficiency, and sustainability of production. Thus, the circularity of supply chains should be enhanced so that they do not return to business as usual of unsustainable linear production and consumption patterns. Instead, there needs to be more focus on safeguarding the region’s natural resources and social fabric while stimulating economic growth.

11. The circular economy is a regenerative industrial process and business strategy that avoids pollution and waste by continuously reusing natural resources through innovations. It combines cleaner production and industrial ecology inside a system, including networks of interconnected firms, to enhanced resource efficiency.

12. At the firm level, greater resource efficiency is pursued via the '5R' strategy of reduce, reuse, recycle, refurbish, and remanufacture. Circular economy strategies that enhance new eco-products and process design are critical for EASMC. At the national level, Asia's developing economies may contribute to environmental sustainability by promoting transitions to a new industrial process that minimises waste and emphasises resource recovery.

13. To this end, circular economy initiatives in the EAS region should:
   i. Develop regional circular value chains that facilitate trade and investment for specialised low carbon products and services.
   ii. Contemplate the distinct bio-economic potentials and transition characteristics of each country while pursuing the region’s long-term sustainable development goals.
   iii. Consider broader economic, sectoral, and social implications for inclusivity, such as MSMEs, employment, and well-being.
   iv. Evaluate institutional capability and financial mechanism in support of the circular transition.
   v. Promote ASEAN-wide cooperation in knowledge sharing, technology transfer, and capacity building.

14. Further, the EASMC should strengthen their industrial policies to expand green businesses and accelerate circular innovation. Policy development related to innovative and inclusive business models with environmental and social undertaking should be explored in the EAS region, in addition to creating a favourable investment climate in support of those business models.

15. Moreover, the EASMC can accelerate the transition to circular economy by initiating regional discussions on various issues such as enhancing product design, increasing efficiency in the use of material resources and energy, and formulating new public private partnerships that contribute to green growth.

16. The Framework for Circular Economy for the ASEAN Economic Community (AEC) is a pioneering initiative under which AMS are provided with a clear road map and prioritisation to develop a circular economy while taking into account related ongoing initiatives and existing mechanisms for cross-sectoral coordination.

**Transition to Sustainable Energy Systems**

17. Availability, accessibility, and affordability of energy supply are the most fundamental requirements for AMS in their energy policy planning and implementation. The EAS Energy Outlook, updated by ERIA in 2019-20, suggests that ASEAN will still heavily depend on fossil fuels in 2050 under the Business-As-Usual (BAU) scenario. Even under the Alternative Scenario (APS) incorporating aggressive energy efficiency and conservation (EEC) and variable renewable energy (VRE), the share of fossil fuel will be 82%. Accordingly, CO2
emissions in AMS from 2017 to 2050 are expected to increase by 3.2 times in the BAU scenario and by 2.3 times under the APS.

18. On the other hand, the Paris Agreement sets the long-term goal to limit the temperature increase to 1.5°C above pre-industrial levels. In order to achieve this goal, Parties to the Paris Agreement aim to reach global peaking of greenhouse gas emissions as soon as possible, and to undertake rapid reductions thereafter so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of GHGs (carbon neutrality) in the second half of this century. With this in mind, a growing number of countries have announced carbon neutrality goals by 2050.

19. Carbon neutrality cannot be achieved by merely announcing targets. Pathways towards carbon neutrality may vary from one country to another - one size does not fit all. As Parties to the Paris Agreement, AMS need to pursue low carbon energy transitions towards carbon neutrality in the second half of this century, taking into account each country’s specific national circumstances and ensuring other policy objectives, namely, availability, accessibility, and affordability. ERIA, in collaboration with the Institute of Energy and Economics Japan (IEEJ), conducted a technology optimisation analysis for decarbonising ASEAN energy systems to achieve regional carbon neutrality. The analysis suggests that:
   i. Energy saving and electrification in end-use sectors, combined with low-carbon power supply, would be core strategies for decarbonising ASEAN energy systems.
   ii. Not only VRE, but also other carbon-free technologies (hydro, geothermal, biomass, nuclear, CO₂ free hydrogen and CCUS) and negative emission technologies should contribute to carbon neutrality.
   iii. During transition periods, various kinds of low-carbon technologies can reduce CO₂ emissions effectively, including switching fuel from coal to natural gas, deployment of more efficient turbines, co-firing with hydrogen or ammonia, and fossil-fuel power with CCS.
   iv. While affordable technologies may be deployed in the mid-term, more expensive technologies will be required in the final stage of complete carbon neutrality.
   v. For political, economic, and social acceptability, mitigation costs must be reduced by affordable and innovative decarbonisation technologies, large scale deployment, and regional/international cooperation.

20. Most ASEAN Member States are considering their strategies to contribute to the ultimate objective of the Paris Agreement. ERIA should work with interested AMS and develop country-specific scenarios. By doing so, the EAS region should facilitate the transition to sustainable energy systems which are essential for industries and economic growth leading to a low carbon economy.
ERIA Supports EASMC to Develop More Resilient, Sustainable, and Inclusive Economies

21. ERIA’s studies on healthcare will lead to a better understanding and policy formulation on health in this region. ERIA should expand its research scope to promote the research and development of medicines and medical devices in Asia and strengthen the international clinical trial network in the region, which could lead to regulatory harmonisation standards of excellence and cross-border trade and/or investment in healthcare services in the region.

22. Further, ERIA may examine constraints to cross-border trade or exchange in healthcare services in the region. For example, Thailand already plays a significant role in the private medical services industry in the Philippines. There appears to be considerable scope for complementation and mutual benefit if the member states’ healthcare systems can be better integrated through trade and cross-border investments while respecting social, cultural, and other differences. In line with this, it would be useful to have a stock-taking of cross-border investments in healthcare in the region, both across countries within the ASEAN/East Asian region, and between those in the region and outside of it.

23. ERIA recognises the importance of addressing regional food security which has deteriorated in recent years due to several causes. In this regard, ERIA’s research regarding food value chains could contribute to enhancing food security from the viewpoint of improving availability of and access to food. Also, since the sustainable food system is an essential concept (e.g. UN food system summit held in September), ERIA will be engaged in this topic in the near future.

24. Beyond Government officials, ERIA should consider working with the private sector (through the ASEAN Business Advisory Council) and organised civil society groups to help achieve a broader and richer perspective in analysing policy issues facing ASEAN and East Asia. The private sector can benefit from ERIA’s capacity building initiatives while at the same time assist in providing a richer perspective in the design and content of capacity building for government stakeholders.

25. Considering the experience of the disruptive and unexpected effects of the pandemic, ERIA should undertake an analysis of high impact, low probability events, which could adversely affect the EAS region.

26. ERIA will fully support the Government of Cambodia during its chairmanship of ASEAN chair of ASEAN in 2022 and the Indonesian government during its chairmanship of the G20 in 2022.