

A [study](#) from the World Bank analyses the maritime capacity in the East and Southern Africa (ESA) Region, concluding that although freight volumes have been growing at 9 percent per year through some of the key ports (with transit consignments to land-locked countries growing at 16.5 percent per year until relatively recently), many of such ports are still affected with high ship waiting times, high berth occupancies, and congestion on both the land and maritime side, all factors contributing to increased transport costs.

The development of any port as a regional hub port in ESA faces several challenges: first, many of such ports serve only one transport corridor, so the possibility to attract traffic flows from other corridors is difficult; second, the movement toward a hub-and-spoke system (a system where containerized cargo is delivered first to a primary hub port and then transported to its final destination, whether by sea, rail, road or inland waterways) is slightly slower in ESA than in West Africa; third, many ports simply lack the necessary attributes to develop into a hub; and finally, some investment appears to be diverted to less-viable port facilities.

The study highlights the need to improve the operating efficiency in all the ESA ports, considered that overall container demand in the fifteen main ports of this Region is predicted to begin exceeding total current capacity by between 2025 and 2030. The analysis shows that the average technical efficiency of container terminal operations in the 10 analysed ports (which include the Mombasa port) falls in a range of 44–53 percent for the 2000–10 data set in the defined sample of matching ports. In other words, the ESA ports are less than half as productive as the most efficient ports in the matched data set of similar ports across the world, in terms of efficiency of container-handling operations.

Durban, Mombasa, Dar es Salaam, and Port Sudan are the most efficient ports in terms of container handling; Beira, East London, and Nacala are the least efficient. Globally, the port of Mombasa is the most technically efficient port, ranking as the 43rd most efficient container port in the defined sample of matched ports.

The analysis also reveals that the main factors contributing to the efficiency of ports in the ESA Region, in particular for what concerns container handling, are:

- (1) the presence of specialist international terminal operator(s);
- (2) the existence of an effective rail connection to the port;
- (3) the existence of transshipment traffic;
- (4) a higher score on the Connectivity Index; and

(5) reduced vessel time at berth.

The report recommends that ESA ports, in order to become globally competitive, should focus on the improvement of all the above five factors.

There is also a need for greater integration in the supply chain. The global port industry has for some time been impacted by vertical and horizontal integration among producers (port operators and port authorities), terminal operators, shipping lines, and land transport.

Within the maritime industry, a key example of horizontal integration is in container shipping alliances, where shipping lines pool their respective fleets and move containers on one another's behalf, to extend their service offerings and geographic coverage in a manner analogous to code-sharing by the airlines. In the port subsector, the most important trend is the development of global specialist terminal operators that operate container terminals internationally, with enhanced cooperation between the respective ports. In some contexts, this can give rise to concerns over anticompetitive practices.

An example of vertical integration by public-sector entities in the port sector concerns the role of the port authority (PA) or terminal operator (TO) as cluster manager. In this role, PAs or TOs are involved in the development or operation of rail and road hinterland links via logistics platforms, to offer efficient and reliable transport services to shippers and ensure sufficient flows of goods through the port.

In the ESA port sector, vertical integration is visible, but to a lesser extent than it is in the more economically developed countries. Also, vertical integration in some countries in the project region is driven by the public sector authorities themselves, while in developed countries these trends are usually driven by the private sector. The degree of vertical integration is strongest in the ports of Djibouti, Mombasa, Toamasina, Port Louis, Durban, and the three Mozambican ports.

Improving landside access is also crucial: one challenge faced by all the ESA ports, almost without exception, is the need to improve landside access. In the case of many, the issue of landside access is more important than improving maritime access and capacity. Main constraints are 3:

- Limited or no intermodality (road transport moves a majority of cargo to and from the

region's ports and a significant part of the ESA railway network is in a poor state, with most lines that are single-track and not electrified. Moreover, despite substantial investments in road infrastructure in recent years, limitations in management, poor enforcement of axle-load restrictions, inadequate maintenance practices, and insufficient resources continue to lead to premature deterioration especially of roads connecting to ports, with increased transport costs.);

- Limitation in the quality of the road infrastructure, and delays at the border-crossing points; and
- Congestion at the port-city interface.

Concerning the border crossing points, these ones are indicated as significant causes of delays and additional costs for moving cargo. An analysis of the road corridor on the Southern North-South Corridor revealed (for the movement of a consignment between Durban and Lusaka), that border posts were responsible for 15 percent of total monetary costs (1 percent at Beitbridge, 1 percent at Chirundu, and 13 percent at Kasumbalesa ) and 37 percent of total travel time (comprising 13 percent at Beitbridge , 11 percent at Chirundu, and 13 percent at Kasumbalesa).

Lastly, the final major challenge for many of the ESA ports in terms of land access is what is known as the port-city interface. The evolution and development of ports create a number of benefits for their host cities and countries. Ports and their related services and industries create substantial employment for local workers. As port traffic has grown, port-related labor demand has increased, usually unskilled and from the immediate vicinity of the port. While increased containerization and mechanization in a port has diminished the number of unskilled cargo handlers, generally ports remain significant local employers at the heart of an economic cluster.

Despite the benefits, the negative impacts of ports on cities—both direct and indirect—are substantial. These externalities range from environmental issues (such as air emissions, water pollution, or soil pollution) to congestion issues and safety risks. Port-induced city congestion is the most notable negative externality in and around the ESA ports. Many cities grew around the existing port, with roads running through the city centres and suburbs, and few have successfully addressed these concerns in a substantive manner.