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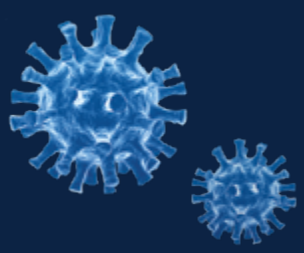
THE CORONAVIRUS DISEASE 2019 PANDEMIC: LESSONS LEARNED FROM FIRST-HAND EXPERIENCES



This chapter highlights selected maritime stakeholder experiences with regard to the COVID-19 pandemic, including challenges faced, related response measures and potential lessons learned. Five stakeholders, from across regions and representing a mix of public authorities and maritime transport industry actors, directly involved in operating and managing maritime transport and logistics, were invited to share their respective experiences. While not exhaustive and only intended as illustrative examples, the reflections received generate additional insights into the implications of the pandemic for maritime transport and trade. Key findings are consistent with the data and analysis detailed in the preceding chapters on the impact of the pandemic on maritime trade; the supply of maritime transport infrastructure and services; and the performance of the sector.[20]

[20] The experiences presented in this chapter are based on the inputs received by UNCTAD from five entities. They are illustrative in nature and may not reflect the experiences of a broader set of stakeholders.

A. INVITED REFLECTIONS ON THE CORONAVIRUS DISEASE 2019 PANDEMIC IN MARITIME TRANSPORT AND HINTERLAND CONNECTIONS

The COVID-19 pandemic is an unprecedented global challenge with significant consequences for all economies, sectors and industries, including maritime transport and logistics. Data and analysis presented in the preceding chapters have underscored the magnitude of the disruption caused by the pandemic. By tracking changes in maritime trade, port traffic, port calls, liner shipping connectivity levels and deployed vessel capacities, the various data sets, including automatic identification system data, have shown the magnitude of the impact of the pandemic on maritime transport and trade. The disruption triggered a sudden slowdown in seaborne trade and increases in blank sailings, delays at ports and closures of ports, as well as reductions in working hours, shortages of equipment, shortages of labour and capacity constraints in truck and other inland transport systems.

An important takeaway from the research and analysis detailed in the preceding chapters is related to the strategic role of maritime transport and logistics in ensuring the continuity and reliability of global supply chains and cross-border trade. Beyond ensuring the smooth delivery of the essential goods and services required to manage crises, the sector is crucial in keeping trade flows moving. Another conclusion from the analysis concerns the need to ensure the integrity, connectivity and smooth functioning of maritime transport for all economies, both developed and developing, in particular small island developing States and the least developed countries. The latter already have disproportionately high transport costs and low levels of shipping connectivity, which makes their trade uncompetitive, volatile, unpredictable and costly. Finally, risk assessment and management and emergency and disaster response planning have emerged as key for business continuity and robustness.

To complement these findings, UNCTAD sought contributions from the field concerning the experiences of some of the main actors involved in maritime supply chains. Building on synergies arising from ongoing collaboration with UNCTAD, selected stakeholders representing a mix of public authorities and maritime transport industry actors were invited to share their experiences with regard to the impact of the pandemic, the measures applied to date and potential lessons learned and good practices. Stakeholders were also invited to share their perspectives regarding the impact on the maritime supply chain and challenges faced and to elaborate on ways in which they have acted to mitigate risks and address challenges generated by the pandemic.[21]

The contributions received provide further clarity on the immediate impact of the disruptions caused by the pandemic on various stakeholders, while taking into account differences in the functions and roles of each stakeholder in the maritime supply chain. They also specify additional efforts that may be required to build the resilience of the maritime transport system and supply chain in the future. While not exhaustive and not meant to be representative of all public authorities and industry actors, the views and experiences shared by the stakeholders provide useful insights into specific occurrences, the related responses and the lessons to be learned, all with a view to any future disruption. The stakeholders shared the perspectives of small island developing States; landlocked, transit and coastal countries, through the lens of a transit and transport corridor; international maritime passage authorities; port authorities; and global shipping companies. These views cover different regions, namely, Africa, Europe, Latin America and the Pacific. The shared experiences are presented in detail in the subsequent sections in this chapter.

The following overview of the various experiences highlights some key aspects that have been crucial to the stakeholders in navigating the crisis. One trend, identified in the analysis in the preceding chapters and reiterated in the experiences shared, is the importance of keeping trade moving during and beyond crisis conditions through well-functioning and resilient maritime supply chains. Despite the difficulties and challenges faced during the pandemic, most shipping companies, ports and other relevant stakeholders have remained operational and put in place immediate measures to facilitate trade and the movement of goods, in particular vital commodities and products. This was highlighted in the experiences shared. Stakeholders reported that

[21] This chapter is informed by contributions from the following stakeholders: Mediterranean Shipping Company; Micronesian Centre for Sustainable Transport; Northern Corridor Transit and Transport Coordination Authority; Panama Canal Authority; Port Authority of Valencia; and Sailing for Sustainability, Fiji.

while experiences varied depending on pre-existing conditions and levels of preparedness, overall, maritime transport and logistics helped to keep essential goods and trade moving. The digitalization of interactions and information-sharing were also emphasized as critical to the continuity of maritime transport operations during the pandemic, and the stakeholders noted that digitalization would be a key component of resilience-building efforts. Finally, the stakeholders stated that awareness was required of the potential changes in trade patterns resulting from the disruptions caused by the pandemic, along with the need to prepare and adapt infrastructure and operations accordingly and to promote the sustainability and resilience of the sector.

Key findings from the experiences shared include the following:

- **The pandemic directly impacted the maritime supply chain and hinterland connections.** Returning to normal will take time and this normality will likely differ from that expected before the pandemic.
- **Responses and adjustments to pandemic-related disruptions spanned various areas**, including operations; financial and economic areas; sanitary and safety protocols and processes; and working practices and organizational aspects.
- **Some of the responses entailed a substantial reorganization of operations**, including prioritization of essential services; reorganization of operations and working conditions due to sanitary and safety protocols; and advancement of digitalization and communications strategies.
- **Sanitary and safety protocols and related measures had to be urgently implemented in a short time.** The capacity to coordinate with local and/or national authorities and communicate with other actors in the maritime supply chain were critical to responses and coping strategies.
- **Work-related and operational adjustment measures that helped the sector adapt were transformational for maritime supply chain stakeholders.** The digitalization of processes and the use of technology by much of the workforce triggered the need to revisit operations and upgrade knowledge and skills.
- **Challenges related to crew changes highlighted the need to orchestrate an integrated approach by all relevant stakeholders.** This was one of the major issues faced in the maritime supply chain. Stakeholders included ministries of health and third parties, for example with regard to public policies that implemented restrictions on travel.
- **Ports managed to avoid significant disruptions to cargo operations.** This was facilitated by the reduced number of port calls by vessels and maritime trade flows.
- **The revision of capacity management plans and the adaption of services were key.** These were significant features of the adjustment measures introduced by shipping lines.
- **Maintaining landside operations was difficult for transit and transport corridors.** Long queues at borders highlighted the importance of reliable chains during a crisis such as the pandemic. Such difficulties affected not only coastal countries but also landlocked and transit countries, which needed to maintain access to seaports. The pandemic exposed potential limitations in trade facilitation measures applied in the context of cross-border transport by land.
- **Business continuity plans emerged as key to acting swiftly.** Such plans are important and likely to be further developed and revised, to integrate lessons learned and help better prepare for any future disruption from events such as pandemics or those due to climate change-related factors.
- **Responding to pandemic-related challenges required collaboration and coordination, as well exchanges of information among all stakeholders.** Wherever they had been established, collective actions were more effective in combating risks and improving decision-making and resilience. Adjustments to the governance and communications strategies of the parties involved, as well as exchanges of information and the sharing of experiences, were important.
- **Furthering systemic, coordinated responses and building the capacities of staff were important.** In future, for example, there is a need for transboundary disaster management

strategies that are well coordinated including, for transit and transport corridors, a harmonized disaster response mechanism. Coordination and collaboration could also focus on sharing intelligence from early-warning systems, conducting capacity-building for personnel involved in the transport logistics chain and embedding disaster responses into national and regional policies that affect trade, transport and other related infrastructure.

- **The pandemic may have had a less obvious impact on small island developing States in the Pacific.** However, the impact may be longer lasting and more critical, in particular as multiple crises or shocks could occur at the same time. The decision to divert a single ship from some countries, the absence of vessels calling at certain ports or even the availability a single operator, due to reductions in the cargo available at a destination at a key export market, has tested the ability of maritime transport to deliver essential goods. There has also been an increase in shipping costs for small island developing States. Such States need to develop risk mitigation capabilities and resilience-building, including through green shipping solutions, at the national, regional and international levels.
- **Small island developing States remain a vulnerable country grouping.** They often experience a combination of disruptive factors and shocks. For example, in April 2020, small island developing States in the Pacific region also experienced the impact of a tropical cyclone. Losses and damages were significant and the pandemic made the delivery of emergency support and relief more challenging. In this context, climate change mitigation and adaptation remain important priorities and efforts to address the challenge, including under the auspices of IMO, should be further enhanced.

B. EXPERIENCE OF SMALL ISLAND DEVELOPING STATES: SMALL ISLAND DEVELOPING STATES IN THE PACIFIC

The coronavirus disease and Cyclone Harold: Lockdown in the Pacific

In 2019, Samoa experienced a measles epidemic and when news of COVID-19 first emerged, small island developing States in the Pacific were therefore cautious and some restricted travel as of January 2020, following which a period of lockdown was instituted. As at June 2020, of the 15 small island developing States in the Pacific, only Fiji and Papua New Guinea had recorded cases of COVID-19 (see https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7348597/). The remoteness of the small island developing States in the Pacific has been beneficial in this instance, as increased case numbers would have put a strain on the limited health-care systems and possibly been further increased by poor sanitation levels and the often overcrowded urban areas.

In April 2020, severe tropical Cyclone Harold struck Fiji, Solomon Islands, Tonga and Vanuatu, causing significant loss of life and damage to crops and buildings. In one instance, 27 lives were lost from an overcrowded interisland vessel leaving Honiara due to the pandemic (see https://apnews.com/article/f15a56f7b85f79c9f22fc28d055c78ec). Cyclone Harold caused damage worth millions of dollars to port infrastructure and jetties, and pandemic-related restrictions put additional pressure on responses, with relief goods and teams from abroad having to comply with quarantine requirements; multiple states of emergency impacting international responses; and pandemic-related restrictions on interisland shipping limiting the reshipment of emergency relief to remoter islands and communities.

The coronavirus disease: Impact on shipping, food, fishing and tourism

In the period January–April 2020, the impact on shipping was mixed. Most small island developing States in the Pacific did not have processes or policies in place to deal with a global pandemic. Some countries instituted a total ban on the arrival of ships or certain types of ships, in particular cruise liners. Other countries imposed varying periods of quarantine and still others allowed access to ships only if they had not come from specific countries or ports and had been at sea for varying periods, of 5 to 28 days. This resulted in blank sailings, reductions in cargo throughput, ships being diverted from some countries and trans-shipment mainly through Fiji. The World Food Programme activated a COVID-19 pandemic response team to collect data on the impact on shipping and to

share information with stakeholders among small island developing States in the Pacific, in line with the recommendations of the International Chamber of Shipping, ILO, IMO and others. The Global Logistics Cluster, for which the World Food Programme is the lead agency, provides a weekly update on the international shipping situation in the Pacific, identifying national quarantine requirements, ship schedules and sources of information for advice.[22] Government plans and systems for dealing with the pandemic were put in place and teams of government officials were trained and briefed. Shipping issues were no longer predominantly due to quarantine restrictions, but due to the significant reductions in demand as the international tourism industry slowed down and to the lack of goods in key resupply hubs such as Hawaii.

When the first case of COVID-19 was recorded in Lautoka, Fiji, the international port was closed, as of March 2020, and all ships were diverted to Suva or elsewhere. There has been a significant drop in throughput at international ports in small island developing States in the Pacific and there have been a few instances of food shortages. For example, in June, certain islands in Kiribati began to experience shortages of foodstuffs, as ships had not called there since March 2020 (see https://logcluster.org/document/pacific-shipping-operations-update-20-may-2020). As demand for cargo declined, the shipping industry applied measures such as, among others, blank sailings, reduced frequencies of services and alterations to scheduled routes. For example, sailings of the Pacific Direct Line New Zealand feeder service to Fiji were reduced from four to three per month, Mariana Express Lines removed Bairiki Tarawa from its Majuro South Pacific Service schedule until end-2020 and there are blank sailings across the region (see https://logcluster.org/document/pacific-shipping-operations-update-25-june-2020). Domestic interisland shipping was initially confined to ports, with interisland travel not allowed; later, commercial interisland vessels began to be allowed to operate, in stages, beginning with cargo only, then with limited numbers of passengers. The Government of the Cook Islands subsidized interisland shipping to the northern islands to ensure that essential cargo was delivered. Other States, such as the Marshall Islands, did not experience an impact on interisland shipping. As at September 2020, ships from Samoa to Tokelau – which does not have an airport and can only be reached by ship – still do not permit passengers.

The economic impact of the pandemic has also included high levels of unemployment in tourism-dependent economies such as Fiji, Vanuatu and the Cook Islands. Governments initiated plans for dealing with the pandemic and many citizens left urban centres and returned to villages to farm. Import and export volumes dropped, but community resilience was seen in self-sufficiency with regard to food and in the increased use of barter systems that helped to reduce the demand for imported goods. Some countries have experienced shortages in fresh food, while others have surpluses due to a drop in demand from the tourism industry and increased use of local gardens.[23] There are thus opportunities for regional trade between States that are free of COVID-19, which are not fully being explored, in part due to the lack of appropriate shipping services.

There has also been a major impact on seafarers, with crew from small island developing States in the Pacific serving on international ships, in particular cruise liners, being stranded abroad. The fishing fleet has been much less affected, with foreign flagged vessels continuing to fish in the region and calling at ports for trans-shipment and resupply, although restrictions are beginning to affect the sector. For example, Samoa restricts the docking of fishing vessels to two per day and crew are not allowed to disembark, while the date since the last port and crew change must not be less than 28 days previously, and compliance with other requirements related to quarantine and notification are also in place. Various surcharges and increases to shipping costs have been put in place by carriers, which have increased the costs of international shipping to the customer, despite significantly lower fuel prices (see table 4.1).

As at September 2020, quarantine restrictions were beginning to be relaxed. For example, in the Marshall Islands, crew with no record of disembarkation and vessels that regularly serviced small island developing States in the Pacific were exempt from the 14-day quarantine period. However, crew changes were still not permitted. Schedules were being altered to reduce quarantine periods in ports, in particular for shorter voyages, for example between Papua New Guinea and Solomon Islands.

[22] See https://logcluster.org/search?f%5B0%5D=field_raw_op_id%3A33587&f%5B1%5D=field_document_type%3A156&f%5B2%5D=field_logistical_category%3A16.

[23] See https://www.fijitimes.com/lautoka-market-sales-plummet/ and https://pacificfarmers.com/resource/pacific-farmers-have-their-say-survey-report/.

Table 4.1 Examples of surcharges and shipping costs		
Shipping line	**Additional charges**	**Application**
Neptune Pacific Line	$349/TEU, $25/revenue (break bulk)	Temporary quarantine surcharge for Pacific ports
	$100/TEU	Freight cost increase on shipments from Australia and New Zealand to Fiji, from 3 and 5 July 2020, respectively
Pacific Direct Line	$100/TEU	Rate restoration charge on shipments from Asia to Pacific island ports, from 15 July 2020
China Navigation Company	$150 (20-foot full container load), $300 (40-foot full container load) and $8.50/ revenue ton (break bulk)	Rate restoration charge on shipments to Fiji
	$163–285 (20-foot full container load), $326–570 (40-foot full container load) and $10–16.75/m3 (break bulk)	Quarantine surcharge applied to vessels calling at Honiara

Source: Global Logistics Cluster data.

Conclusion and way forward

The pandemic may have had a less obvious impact on small island developing States in the Pacific. However, the impact may be longer lasting and more critical. The pandemic was a new setback for small island developing States in the Pacific already experiencing climate change-related and extreme weather events, such as severe tropical Cyclone Harold. Building the resilience of small island developing States, including with regard to maritime transport chains, in preparing for, responding to and recovering from significant multi-hazard threats such as pandemics and climate change-related events is therefore critical.

As small island developing States in the Pacific are among the most vulnerable with regard to the impact of climate change, achieving reductions in emissions from international shipping, in line with efforts to limit the global temperature increase to 1.5°C above pre-industrial levels, is essential to the survival of these States in the next few decades and they cannot afford any delay. In 2018, IMO adopted an initial strategy on the reduction of total annual greenhouse gas emissions by at least 50 per cent by 2050 compared with 2008 while, at the same time, pursuing efforts towards phasing them out entirely (see http://www.imo.org/en/MediaCentre/PressBriefings/Pages/06GHGinitialstrategy.aspx). The current delay in the adoption of the short-term reduction measures in the strategy will in turn defer debates on the medium-term measures, such as market-based measures and, in particular, a carbon tax, which are key if international shipping is to deliver on the vision of decarbonization as soon as possible. There may also be a delay in the review of the initial targets, agreed prior to the release of the special report by the United Nations Intergovernmental Panel on Climate Change in 2018. More recent data demonstrates that significantly greater emissions reduction levels are required in all sectors if limiting the global temperature increase to 1.5°C is to remain a viable option (see Bullock et al., 2020). The fourth IMO greenhouse gas study was submitted to the Marine Environment Protection Committee in July 2020 and shows that emissions from shipping increased by 9.6 per cent in 2012–2018, with methane emissions increasing by 151 per cent (IMO, 2020). Shipping is not yet on the pathway needed to achieve limiting the global temperature increase to 1.5°C; in fact, the trend is in the opposite direction, with a projected 50 per cent increase in emissions by 2050 (see https://www.cedelft.eu/en/publications/2488/fourth-imo-greenhouse-gas-study). As economic recovery and stimulus packages are being put in place worldwide, the inclusion measures related to the decarbonization of shipping is essential if shipping is to meet the emissions reductions targets in the initial strategy.

The global investment opportunity and initiatives in greener shipping, both nationally and internationally, are available now, and the small island developing States in the Pacific cannot afford to be left behind. The pandemic has demonstrated their resilience, but also their dependence on shipping. In this regard, for example, the Pacific Blue Shipping Partnership is a country-driven initiative for large-scale blended finance investments, to catalyse a multi-country transition to sustainable, resilient and low-carbon shipping, including in appropriate low-carbon domestic and interregional shipping driven by small island developing States in the Pacific (see: www.mcst-rmiusp.org/index.php/projects/current-projects/pacific-blue-shipping-partnership).

C. EXPERIENCE OF AN AUTHORITY COORDINATING A TRANSIT AND TRANSPORT CORRIDOR: NORTHERN CORRIDOR TRANSIT AND TRANSPORT COORDINATION AUTHORITY, EAST AFRICA

Importance of maritime transport for regional and international trade

The importance of maritime transport and the role of international shipping cannot be underestimated in current global economic and market conditions, with transport by sea becoming ever more prominent. Maritime shipping connects suppliers and producers, buyers and sellers. It is therefore one of the most important transport activities for the northern corridor and the continent of Africa as a whole. Current issues related to the status of regional maritime shipping should therefore be discussed in relation to the rest of the world, and factors crucial in sustaining the industry should be analysed.

Port of Mombasa: Gateway to regional trade

Ports serve as important transportation hubs that facilitate the movement of goods to regional markets, businesses and, in particular, landlocked countries. The port of Mombasa, for example, connects goods to consumers through the northern corridor, which includes road networks, railways, inland waterways and pipelines. The port is a gateway to East Africa and Central Africa and is one of the busiest and largest ports in East Africa. It provides direct connectivity to over 80 ports worldwide and is linked to Burundi, the Democratic Republic of the Congo, Ethiopia, Rwanda, Somalia, South Sudan, Uganda and the United Republic of Tanzania. The port comprises Kilindini Harbour, Port Reitz, Old Port, Port Tudor and the whole of the tidal waters encircling Mombasa Island and has a capacity of 2.65 million TEUs (Kenya Port Authority Strategic Plan 2018-2022). Kilindini Harbour is a natural deep-water inlet with a depth of 45–55 meters at its deepest; the controlling depth is the outer channel, with a dredged depth of 17.5 meters.

The coronavirus disease: Impact on port and northern corridor performance

The COVID-19 pandemic has had profound effects on transport and the entire logistics sector. The pandemic, a situation that was sudden and unanticipated, exposed the vulnerability of trade facilitation in the northern corridor region. Key challenges in facilitating cross-border trade included a lack of preparation and a lack of transboundary disaster management strategies. The abrupt nature of the pandemic coupled with the absence of tailored strategies affected, and to some extent continue to affect, the performance of the port of Mombasa and the northern corridor.

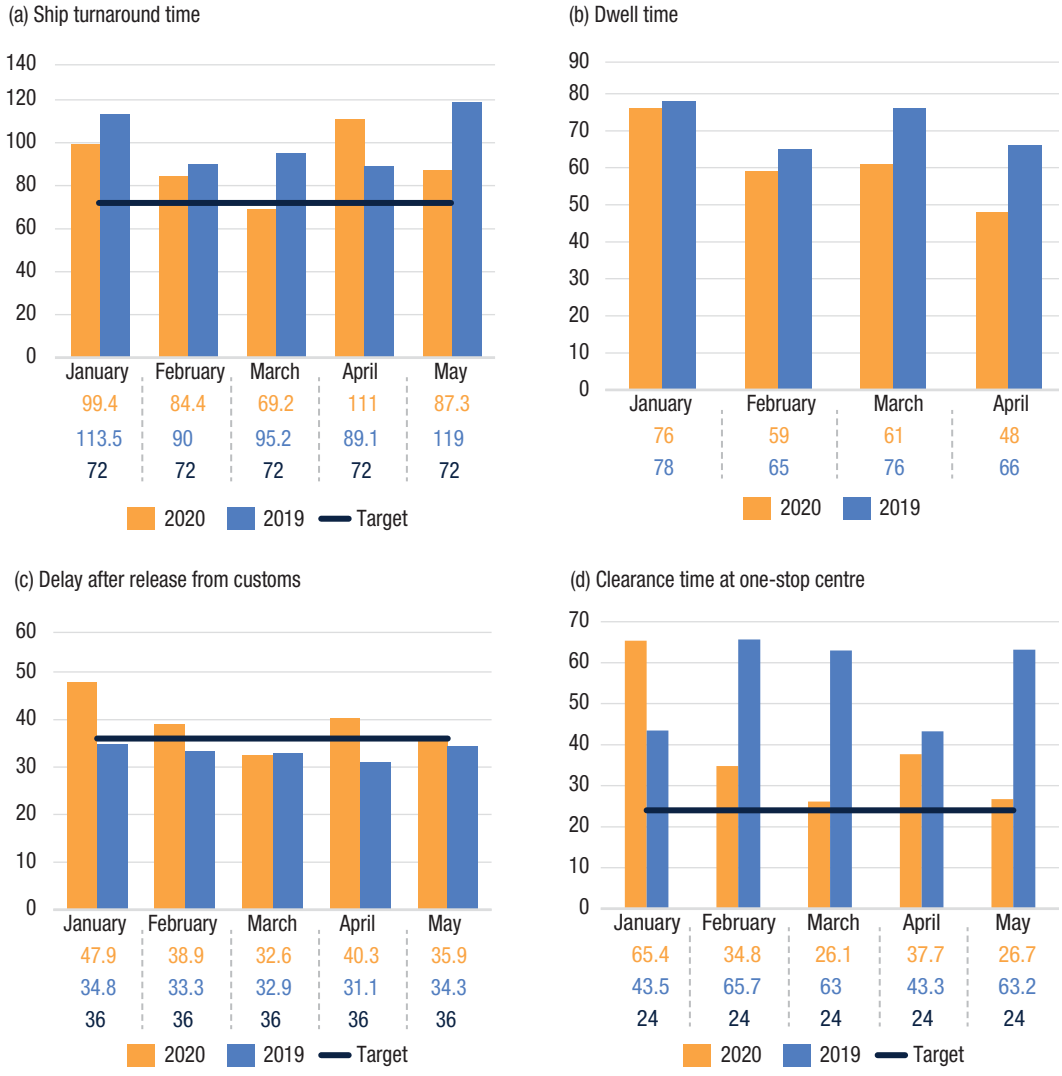
Declines were noted during the pandemic with regard to performance indicators for the northern corridor, with border crossing time affected the most. By May 2020, queues of trucks awaiting clearance at common border crossing points were reported to have stretched to over 50 kilometres (see http://www.ttcanc.org/documents.php). Congestion was also experienced at various crossing points due to some of the measures put in place for testing drivers for the virus. For example, transit time between two crossing points at a distance of 948 kilometres increased from an average of 3 days to 8 days. Such disruptions led to delays, in particular in the return of empty containers to the port of Mombasa, and the delays often led to retention charges set by shipping lines, posing a burden on the cost of doing business.

A number of measures have been put in place at the port of Mombasa to help curb the spread of the virus, including, among others, fumigation of key equipment, operational areas, offices and workshops; temperature checks of all individuals accessing the port; and sanitization and hand washing at gates and entrances to all buildings. The port health authority ensures that all necessary protocols are observed by ships scheduled to call at the Port. Such measures cannot be implemented without affecting normal port operations. The new interventions, coupled with the blank sailings and vessel cancellations, explain in part the changes with regard to performance indicators for both the port and the northern corridor.

The directives executed by various Governments to allow people to remain at home or telecommute also affected performances at both the port and along the northern corridor by

disrupting working systems. Many adjustments had to be made and, as coping mechanisms were instituted to mitigate negative impacts, improvements began to be made in delivering services at both the port and along the northern corridor. The impact of the pandemic on transport and trade patterns along the northern corridor was apparent, as fewer cargo trucks were in operation. In addition, there were shortages of staff to operate equipment at the Port, which caused delays in the transfer of cargo. This may help explain variations in ship turnaround time and other performance indicators, as noted by the Northern Corridor Transport Observatory (see http://www.kandalakaskazini.or.ke). Some positive trends during the pandemic have been noted with regard to indicators such as vessel waiting time before berth, ship turnaround time and port dwell time. This may be attributed to decreased volumes and the reduced number of vessels calling at the Port, compared with in 2019. Time taken to pick up cargo after release from customs has increased in 2020, compared with in 2019, mainly due to the length of time taken by trucks to return from their destinations due to pandemic-related measures. The increase in transit time in January–May 2020 with regard to various destinations may also be attributed to such measures, implemented by various member States of the Northern Corridor Transit and Transport Coordination Authority (see figure 4.1).

Figure 4.1 Port of Mombasa: Performance indicators, 2020
(Hours)



Source: UNCTAD calculations, based on data from the Northern Corridor Transport Observatory, available at http://top.ttcanc.org/downloads.php.

Northern Corridor Transit and Transport Coordination Authority and East African Community: Current interventions

In an attempt to address the numerous challenges affecting transport and trade logistics due to the pandemic, the secretariat of the Northern Corridor Transit and Transport Coordination Authority initiated an online platform for key stakeholders to meet and discuss issues related to the corridor and trade facilitation. Meetings bring together stakeholders from all member States of the Authority, with the aim of sharing experiences, challenges and opportunities. The platform also provides real-time updates on events in each member State, in particular at transit or transport nodes along the corridor, including ports, weighbridges, border crossing points, inland container depots and truck transit parking yards.

The East African Community is putting in place a surveillance tracker, to contribute towards dealing with the pandemic (see http://www.ttcanc.org/news.php?newsid=117). The initiative, currently in pilot testing, will provide a platform for the exchange of information in real time about tests taken by drivers and crew and about the transit movements of drivers and trucks. It will also support the tracking and tracing of drivers and their contacts.

Advocacy is being made for mutual recognition of COVID-19 testing certificates between member States of the East African Community and efforts are being made to establish testing centres at all points of origin of cargo and in other locations along the northern corridor.

Conclusion and way forward

Member States of the Northern Corridor Transit and Transport Coordination Authority have ratified various protocols and strategic responses, at both the national and international levels, aimed at enhancing safe trade in the region. However, there is a need for a detailed assessment of regional vulnerability, so that national and transboundary disaster mitigation measures may be put in place. Member States therefore need to adopt a harmonized disaster response mechanism to safeguard the transport corridor; share intelligence from early-warning systems; conduct capacity-building for personnel involved in the transport logistics chain; and embed disaster responses into national and regional policies that affect trade, transport and other related infrastructure.