



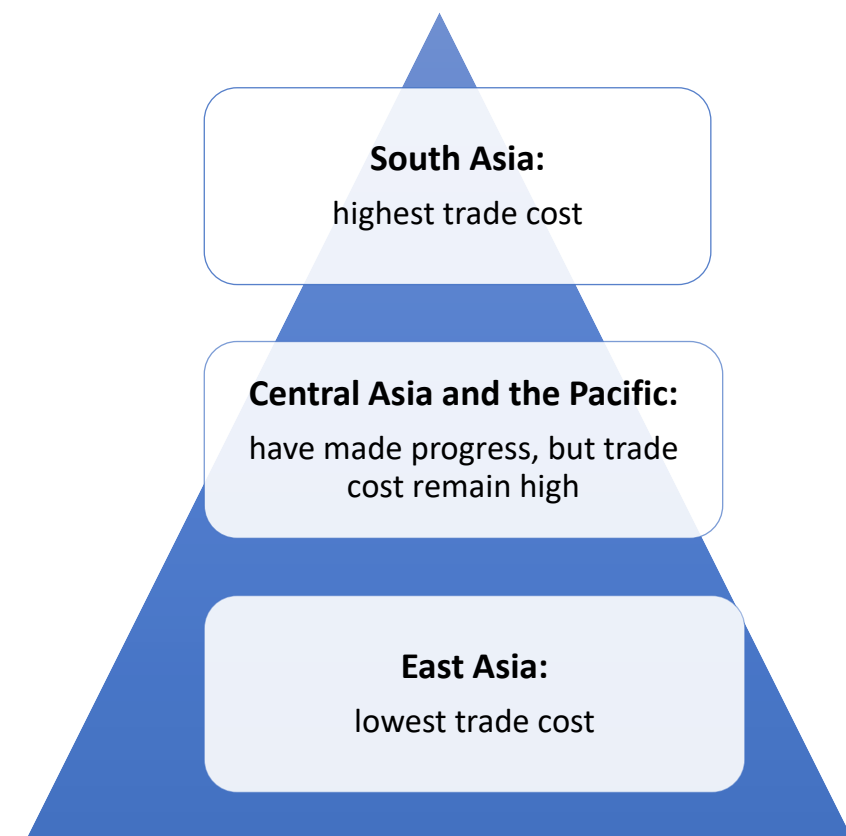
## A circular collage of images representing various sectors of the economy, including agriculture, manufacturing, and services, framed by a blue and white spiral graphic. The images include: a market stall with fresh produce like tomatoes and leafy greens; a person in a straw hat working in a field; a busy port with yellow cranes and blue shipping containers; a group of people wearing face masks; a person in a blue lab coat and mask working with equipment; a person in a red shirt and straw hat wearing a face mask; a close-up of a mechanical part; a person in a white shirt and hat working with a large pile of red chili peppers; and a close-up of a yellow chicken. The entire collage is set against a background of concentric blue and white circles.

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## A circular collage of various images representing different sectors of the economy and society, framed by a blue spiral graphic. The images include: a market stall with fresh produce like tomatoes; a person wearing a straw hat working with green vegetables; a busy port with shipping containers and cranes; a crowd of people wearing face masks; a person in a blue protective suit and mask handling items; a woman in a red patterned shirt and face mask; a close-up of a metallic helmet or dome; a person in a yellow jacket sorting through red chili peppers; and a small white chick. The entire composition is set against a background of concentric blue and white curved bands.

# Trade cost on the rise

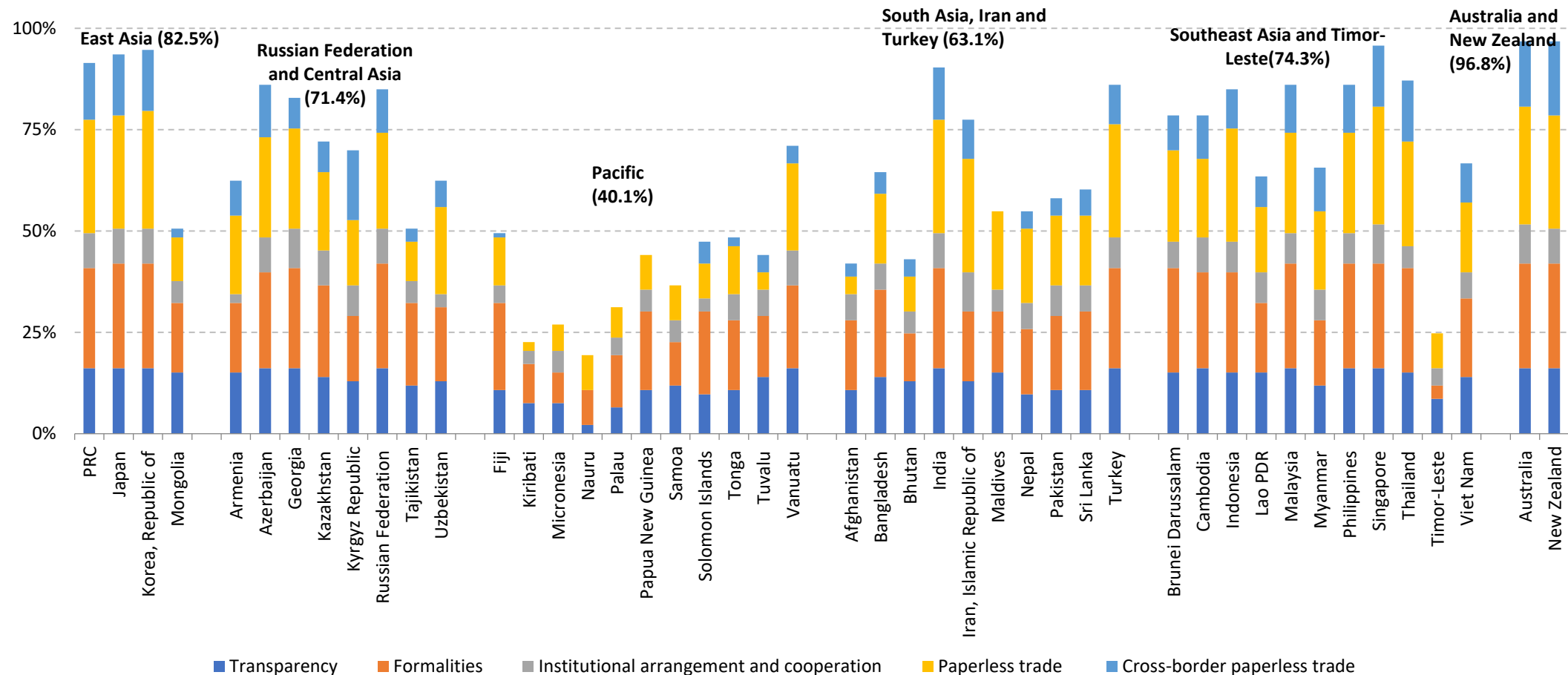
Region	ASEAN-4	East Asia-3	North and Central Asia - 4	Pacific Islands Developing Economies	SAARC-4	AUS-NZL	EU-3
ASEAN-4	76.7% (3.9%)	79.4% (6.8%)	319.0% (-1.7%)	308.5% (-3.8%)	135.2% (5.1%)	103.3% (5.0%)	103.8% (-3.2%)
East Asia-3	79.4% (6.8%)	56.9% (9.8%)	168.2% (-3.6%)	241.6% (-14.0%)	125.4% (1.0%)	89.0% (2.1%)	85.2% (0.3%)
North and Central Asia - 4	319.0% (-1.7%)	168.2% (-3.6%)	110.6% (-8.6%)	417.1% (13.7%)	268.7% (-8.5%)	318.8% (-8.5%)	148.2% (-2.7%)
Pacific Islands Developing Economies	308.5% (-3.8%)	241.6% (-14.0%)	417.1% (13.7%)	117.9% (-12.6%)	409.8% (3.2%)	117.3% (1.3%)	397.9% (-3.0%)
SAARC-4	135.2% (5.1%)	125.4% (1.0%)	268.7% (-8.5%)	409.8% (3.2%)	128.4% (13.4%)	138.0% (0.2%)	113.7% (-0.5%)
AUS-NZL	103.3% (5.0%)	89.0% (2.1%)	318.8% (-8.5%)	117.3% (1.3%)	138.0% (0.2%)	54.0% (3.6%)	105.8% (-1.1%)
EU-3	103.8% (-3.2%)	85.2% (0.3%)	148.2% (-2.7%)	397.9% (-3.0%)	113.7% (-0.5%)	105.8% (-1.1%)	41.4% (-5.9%)
USA	86.6% (2.0%)	66.2% (5.4%)	190.5% (7.1%)	199.8% (-4.5%)	114.2% (3.6%)	99.7% (0.5%)	66.7% (0.1%)



- Continuous trade facilitation could help bend the trend of surging shipping costs in the context of COVID-19

# Overall Implementation of Trade Facilitation

**Australia-New Zealand is leading the region, followed by East Asia and Southeast Asia and Timor-Leste**  
**Regional frontiers: Australia, the PRC, India, Japan, New Zealand, the Republic of Korea, and Singapore**



# Continued progress on streamlining trade procedures

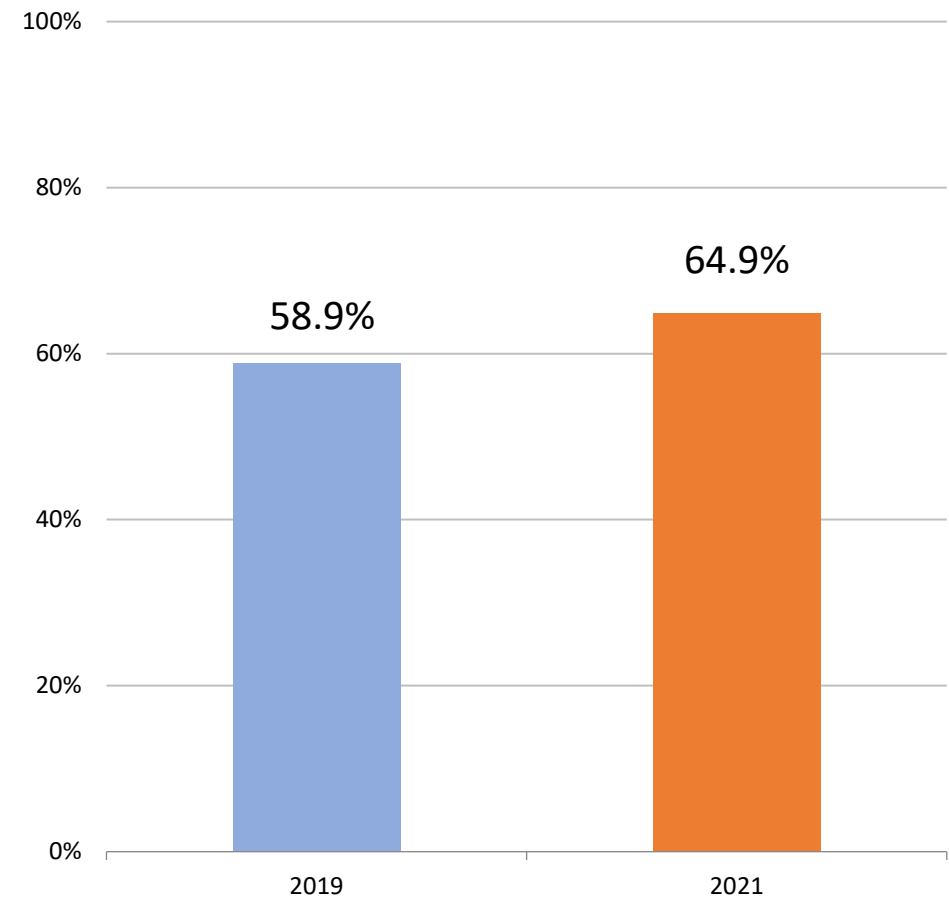


Continued progress on streamlining trade procedures in the region

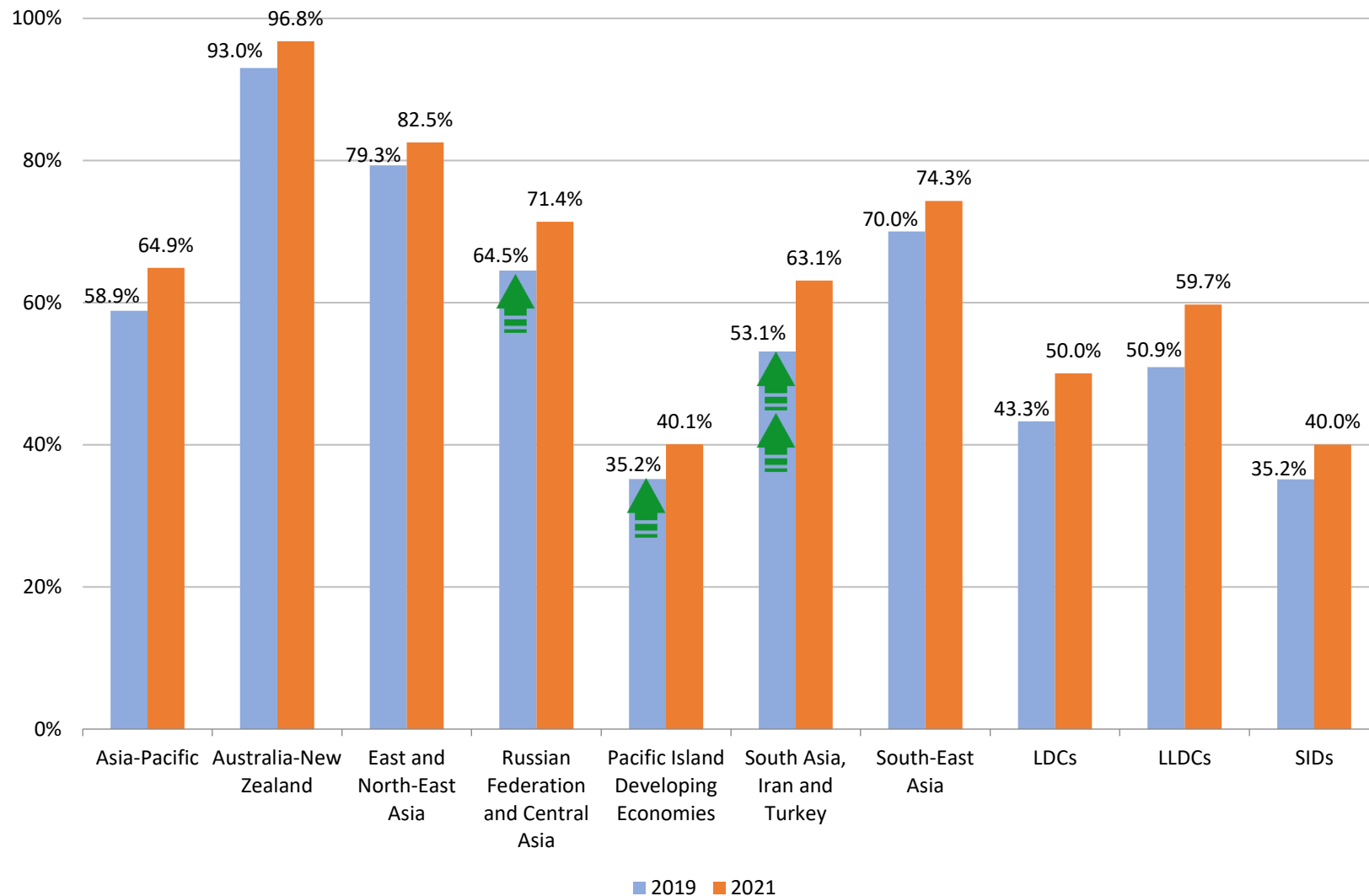
- implementation increased by 6 percentage point over the last two years

Trade facilitation could help bend the trend of rising trade costs

The regional average implementation of 31 common measures



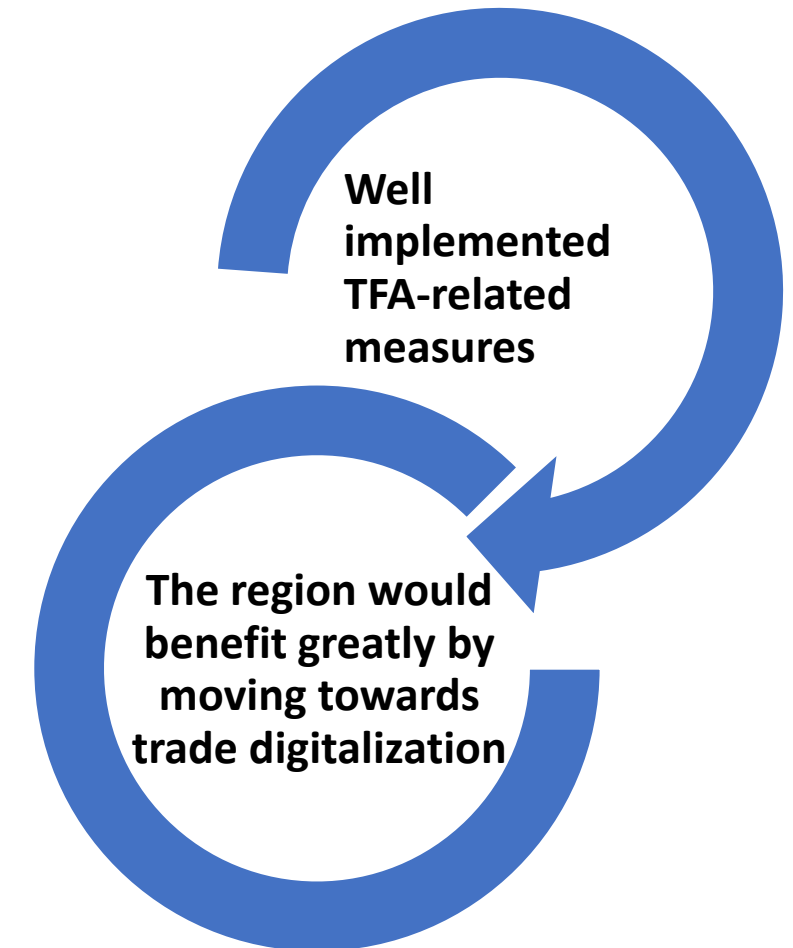
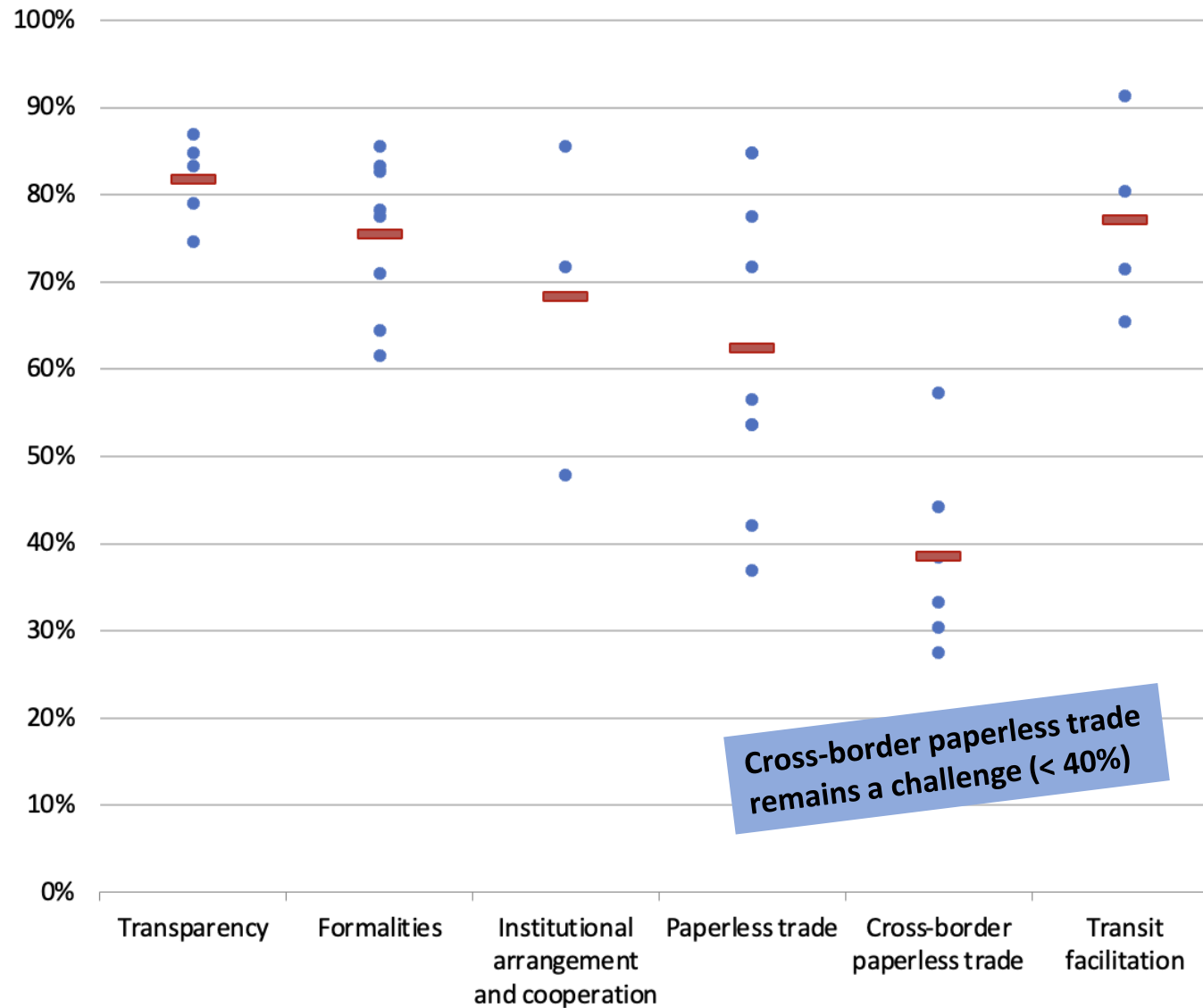
# All subregions have made progress since 2019



- Most progress observed in South Asia, Iran and Turkey (**10** percentage points)
- Progress in Russian Federation and Central Asia pronounced at about **7** percentage points
- Progress is also substantial in the Pacific (about **5** percentage points) given their challenges and trade disruptions



# Implementation of cross-border paperless trade still a challenge



# Significant room to cut trade costs through trade digitalization

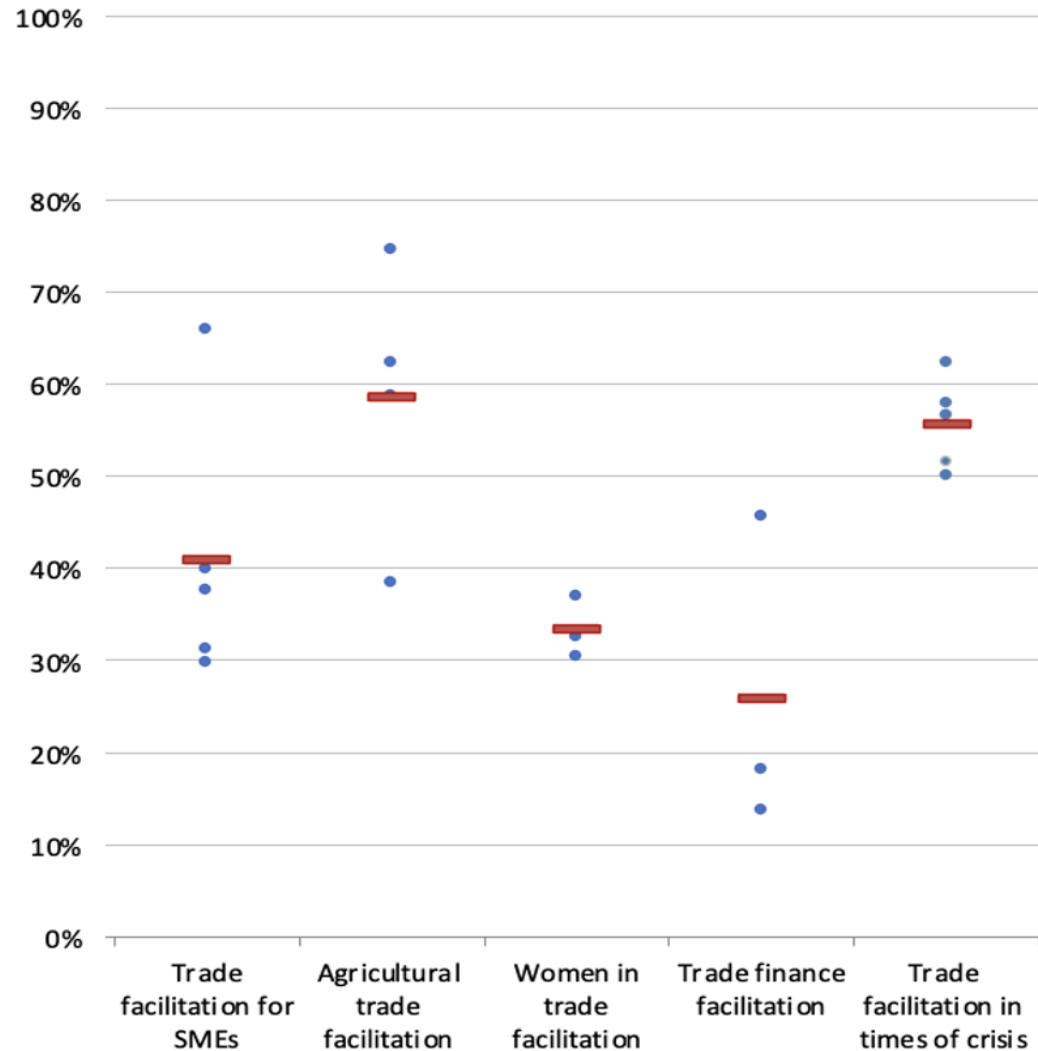
- Achieving basic compliance with WTO TFA results in modest trade cost reductions.
- Digital trade facilitation results in much larger trade costs reductions, averaging over 13% (full implementation).

**Table 6:** Changes in International Trade Costs of Asia and the Pacific as a Result of World Trade Organization Trade Facilitation Agreement Implementation

Trade Costs Model	WTO TFA (binding only)		WTO TFA (binding + nonbinding)		WTO TFA+ (binding + nonbinding + other paperless and cross-border paperless trade)	
	Partially Implemented	Fully Implemented	Partially Implemented	Fully Implemented	Partially Implemented	Fully Implemented
<b>Model 1</b>						
Overall trade facilitation	-1.74%	-4.11%	-2.81%	-6.64%	-7.65%	-13.40%
<b>Model 2</b>						
General trade facilitation measures	-0.56%	-1.36%	-0.73%	-1.91%	-0.92%	-2.18%
Digital trade facilitation measures	-	-	-1.56%	-2.80%	-8.78%	-13.09%



# Need to enhance sustainable trade facilitation measures



**More holistic and inclusive trade facilitation are required to enhance strategies targeting groups and sectors with special needs**



# Trade facilitation to mitigate COVID-19 impacts

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The pandemic highlighted the role of trade facilitation in ensuring swift movement of medical and other essential goods.

Trade facilitation has emerged as an effective tool to mitigate the devastating effects on COVID-19



Many countries still lack long-term trade facilitation plans to enhance preparedness for future crises



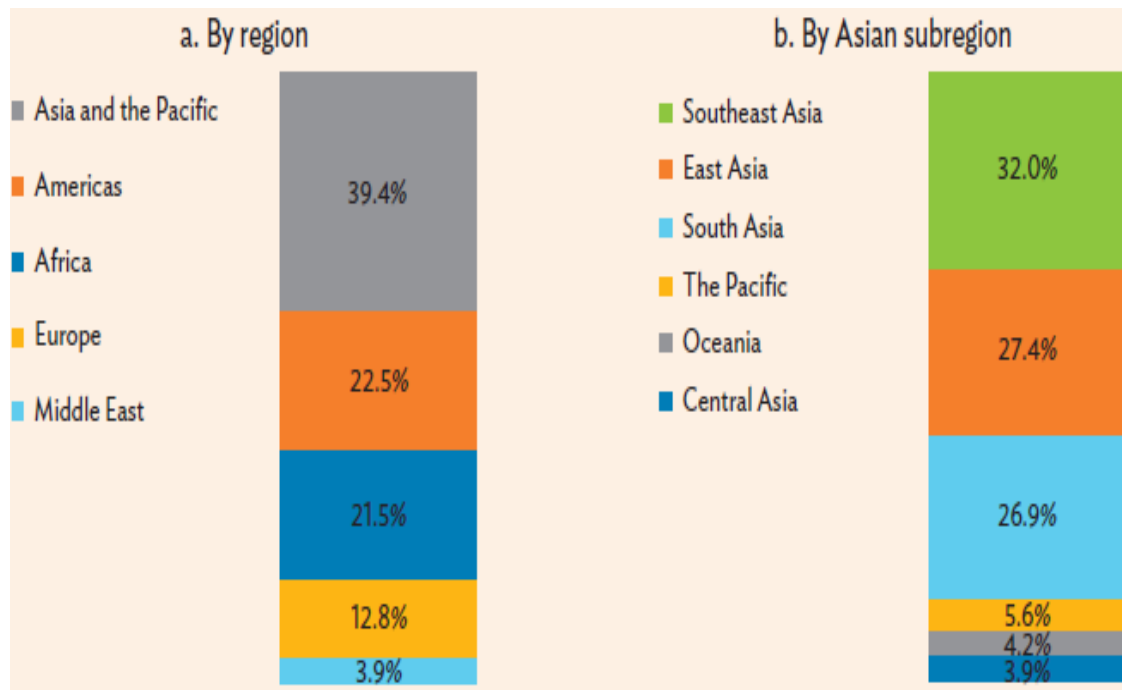
# Theme Chapter

# Supply Chains of Critical Goods Amid the Covid-19 Pandemic: Disruptions, Recovery, and Resilience



# Supply chains have been disrupted by natural hazards, epidemics, trade policy, and economic crises

## Distribution of disasters, 2000-2021



Notes: For an event to be considered a disaster, it must satisfy at least one of the following criteria: (i) 10 or more deaths, (ii) 100 or more people affected/injured/homeless, or (iii) official declaration of the country of a state of emergency and/or appeal for international assistance.

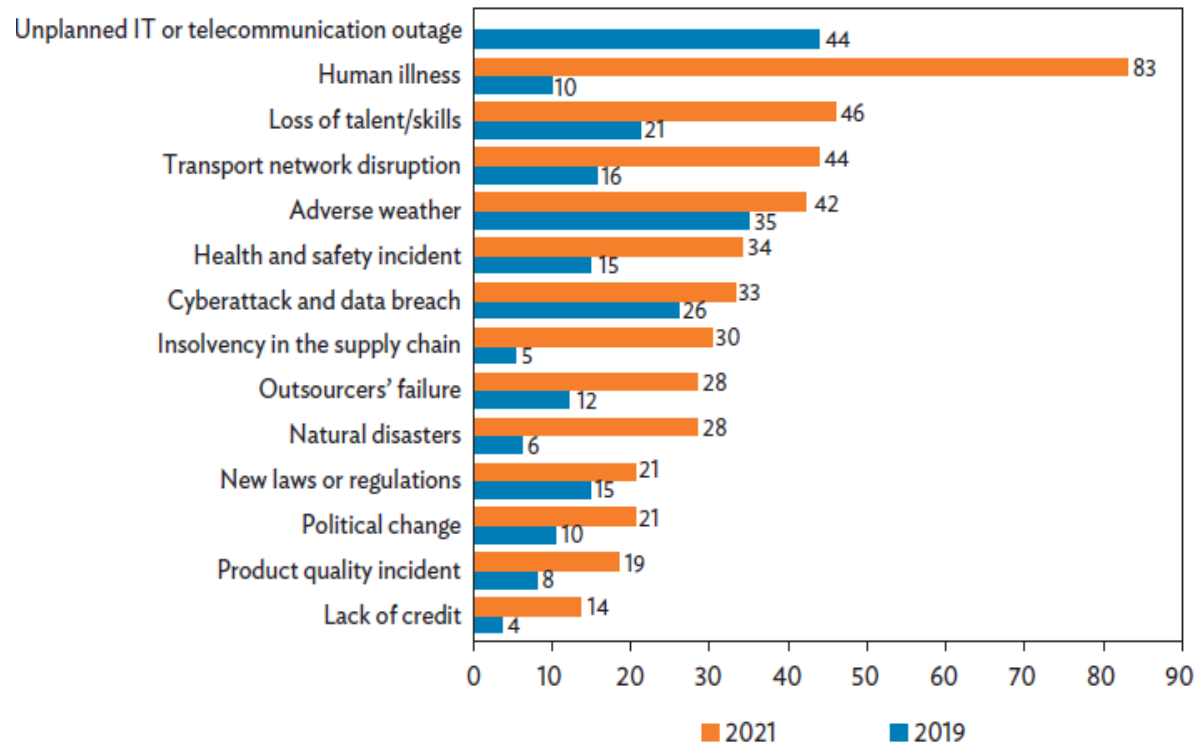
Source: Asian Development Bank calculations using the International Disaster Database. <http://www.emdat.be> (accessed June 2021).

## Supply chain disruptions

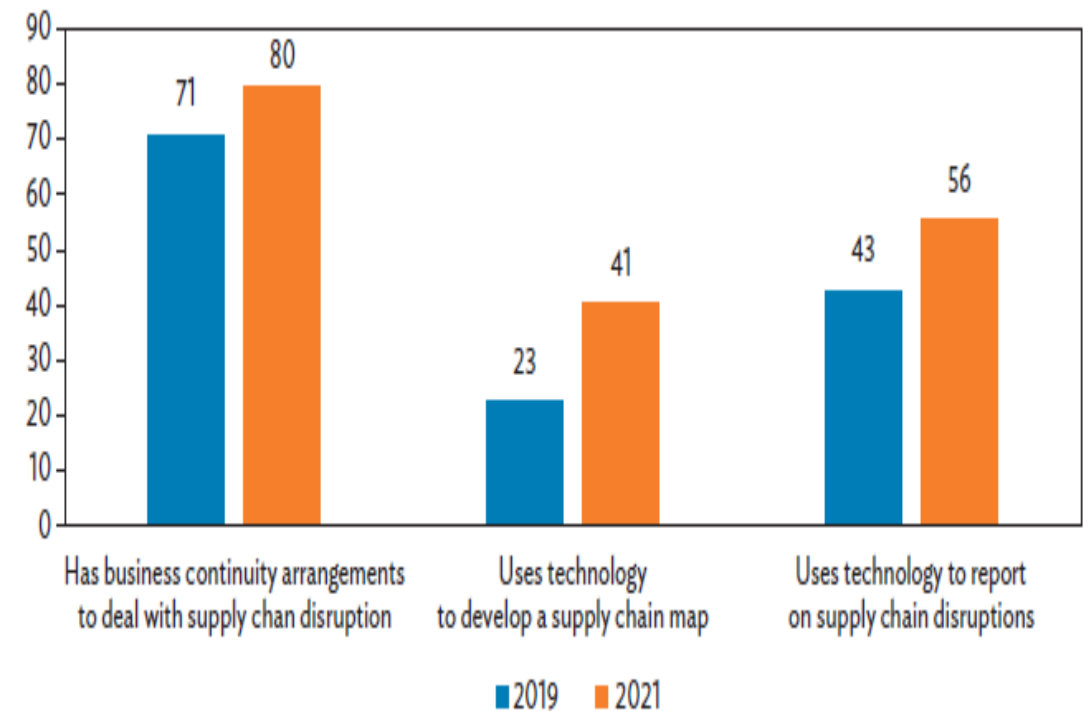
- Tohoku earthquake and tsunami – Japan, March 2011
- Flood – Thailand, 2011
- 2007-2008 food price crisis
- 2008 financial crisis
- 2003 Severe acute respiratory syndrome (SARS) outbreak
- 2014-2016 Ebola outbreak in West Africa
- 1918 Influenza Pandemic (Spanish flu)

# The COVID-19 pandemic became a stress test for global supply chain and is requiring a paradigm change in supply chain management

**Major sources of disruption on supply chains before and after COVID-19 (% of respondents)**



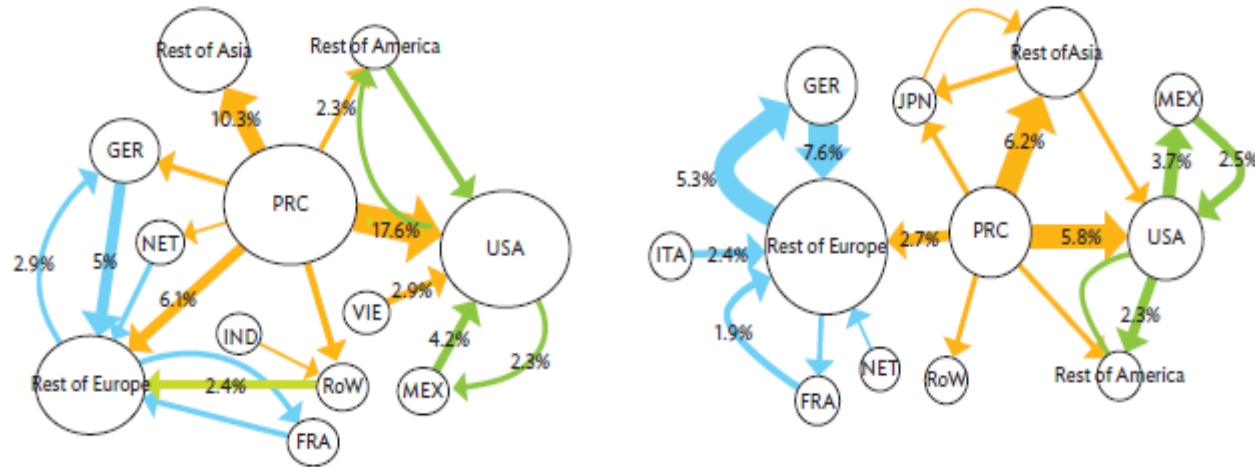
**Business continuity arrangements and use of technology (% of respondents)**



Source: BCI (2019) and (2021).

# The pandemic revealed weaknesses in the production and distribution of critical goods such as medical supplies and foods

## Trade Networks of Surgical Masks and Respirators, 2019

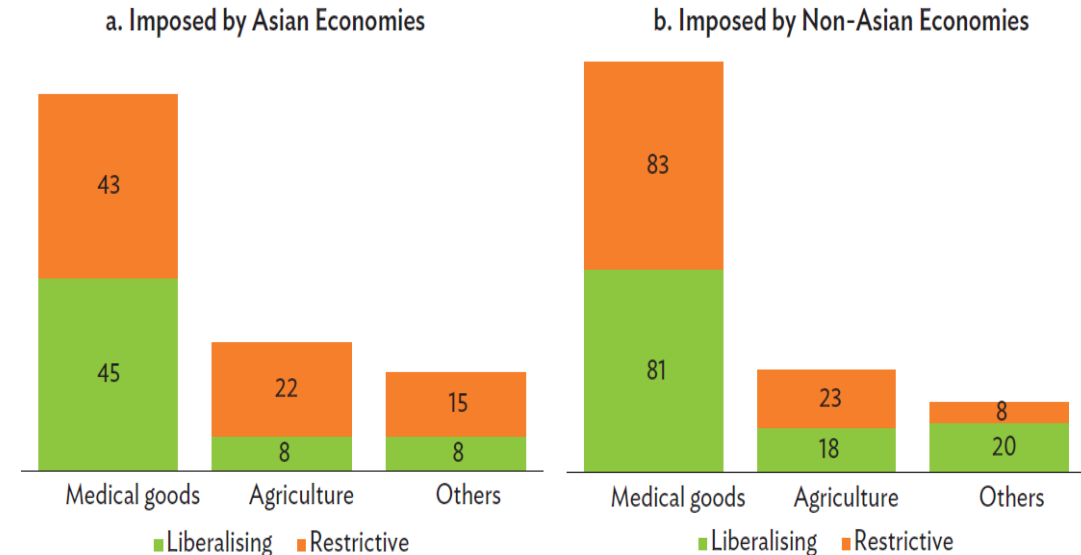


## Bilateral Trade Flows of Rice (%total imports, 2019)

Expoter/Importer	LAO	BAN	NEP	INO	SRI	PHI	MAL	KAZ
Thailand	31	0	0	14	1	6	18	0
Viet Nam	67	10	0	7	2	82	57	0
India	0	75	99	0	26	1	9	0
Pakistan	0	4	0	31	71	3	6	87
Rest of the world	2	11	1	48	0	8	10	13
Total	100	100	100	100	100	100	100	100

Source: Asian Development Bank calculations using data from the United Nations. Commodity Trade Database. <https://comtrade.un.org> (accessed 16 March 2021).

## Products Affected by COVID-19-Related Trade Measures

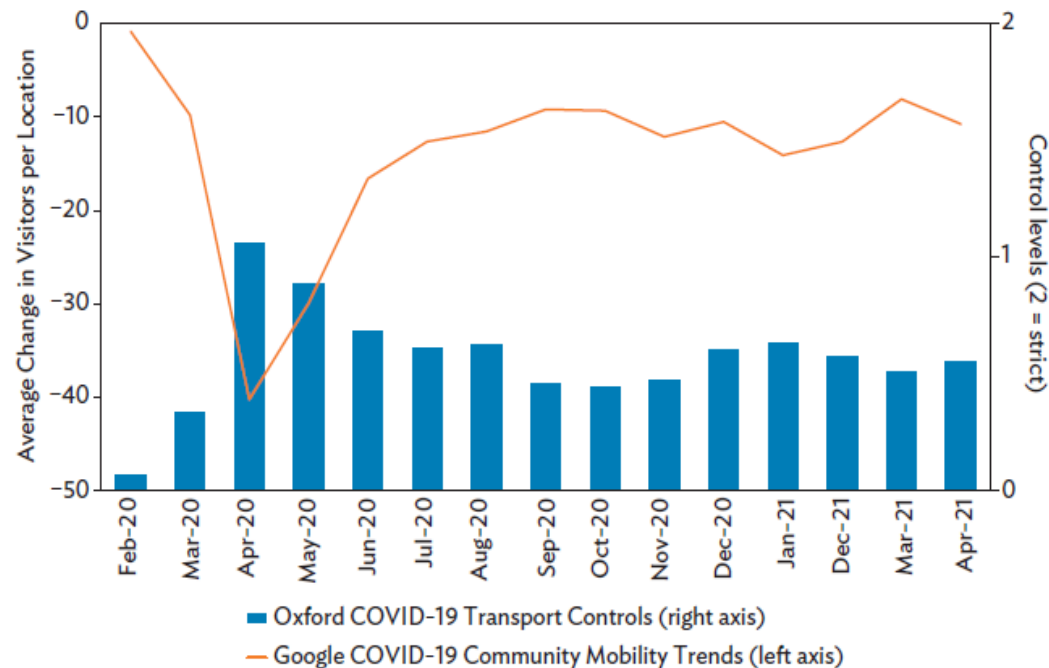


Source: Asian Development Bank calculations using data from International Trade Centre. <https://www.intracen.org> (accessed April 2021).



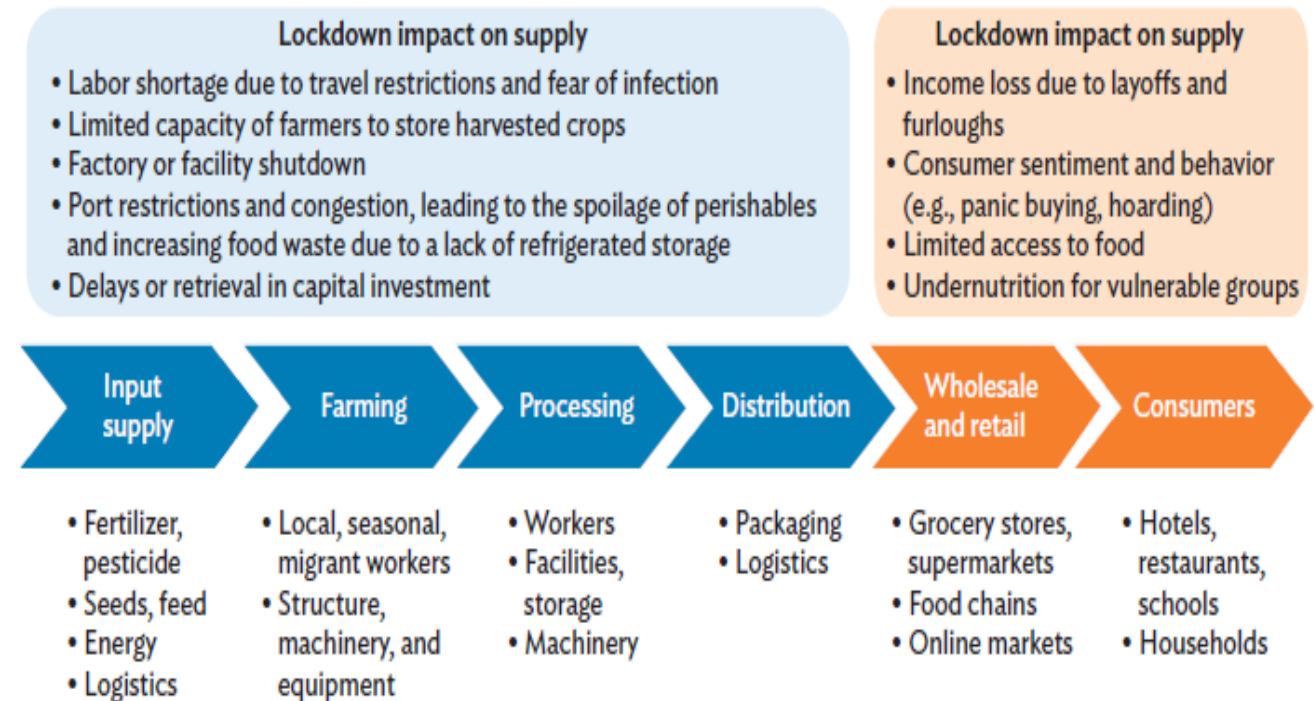
# Domestic and international disruptions in food supply chains emphasized the role of trade facilitation and open trade

## Domestic Movement Restrictions and Mobility in Asia and the Pacific



Source: Asian Development Bank calculations using data from Oxford COVID-19 Government Response Tracker, <https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker>; and Google COVID-19 Community Mobility Trends <https://www.google.com/covid19/mobility/> (both accessed May 2021).

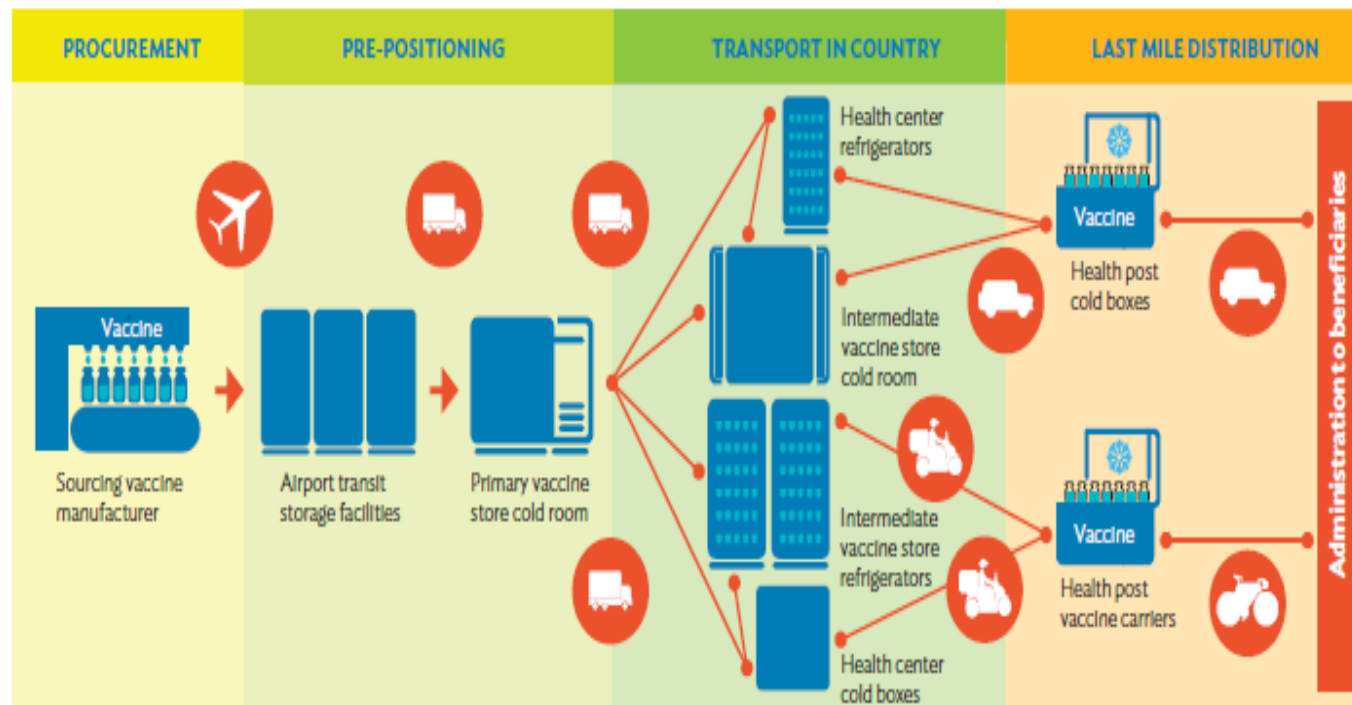
## Lockdown Impact on Food Supply Chain





# Complex vaccine supply chains further highlights the importance of trade facilitation

## The Flow of the Vaccine Cold Chain



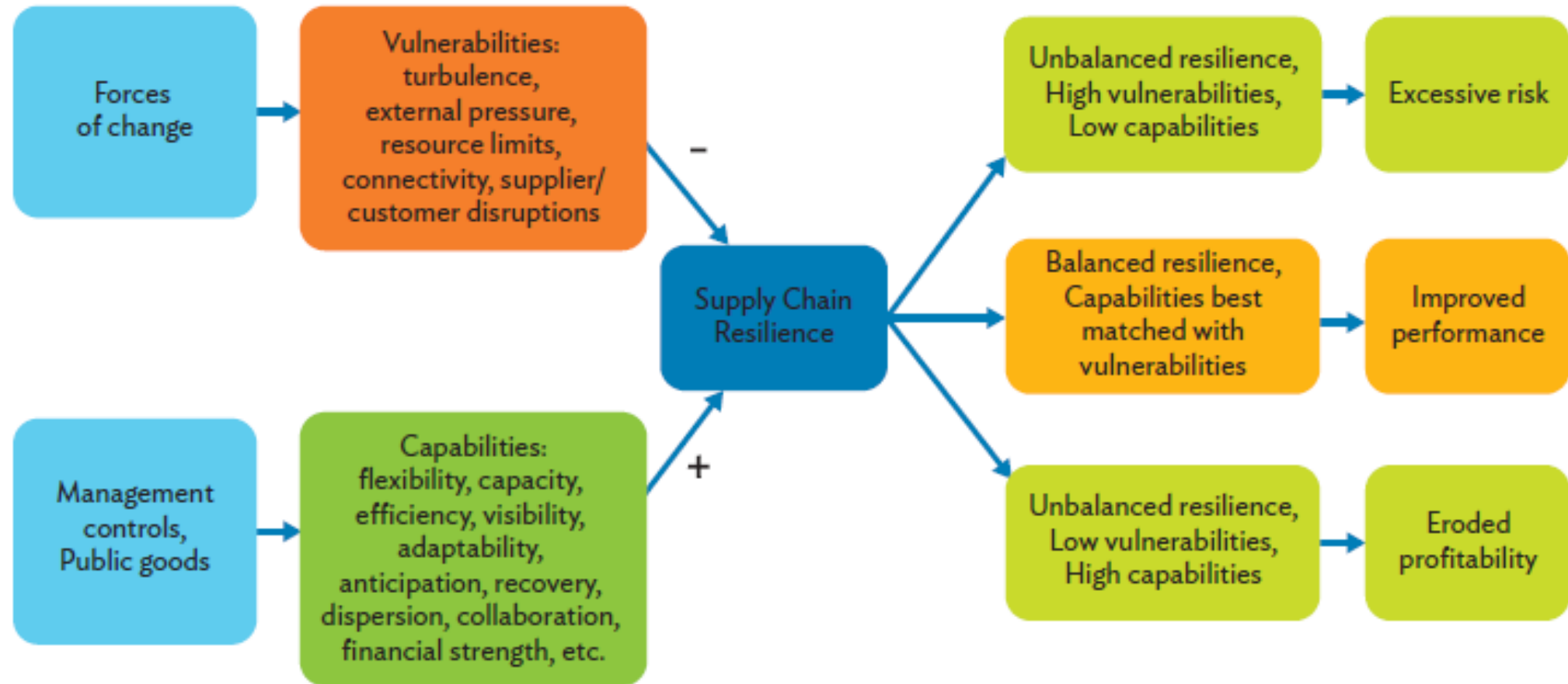
Sources: Reproduced by the Asian Development Bank based on Medium (2020) and cited in ADB (2021b); World Health Organization (2015).

## Constraints to vaccine deployment in developing economies

- Low air transport capacity
- Security and border management
- Inadequate temperature-controlled supply chains
- Improper handling of vaccines and lack of information
- Vaccine in rural areas and the last mile

# Balancing capabilities with vulnerabilities is key to recovery and supply chain resilience

## Conceptual Framework of Supply Chain Resilience



Source: Authors based on Pettit, Fiksel, and Croxton (2010).

# Enhancing supply chain resilience of essential goods requires expanding international cooperation in many areas

## Open trade and trade facilitation

- Multilateral approaches to trade facilitation
- Addressing legal and technical standards, system interoperability, implementing WTO Trade Facilitation Agreement and UN paperless trade treaty

## Digital technologies

- Reducing trade costs
- Enhancing inclusion of smallholder farmers, borrowers, lenders

## Deeper international cooperation

## Targeted assistance to vulnerable groups

- Equitable vaccine procurement and distribution
- Logistics support and handling of vaccines

## Role of MDBs

- Trade and supply chain finance, food aid, vaccine procurement

# Thank you!

[Download the report](#) for more details

