

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT  
Geneva

**REVIEW OF MARITIME  
TRANSPORT  
2009**

*Report by the UNCTAD secretariat*

Chapter 7

**UNITED NATIONS  
New York and Geneva, 2009**

## Chapter 7

# REVIEW OF REGIONAL DEVELOPMENTS: AFRICA

*Every year, the Review of Maritime Transport gives attention to transport developments in a particular region. The 2008 edition of the Review of Maritime Transport focused on developments in Latin America and the Caribbean. The focus in 2009 is on developments in Africa since UNCTAD last reported on the region in 2006. Despite the global financial crisis, the region still experienced strong growth in 2008 (5.1 per cent), the top performers being the resource-rich countries. Africa's share of world trade remains at 2.7 per cent. Global port operating companies have sought to expand along the main international African shipping routes, however in some countries, physical, legal, social and economic constraints have prevented them from doing so effectively. A high number of cross-border documents, poor inland connections, security issues, excessive transaction costs and delays are common. This has serious consequences in the case of landlocked countries, whose dependence on transit countries complicates the export and import processes, with costs of imported freight estimated to be three to five times higher than the world average. In recent years, however, there has been a growing recognition of the need to improve port operations and inland connectivity in the region. Even when new investments are being considered in Africa, these could be affected by the global financial crisis.*

### A. ECONOMIC BACKGROUND

Despite the global financial crisis, Africa experienced strong GDP growth in 2008, estimated at 5.1 per cent (6 per cent in 2007). Growth was mainly driven by high commodity demand and prices, especially from oil, with oil-exporting countries contributing more than half (53.3 per cent) of the continent's total GDP.<sup>1</sup> Increased domestic investment, debt write-offs, increased non-fuel exports, and political and social stability also contributed to the continent's economic performance.

The GDP growth rate in 2008 for oil-exporting countries was 5.9 per cent, with oil-importing countries experiencing a slower average growth rate

of 4.4 per cent (see fig. 26). Higher energy and food import costs, coupled with lower demand for exports, explain a decrease in the overall revenue of oil-importing countries. For the last three years, these countries have not been able to reach the 7 per cent growth rate that is the minimum growth rate required for achieving the United Nations Millennium Development Goals.<sup>2</sup>

---

**Overall, GDP growth rates were lower in 2008 than in 2007. However, for two out of five subregions of the continent, namely West Africa and Central Africa, growth rates increased from 5.2 % and 3.9 % respectively in 2007 to 5.4 % and 4.9 % in 2008. In contrast, GDP growth rates for North, East and Southern Africa decreased.**

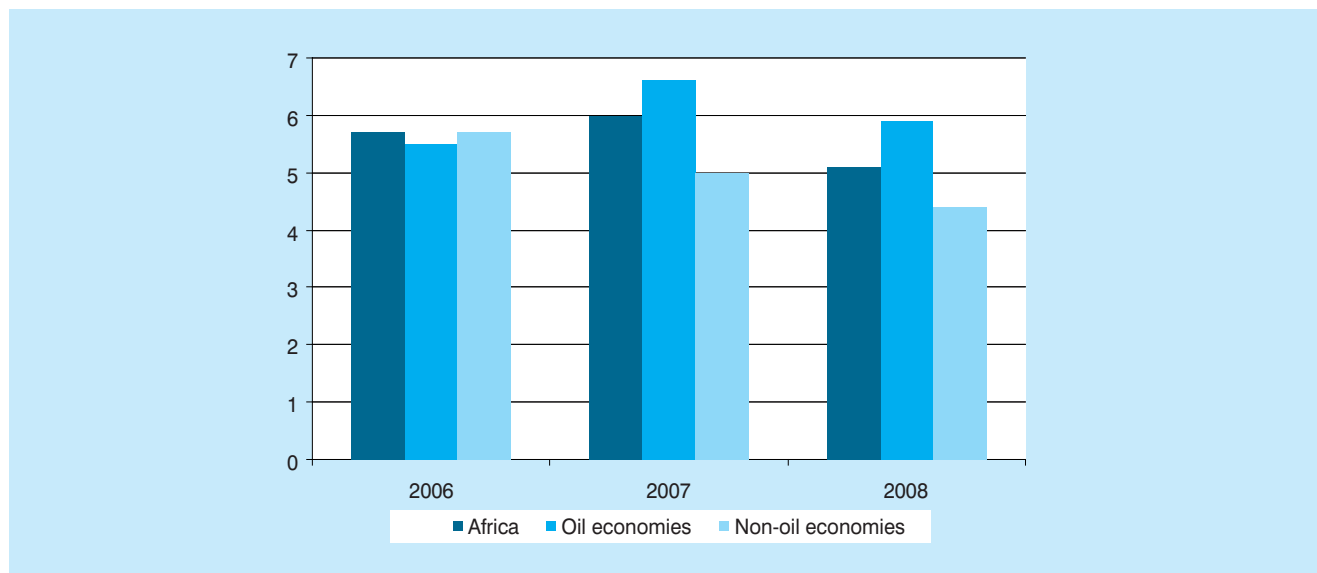
---

Overall, GDP growth rates were lower in 2008 than in 2007. However, for two out of five subregions of the continent, namely West Africa and Central Africa, growth rates increased from 5.2 per cent and 3.9 per cent respectively in 2007, to 5.4 per cent and 4.9 per cent in 2008. In contrast, GDP growth rates for North, East and Southern Africa

Figure 26

## Growth in Africa, oil vs. non-oil economies, 2006–2008

(in percentages)



Source: UNCTAD secretariat using figures from the United Nations Department of Economic and Social Affairs. Africa Database. United Nations, New York, November 2008.

decreased. Figure 27 depicts the economic performance of all subregions.

The best-performing African countries in terms of GDP growth (see fig. 28) were the resource-rich exporting countries. Almost all the higher performers – with the exception of Egypt – have relatively undiversified economies. The least-performing economies included Chad, the Comoros, Eritrea, Somalia and Zimbabwe, which have remained in the list of least-performing economies for more than three years. A poor business environment and a lack of political stability have been among the main reasons for their weak economic performance.

In 2007, the total value of trade in goods in Africa was \$782 billion, which places the continent's share of global trade at 2.7 per cent. Exports increased by 15.6 per cent in 2006–2007, down from the average of 20 per cent registered in the period 2002–2005 (fig. 29).<sup>3</sup>

Africa's main trading partners are the European Union (accounting for approximately 40 per cent of exports) and North America (25 per cent of exports). The leading African exporting countries are Algeria, Nigeria and South Africa. Together, these three countries accounted for an export volume of \$195.5 billion or 1.9 per cent of world merchandise trade in 2007.<sup>4</sup>

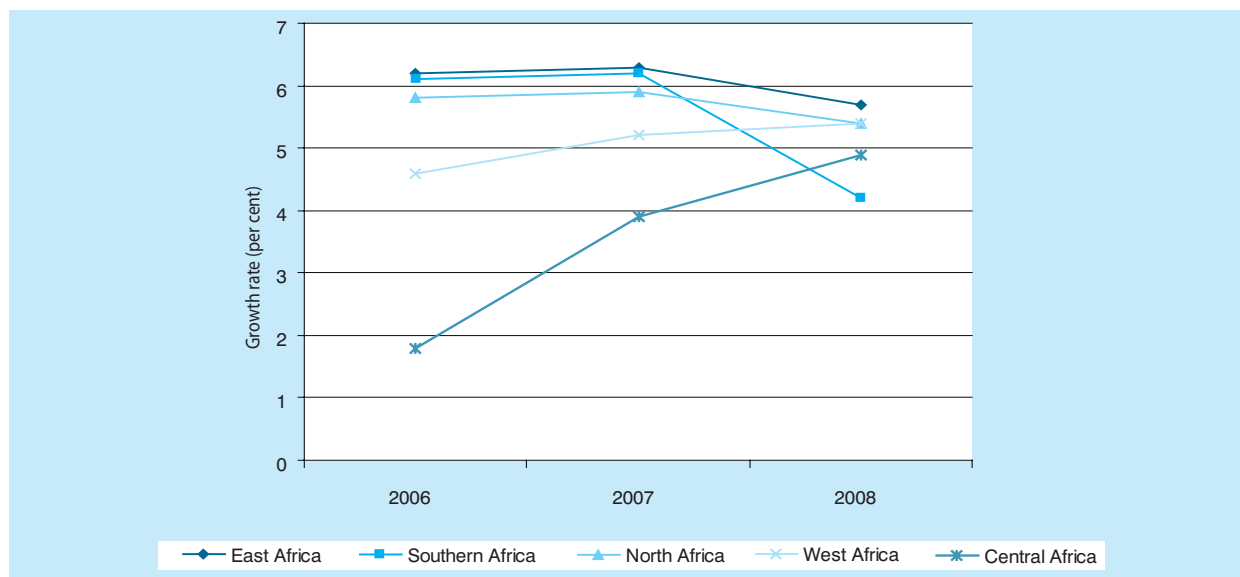
The major importing countries in the region are Algeria, Egypt, Morocco, Nigeria, South Africa and Tunisia. In total, they accounted for an import volume in merchandise trade of \$225.9 billion or 2.3 per cent of world merchandise trade in 2007.<sup>5</sup>

The trade structure of African countries has remained unchanged over the last few years, with most countries being primary product exporters. Some 79 per cent of total exports from African economies in the period 2003–2006 were primary commodity exports, including oil. Cocoa accounted for 90 per cent of the exports of Sao Tome and Principe, iron ore for 64 per cent of Mauritania's exports, and cotton for 64 per cent of Benin's exports, with only a few countries drawing a significant part of their export revenue from manufactured products. Hence, the African continent is highly exposed to demand and price volatility in commodity markets.

The few countries endowed with fuel resources accounted for as much as 61.3 per cent of the continent's total merchandise exports in 2007, while most African countries are non-fuel primary commodity exporters. Sub-Saharan Africa is the largest exporter of fuels among developing regions. From 2000 to 2007, the export of fuels from Africa grew by 19 per cent annually. The major fuel-exporting countries are Nigeria (\$62.5 billion), Algeria (\$59.1 billion) and the

Figure 27

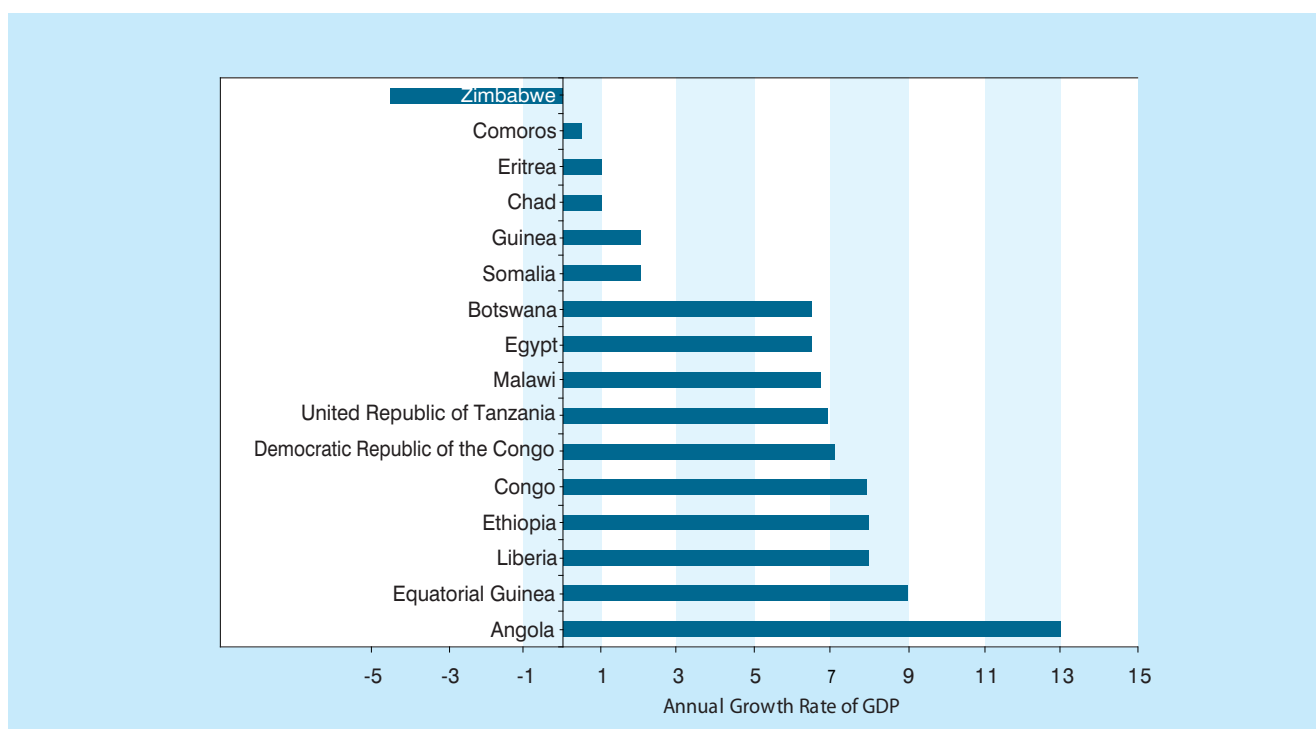
**Growth of GDP by African subregions 2006–2008**  
(percentages)



Source: UNCTAD secretariat using figures from the United Nations Department of Economic and Social Affairs. Africa Database. United Nations, New York, November 2008.

Figure 28

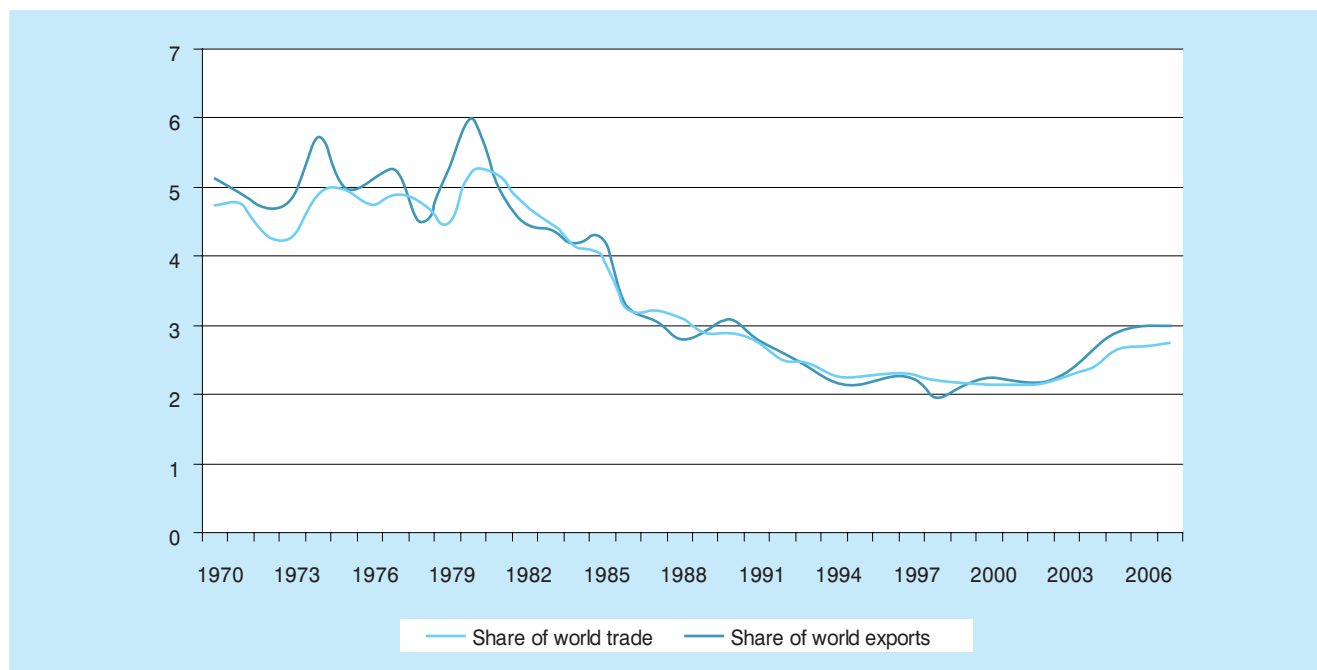
**Top and bottom performers in Africa**  
(annual growth by percentage)



Source: UNCTAD secretariat using figures from the United Nations Department of Economic and Social Affairs. Africa Database. United Nations, New York, November 2008.

Figure 29

**Africa's share of world trade, 1970–2007**  
(percentages)



Source: UNCTAD secretariat based on the World Economic Forum. *Africa Competitiveness Report 2009*.

Libyan Arab Jamahiriya (\$44.1 billion). Since 1990, all three countries have increased their fuel exports by at least 400 per cent.<sup>6</sup>

The export of manufactured products in 2007 amounted to \$79.8 billion; it was concentrated on Europe, which accounted for approximately 50 per cent of these exports, while Asia and North America accounted for 10 per cent and 9 per cent of exports respectively. The share of manufactured products accounted for 18.8 per cent of total merchandise exports and for 68 per cent of total merchandise imports. The export share of manufactured products for Africa is the lowest compared to any other region in the world. Imports into African countries from the European Union reached \$108.4 billion, outperforming the United States with \$15.4 billion and China with \$34.4 billion. Remarkably, between 2000 and 2007, the share of China's exports of manufactured products to Africa increased by 35 per cent.<sup>7</sup> This reflected the increasing number of bilateral agreements and partnerships between African countries and China.

Africa's share in world imports of agricultural products was 14 per cent, making it the number one importing

region.<sup>8</sup> Africa's share in agricultural exports was only 8.1 per cent, and 10.4 per cent in primary products exported.<sup>9</sup> The total value exported in agricultural products amounted to \$34.3 billion in 2007.

The largest markets for African agricultural products were Europe (\$16.5 billion), Asia (\$5.7 billion), and the Middle East and North America (\$1.7 billion and \$1.6 billion). The largest exporters of agricultural products, measured by total value, were South Africa with \$5.6 billion, Côte d'Ivoire with \$3.9 billion, and Morocco with \$2.8 billion. Many African economies increased their agricultural exports from 1990 to 2007 significantly. For instance, Kenya, Ethiopia and Tunisia's exports performed extremely well, with growth rates of 299 per cent, 297 per cent and 262 per cent respectively, whereas countries such as Cameroon and Côte d'Ivoire increased their exports by 58 per cent and 64 per cent respectively.<sup>10</sup>

The largest food-importing countries were Nigeria (\$6.6 billion), Algeria (\$5.5 billion) and Egypt (\$5.2 billion), whereas countries such as Morocco, Kenya and South Africa experienced the fastest growth rates between 1990 and 2007 of 464 per cent, 397 per

cent and 381 per cent respectively. This illustrates a trend over the past two decades whereby African economies have been showing high growth in their levels of food imports. The largest African food exporter in 2007 was South Africa, with an export value of \$4.2 billion. Other large food exporters were Côte d'Ivoire with \$3.2 billion, and Morocco with \$2.6 billion. Smaller economies such as Malawi exported food to the value of \$584 million.<sup>11</sup>

In 2007, intra-African trade remained low despite strong GDP growth rates. Intra-regional trade, therefore, plays only a minor role in Africa's economy. For example, total intraregional merchandise exports in 2007 were around 10 per cent of the total export volume – the smallest share of intraregional trade of all continents.<sup>12</sup> West Africa's intraregional trade registered the highest average growth rates during the 10-year period from 1996 to 2006 (see table 43).

Although estimates indicate that Africa is more vulnerable to commodity prices than to global financial markets,<sup>13</sup> the crisis may still impact economic activity and foreign trade further.

The significant dependence by African countries on foreign trade makes maritime transport – its quality,

efficiency and cost-effectiveness – a crucial factor in the continent's competitiveness. Hence the importance of looking at the latest developments and the performance of sea ports in Africa.

## B. AFRICAN PORTS: SOME IMPROVEMENTS AND MORE EXPECTED

Most of the world's major ports are located close to the main international shipping routes that traverse the East–West axis. In Africa, the main international shipping route transits the Red Sea into the Suez Canal through the Mediterranean and out through the Strait of Gibraltar (see fig. 30). Vessels travelling along this route deliver goods mainly to and from Asia and Europe, although in recent years intraregional trade has been increasing.

Global port- or terminal-operating companies have sought to expand along the main international shipping routes. However, for a variety of reasons, Somalia, Eritrea, Sudan, the Libyan Arab Jamahiriya and Tunisia are not currently host to these global port- or terminal-operating companies. Among the reasons for this are local physical constraints (e.g. related to water depth, existing shoreside facilities or infrastructure), as well as social, political, legal and economic constraints.

**In 2007, intra-African trade remained low despite strong GDP growth rates. Intra-regional trade, therefore, plays only a minor role in Africa's economy.**

Table 43

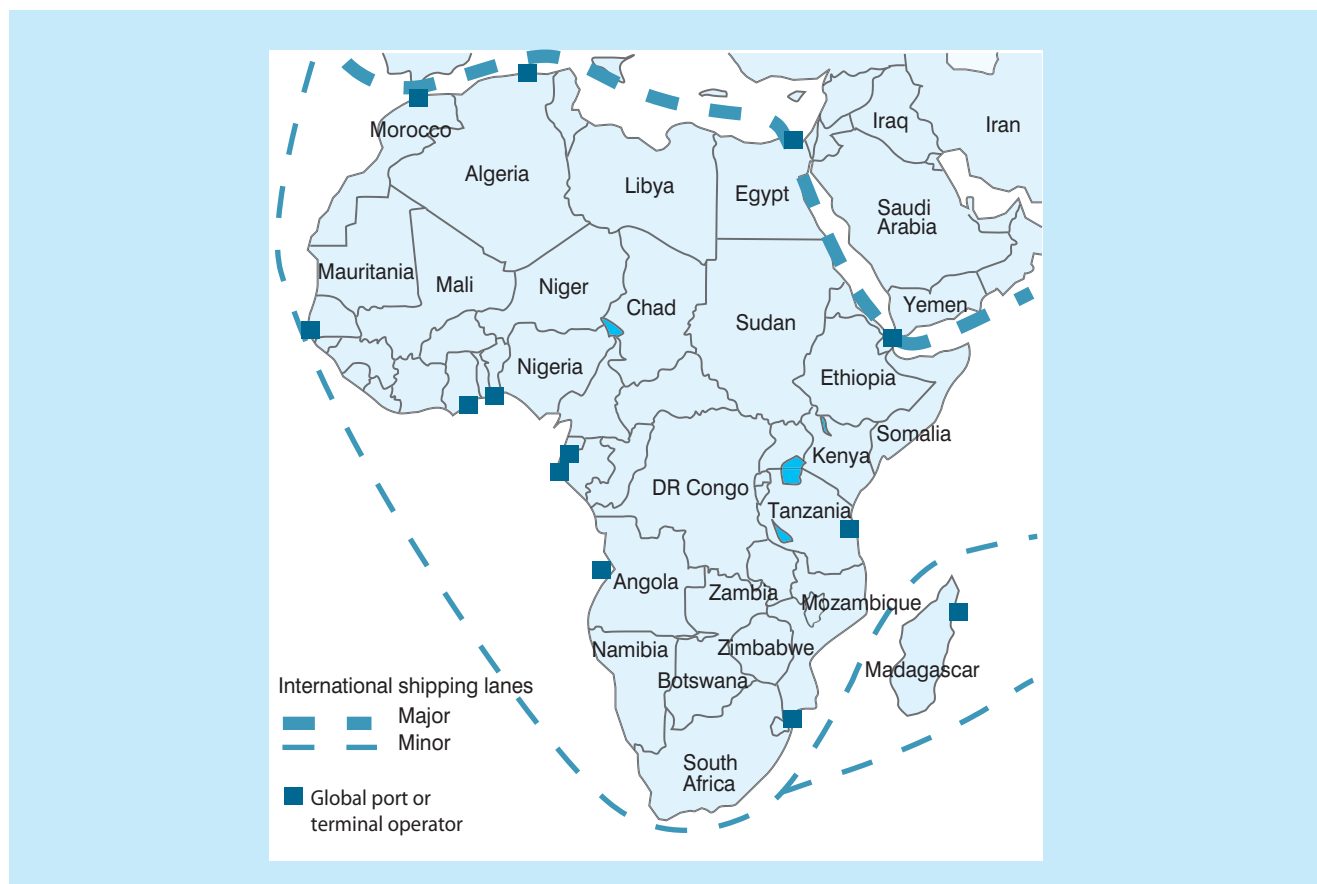
### Share of intraregional trade in total African trade (percentages)

Selected subregions	2006			1996–2006 average		
	Share of intra-group trade	Intra-group trade growth rate	Group trade growth rate	Share of intra-group trade	Intra-group trade growth rate	Group total trade growth rate
<b>Africa</b>	8.33	17.59	21.34	10.57	11.22	12.94
<b>East Africa</b>	14.33	18.85	20.62	9.11	7.52	6.99
<b>Central Africa</b>	0.53	23.59	31.74	6.93	6.18	18.24
<b>North Africa</b>	2.72	23.04	26.49	9.51	12.26	16.8
<b>Southern Africa</b>	..	..	..	..	..	6.59
<b>West Africa</b>	8.41	8.57	22.44	11.78	14.29	12.82

Source: UNCTAD secretariat.

Figure 30

## Main international shipping lanes, Africa



Source: UNCTAD secretariat.

This, in turn, has affected trade flows, as an increasing number of ships are now avoiding the Suez Canal passage and taking the longer route around the Cape of Good Hope.

As trade volumes rise, it is even more important for African ports to improve cargo-handling operations. While most African ports can handle containers, their cargo-handling operations will remain less efficient if special container cranes are not used. In some African ports, for instance, container moves of 25 per hour are common, whereas in more developed ports the rate can be double or triple (see chapter 5 for more details on port performance).<sup>14</sup>

In recent years, there has been a growing recognition of the need to improve port operations in some countries in Africa. Nigeria, for example, adopted in 2006 the familiar landlord model in its organizational structure, whereby the public

sector takes responsibility for port planning, while the private sector (through concessionaires) is responsible for marine and terminal operations, or the development of port infrastructure and equipment. The advantages of such arrangements include improvements in port efficiency, reductions in berthing time, and an increase in overall port productivity<sup>15</sup> (see table 44 below).

In Ghana, measures taken to enhance the efficiency of port operations include the installation of ship-to-shore gantry cranes, rubber-tyred gantry cranes, the construction of a container terminal, and a new off-dock container devanning area. To facilitate the clearance process, the Ghana Shippers' Council introduced a destination inspection scheme, scanners to examine containers,

and a satellite tracking system to monitor the transit of goods. Furthermore, the ports have been refurbished and cameras installed to improve security and to reduce the incidence of theft.<sup>16</sup>

**In recent years, there has been a growing recognition of the need to improve port operations in some countries in Africa.**



Table 44

## Performance indicators

*(days)*

Country name	Time to import (days)				Time to export (days)			
	2006	2007	2008	2009	2006	2007	2008	2009
Algeria	22	22	23	23	15	15	17	17
Angola	58	58	58	62	64	64	64	68
Benin	41	41	41	40	34	34	34	32
Botswana	43	43	43	42	33	33	33	31
Burkina Faso	54	54	54	54	45	45	45	45
Burundi	71	71	71	71	47	47	47	47
Cameroon	53	33	33	33	39	27	27	27
Central African Republic	66	66	66	66	57	57	57	57
Chad	102	102	102	102	78	78	78	78
Congo	62	62	62	62	50	50	50	50
Côte d'Ivoire	43	43	43	43	23	23	23	23
Democratic Rep. of the Congo	62	66	66	66	50	46	46	46
Djibouti	..	26	18	16	..	25	22	19
Egypt	29	25	18	15	27	20	15	14
Eritrea	69	69	69	60	69	59	59	50
Ethiopia	42	42	42	42	46	46	46	46
Gabon	..	22	22	22	19	19	19	20
Gambia	..	23	23	23	..	23	23	24
Ghana	55	42	29	29	47	21	19	19
Guinea	32	32	32	32	33	33	33	33
Guinea-Bissau	..	24	24	24	..	25	25	25
Kenya	62	37	37	26	45	29	29	29
Lesotho	49	49	49	49	44	44	44	44
Malawi	54	54	54	54	45	45	45	45
Mali	65	65	65	42	44	44	44	38
Mauritania	40	42	42	42	42	35	35	35
Morocco	30	30	19	18	18	18	14	14
Mozambique	38	38	38	32	27	27	27	26
Namibia	24	24	24	24	29	29	29	29
Niger	64	64	64	64	59	59	59	59
Nigeria	53	46	46	42	41	26	26	25
Rwanda	92	95	69	42	63	60	47	42
Senegal	26	26	26	18	20	20	20	14
Sierra Leone	34	34	34	34	31	31	31	29
South Africa	35	35	35	35	30	30	30	30
Sudan	83	83	54	49	56	56	39	35
Swaziland	..	33	33	33	..	21	21	21
Togo	43	29	29	29	34	24	24	24
Tunisia	29	29	22	23	18	18	17	17
Uganda	67	67	37	37	42	42	39	39
United Republic of Tanzania	51	30	30	31	30	24	24	24
Zambia	64	64	64	64	53	53	53	53
Zimbabwe	67	67	67	73	52	52	52	53
Average <sup>a</sup>	52	47	44	42	41	37	36	35

<sup>a</sup> Rounded figures.Source: World Bank. *Doing Business: Trading Across Borders*.



### C. AFRICAN SHIPPING NETWORKS AND LINER SHIPPING CONNECTIVITY IN AFRICA: A DIFFICULT PATH

Access to world markets depends largely on maritime transport connectivity. Important challenges exist for developing countries, especially for sub-Saharan liner operators, as they comprise a large number of relatively small markets, served in many cases by gateways that have lacked investment to take them beyond minimum standards of efficiency. Operations are also hampered by unnecessary paperwork and poor inland connections, and sometimes also by political and economic instability.

In general, regional trends have followed the worldwide pattern, whereby a few global carriers have penetrated markets and dominate them. In fact, African trade to and from Europe and North America is dominated by only a small number of lines, including the A.P. Moller–Maersk Group, the Mediterranean Shipping Company (MSC), Safmarine, Mitsui O.S.K. Lines (MOL), Deutsche Afrika-Linien (DAL), Compagnie Maritime d’Affrètement–Compagnie Générale Maritime (CMA-CGM), and these are all headquartered in Europe. The Far East and South-East Asia route is served by many liner carriers, including major operators from both Europe and Asia.

South Africa remains the largest market in volume terms for containerized cargo, with 3.9 million TEUs serviced in 2008. Durban, the largest port in the region, with growth rates of currently 6.6 per cent, had a container throughput of 2.6 million TEUs in 2008. The other major ports in the country, Cape Town and Port Elizabeth, recorded only marginal growth rates. Most of the cargo volume bound for Europe, North America, Asia and the Middle East is carried by the two largest shipping lines: the A.P. Moller–Maersk Group with its subsidiaries, and MSC. South Africa has six ports that attract 30 companies providing regular services. It benefits from its geographical position, as it not only caters for regional trade, but also for some shipping services that connect South America with Asia. However, the ships on these routes tend to be small – the largest ship calling at a South African port in January 2009 had a

6,742-TEU carrying capacity. South Africa is the country on the African continent that has the largest number of intraregional maritime connections, with international carriers providing direct services to 29 other African countries.

Other countries in Southern Africa have seen improvements in their connectivity, notably Mauritius, providing transshipment services, and Namibia, where investments in the port of Walvis Bay aim at attracting cargo from a wider hinterland, including Botswana and Zambia. The small island economies of the Comoros and Seychelles have seen their connectivity worsen in recent years.

Major West African ports (in Cameroon, Côte d’Ivoire, Ghana, Nigeria and Senegal) have experienced strong growth in cargo throughput in the past few years.

However, reliable data are not available. The highest growth rates have been experienced in ports of oil-exporting countries, such as Angola, Cameroon and Nigeria. West Africa is serviced largely by the A.P. Moller–Maersk Group and by CMA-CGM. CMA-CGM

has a large market share especially in French-speaking countries. It is worth noting that due to the high demand for automobiles and other vehicles, shipping lines that have ro-ro ships have been able to survive.<sup>17</sup> Most countries in West Africa have seen their shipping connectivity improve over recent years, including Côte d’Ivoire after a downturn in 2006. In particular, Senegal has significantly improved its access to shipping services since 2005, when additional companies started to introduce new services, doubling the largest vessel size between 2006 and 2007 when the Dubai-based port operator DP World won the concession to operate the existing container terminal and build a new facility in Dakar.

The smallest cargo volume in sub-Saharan Africa is found in East Africa, a region served mainly by the two major ports of Mombasa and Dar-es-Salaam. Due to the low trading volume to and from this region, with a container throughput in 2007 in Mombasa and Dar-es-Salaam of around 800,000 TEUs, no single line is devoted to servicing this region only. East African ports in Djibouti, Kenya and the United Republic of Tanzania

---

**Important challenges exist for developing countries, especially for sub-Saharan liner operators ...**

---



---

**Operations are also hampered by unnecessary paperwork and poor inland connections, and sometimes also by political and economic instability.**

---

all saw important connectivity improvements between 2006 and 2007, while Sudan has experienced a slow but steady decline over the last five years, in spite of its closeness to the Suez Canal route.

As far as Egypt is concerned, in January 2009 there were 47 international shipping companies providing regular services to Egyptian container ports; they employed 405 ships, including vessels with a carrying capacity of up to 9,580 TEUs. Egypt benefits from its geographical position, and from the Suez Canal, which forms part of the world's busiest shipping route, connecting Europe and Asia. Thus, several terminals have been developed by private sector investors, who provide services to shipping lines that redistribute cargo to other Mediterranean and African destinations. As a consequence, Egypt's traders benefit from direct shipping links to 59 trading partners – more than any other African country, and more than twice the region's average of 24 direct connections. Nine out of Egypt's 59 direct connections are to other countries in Africa, particularly in North and East Africa.

Although Morocco's ports attract only 18 companies, larger ships are employed with up to a 11,000-TEU carrying capacity. Thus, Morocco, benefiting from its geographical position, saw a surge in its shipping connectivity in 2008 and 2009, after a new specialized transshipment facility was inaugurated in Tangier. Tangier connects major East–West and North–South shipping routes, including the routes that connect Europe with South America and with West Africa. This improved connectivity ultimately benefits Moroccan importers and exporters, who have access to more destinations by direct shipping service and who may benefit from lower shipping costs resulting from the economies of scale achieved with larger vessels.

UNCTAD's Liner Shipping Connectivity Index (LSCI) aims at capturing a country's level of integration into global liner shipping networks. The five components of the index are: (a) the number of ships; (b) the container-carrying capacity of those ships; (c) the maximum vessel size; (d) the number of services; and (e) the number of companies.<sup>18</sup> Globally, China leads the LSCI ranking (with an LSCI value of 132 in 2009), followed by other Asian countries and European countries. For most African countries, the LSCI shows values that are far below the world average. The best-connected countries

in Africa are Egypt, Morocco and South Africa (see table 45 for the LSCI of African countries for the period 2004–2009).

With regard to the components of the LSCI, it is interesting to note that, globally and in Africa, the total number of ships per country, the TEU capacity deployed, and the average maximum ship size have all increased since 2004. By comparison, the number of companies providing liner services has decreased. In Egypt, for example, the number of international companies providing services to the country's ports went down from 61 in 2004 to 47 in 2009 (according to the latest available figures); in South Africa there are now 30 companies, down from a total of 38 in 2004. This trend raises concerns about the impact of the continuing process of concentration in liner shipping, especially in respect of countries with a low connectivity, where a further decline in the number of service providers may give rise to oligopolistic or monopolistic market structures. Eritrea, Seychelles and Somalia, for example, record services from only one international shipping line; Liberia is served by two providers; and Cape Verde and Sierra Leone receive three liner companies.

Africa's intraregional liner shipping connections are largely determined by the shipping lines' routes connecting African countries with Europe and Asia, and to a lesser extent with the Americas. West African ports are well connected with countries in Europe, but not with countries in East Africa or North Africa; for example, there are no direct shipping services between Côte d'Ivoire and Kenya or between Côte d'Ivoire and Algeria, whereas there are 15 shipping companies that provide regular shipping services between Côte d'Ivoire and Ghana. By the same token, 12 companies provide direct services between Mombasa in Kenya and Dar-es-Salaam in the United Republic of Tanzania, while neither of these two ports have any direct service to the western or northern seaboard of Africa. Thus, maritime trade between African countries lying on the same North–South route benefits from relatively frequent services, whereas maritime trade between opposite coasts of the African continent depends on transshipment services, mostly via Europe or South Africa.

Normally, a transshipment operation in a third-country port means higher costs and longer delivery times

---

**With regard to the components of the LSCI, ... globally and in Africa, the total number of ships per country, the TEU capacity deployed, and the average maximum ship size have all increased since 2004.**

---

Table 45

## Indicators of African countries' connectivity in liner shipping

	LSCI: World ranking		LSCI: Connectivity Index values						Percentage of direct country connections with other african countries <sup>a</sup>
	2004	2009	2004	2005	2006	2007	2008	2009	
<b>Algeria</b>	74	96	10.0	9.7	8.7	7.9	7.8	8.4	14%
<b>Angola</b>	76	75	9.7	10.5	9.5	9.9	10.2	11.3	43%
<b>Benin</b>	73	70	10.1	10.2	11.0	11.2	12.0	13.5	52%
<b>Cameroon</b>	69	73	10.5	10.6	11.4	11.7	11.0	11.6	50%
<b>Cape Verde</b>	153	115	1.9	2.3	2.8	2.5	3.6	5.1	44%
<b>Comoros</b>	105	117	6.1	5.8	5.4	5.5	5.2	5.0	64%
<b>Congo</b>	87	74	8.3	9.1	9.1	9.6	11.8	11.4	43%
<b>Côte d'Ivoire</b>	50	53	14.4	14.5	13.0	15.0	16.9	19.4	45%
<b>Democratic Republic of the Congo</b>	142	137	3.0	3.0	2.7	2.7	3.4	3.8	100%
<b>Djibouti</b>	98	58	6.8	7.6	7.4	10.5	10.4	18.0	24%
<b>Egypt</b>	16	17	42.9	49.2	50.0	45.4	52.5	52.0	15%
<b>Equatorial Guinea</b>	127	141	4.0	3.9	3.8	3.4	3.9	3.7	55%
<b>Eritrea</b>	138	145	3.4	1.6	2.2	0.0	3.3	3.3	33%
<b>Gabon</b>	81	88	8.8	8.8	8.7	8.6	8.9	9.2	48%
<b>Gambia</b>	119	103	4.9	6.1	4.8	4.7	5.0	7.5	44%
<b>Ghana</b>	58	54	12.5	12.6	13.8	15.0	18.1	19.3	43%
<b>Guinea</b>	104	97	6.1	6.9	8.7	8.5	6.4	8.3	54%
<b>Guinea-Bissau</b>	152	143	2.1	5.2	5.0	5.1	5.3	3.5	50%
<b>Kenya</b>	84	72	8.6	9.0	9.3	10.9	10.9	12.8	32%
<b>Liberia</b>	113	112	5.3	6.0	4.5	4.5	4.3	5.5	67%
<b>Libyan Arab Jamahiriya</b>	114	84	5.3	5.2	4.7	6.6	5.4	9.4	13%
<b>Madagascar</b>	96	91	6.9	6.8	8.3	8.0	7.8	8.6	63%
<b>Mauritania</b>	112	104	5.4	6.0	6.2	7.9	7.9	7.5	50%
<b>Mauritius</b>	54	64	13.1	12.3	11.5	17.2	17.4	14.8	41%
<b>Morocco</b>	78	23	9.4	8.7	8.5	9.0	29.8	38.4	35%
<b>Mozambique</b>	99	85	6.6	6.7	6.7	7.1	8.8	9.4	48%
<b>Namibia</b>	102	69	6.3	6.6	8.5	8.4	11.1	13.6	58%
<b>Nigeria</b>	56	50	12.8	12.8	13.0	13.7	18.3	19.9	43%
<b>Sao Tome and Principe</b>	159	153	0.9	1.3	1.6	1.6	2.5	2.4	45%
<b>Senegal</b>	72	63	10.1	10.1	11.2	17.1	17.6	15.0	59%
<b>Seychelles</b>	120	118	4.9	4.9	5.3	5.3	4.5	4.9	75%
<b>Sierra Leone</b>	107	111	5.8	6.5	5.1	5.1	4.7	5.6	43%
<b>Somalia</b>	140	149	3.1	1.3	2.4	3.1	3.2	2.8	33%
<b>South Africa</b>	32	29	23.1	25.8	26.2	27.5	28.5	32.1	40%
<b>Sudan</b>	95	86	6.9	6.2	5.7	5.7	5.4	9.3	33%
<b>Togo</b>	71	68	10.2	10.6	11.1	10.6	12.6	14.4	52%
<b>Tunisia</b>	83	107	8.8	7.6	7.0	7.2	7.0	6.5	19%
<b>United Republic of Tanzania</b>	90	83	8.1	8.6	8.7	10.6	10.5	9.5	30%

Source: UNCTAD secretariat, using data provided by *Containerisation International Online*.

<sup>a</sup> Based on 2008 data.

compared to direct port-to-port services between two trading partners. Port operations in Africa's transshipment centres – such as those in Djibouti, Egypt, Morocco, Senegal and South Africa – are improving; ultimately they benefit not only their own country's importers and exporters, but also contribute to the promotion of intraregional South–South trade, especially on routes where trade volumes are currently not large enough to commercially justify a direct shipping service. However, it must be recalled that the most efficient transport arrangements still need matching trade support services and administrative procedures. Therefore, trade facilitation is another important factor for the competitiveness of African countries, both when they are considered individually and as a continent. A brief overview of the situation shows that recent developments are on the right track, but that more needs to be done.

#### D. TRADE FACILITATION ISSUES IN AFRICA

Trade facilitation and efficient transport and logistics services have emerged in recent years as key determinants for successful market access. Globally fragmented production processes and just-in-time inventory techniques have made speed, transparency and security essential for integration into global value chains.

Trade facilitation is of particular relevance in the African development context. African intraregional trade is confronted with excessive transaction costs, operational uncertainty and border crossing delays.<sup>19</sup> Sub-Saharan countries face comparatively longer time frames for imports and exports, higher transport costs, and a relatively high number of documentation requirements (table 46; fig. 31). Such barriers to trade impact on trade flows and offset potential gains from trade liberalization.

Of the 118 countries monitored by the World Economic Forum's Global Enabling Trade Index, only 2 (out of 17) sub-Saharan countries are among the middle-performing

countries, namely Mauritius (rank 40) and South Africa (rank 59) (see table 47).

Such high barriers to trade cause regional economic integration to lag behind its potential. Operational and administrative barriers to intraregional trade have to be removed in order to fully realize the benefits offered by a single market, a free trade area or a customs union. Furthermore, trade facilitation solutions are more effective when implemented across countries – by means of multilateral, regional or bilateral arrangements – through cooperation and harmonization. Benefits can be maximized when more countries strive to implement trade and transport facilitation reforms. Costs can be reduced

through the development of regional solutions based on international standards known to be the most efficient way of harmonizing procedures and formalities. Countries can also support each other in implementation by sharing experiences and by building capacities for development of the required infrastructure and services, including IT applications.

Most African regional economic agreements (see table 48 above) contain provisions or dedicated protocols on transport, transit, and customs cooperation. However, implementation of these provisions and enforcement of commitments have fallen short of their objectives for a variety of reasons, including weak institutional capacity, weak operational coordination, and financial and human resource constraints, among other things. Amid the recent negotiations on trade facilitation at WTO as part of the Doha Development Round

and the Economic Partnership Agreement (EPA) negotiations, regional and subregional integration bodies such as the Common Market for Eastern and Southern Africa (COMESA), the Southern African Development Community (SADC), the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (WAEMU) have been multiplying their efforts to strengthen implementation of their trade and transport facilitation objectives, including

---

**... trade facilitation solutions are more effective when implemented across countries – by means of multilateral, regional or bilateral arrangements – through cooperation and harmonization. Benefits can be maximized when more countries strive to implement trade and transport facilitation reforms.**

---



---

**African intraregional trade is confronted with excessive transaction costs, operational uncertainty and border crossing delays. Sub-Saharan countries face comparatively longer time frames for imports and exports, higher transport costs, and a relatively high number of documentation requirements.**

---

Table 46  
Selected indicators of border administration efficiency in Africa

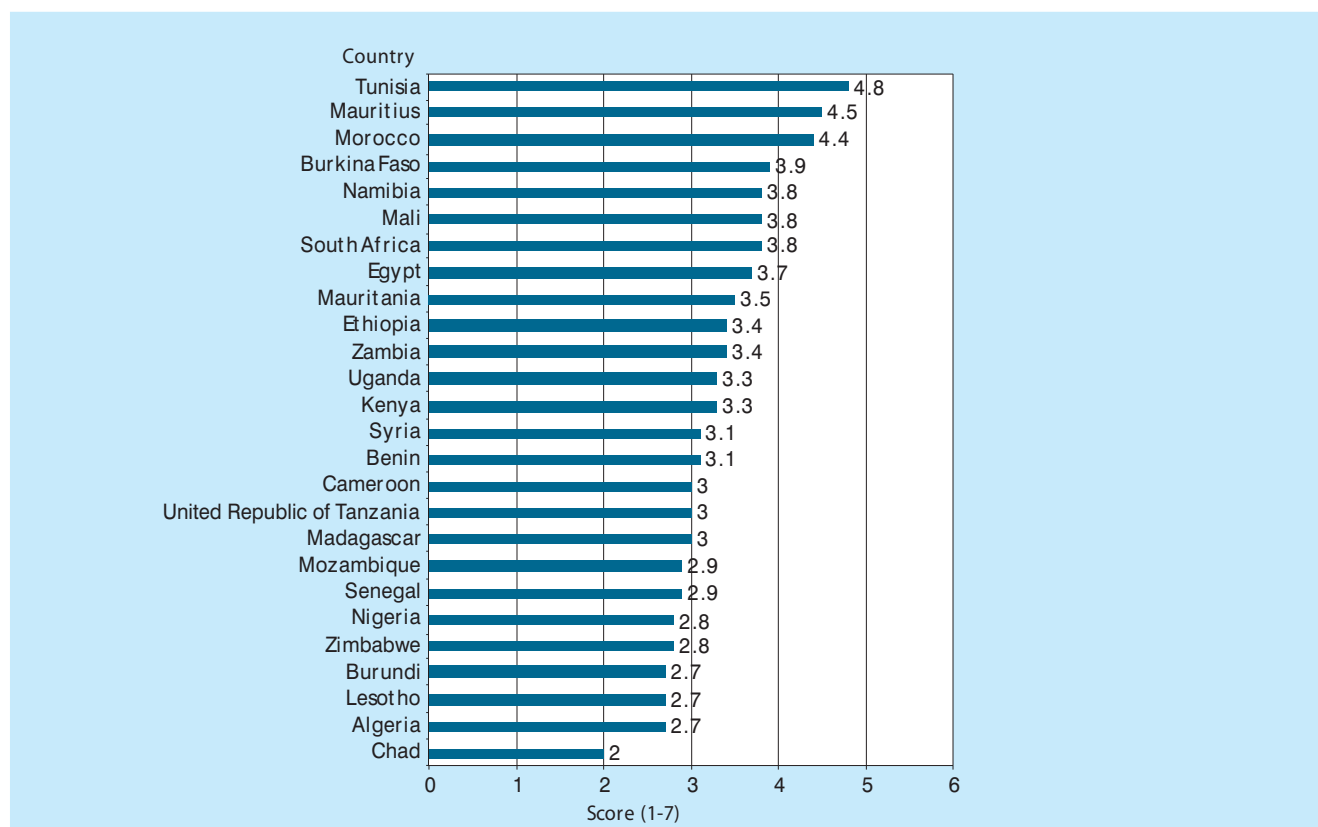
Country	Burden of customs procedures	Customs services Index	Effectiveness and efficiency of clearance	Time to import	Documents for import	Cost to import
	Scale of 1–7	Scale of 0–11.5	Scale of 1–5	Days	Number	US\$
Algeria	2.7	3.7	1.6	23.0	9.0	1 378
Benin	3.1	3.8	1.8	41.0	7.0	1 202
Burkina Faso	3.9	2.7	2.1	54.0	11.0	3 522
Burundi	2.7	..	2.2	71.0	10.0	3 705
Cameroon	3.0	5.8	2.6	33.0	8.0	1 529
Chad	2.0	..	2.0	102.0	9.0	5 520
Egypt	3.7	3.7	2.1	18.0	7.0	729
Ethiopia	3.4	4.2	2.1	42.0	8.0	2 793
Kenya	3.3	4.0	2.3	37.0	8.0	1 995
Lesotho	2.7	2.7	2.4	49.0	8.0	1 210
Madagascar	3.0	2.3	2.2	49.0	10.0	1 282
Mali	3.8	2.3	2.2	65.0	11.0	2 680
Mauritania	3.5	1.8	2.4	42.0	11.0	1 363
Mauritius	4.5	6.5	2.0	16.0	6.0	673
Morocco	4.4	8.2	2.2	19.0	11.0	800
Mozambique	2.9	..	2.2	38.0	10.0	1 185
Namibia	3.8	3.0	2.1	24.0	9.0	1 550
Nigeria	2.8	3.0	2.2	46.0	9.0	1 047
Senegal	2.9	4.0	2.4	26.0	11.0	1 720
South Africa	3.8	..	3.2	35.0	9.0	1 195
Tunisia	4.8	..	2.8	22.0	7.0	810
Uganda	3.3	6.0	2.2	37.0	7.0	2 990
United Republic of Tanzania	3.0	3.0	2.1	30.0	7.0	1 425
Zambia	3.4	6.7	2.1	64.0	11.0	2 840
Zimbabwe	2.8	4.5	1.9	67.0	13.0	2 420
ETI <sup>a</sup> sample average	3.9	5.7	2.7	27.1	7.6	1 338
ETI sample minimum	2.0	1.7	1.6	3.0	3.0	367
ETI sample maximum	6.4	10.2	4.0	104.0	14.0	5 520
Africa average	3.3	4.1	2.2	42.0	9.1	1 903
Africa minimum	2.0	1.8	1.6	16.0	6.0	673
Africa maximum	4.8	8.2	3.2	102.0	13.0	5 520

Source: World Economic Forum. *Africa Competitiveness Report 2009*.

<sup>a</sup> ETI refers to *Enabling Trade Index*.



Figure 31

**Burden of customs procedures in Africa, 2007**

Source: World Economic Forum. *Africa Competitiveness Report 2009*.

through the extensive use of UNCTAD's ASYCUDA customs automation programme.<sup>20</sup>

Subregional initiatives in this area encompass harmonization of procedures, adoption of cross-border insurance schemes, transit guarantee systems, and the production of standardized documents, as well as cooperation and information exchange among customs administrations. Some areas where progress has been made include:

- (a) ECOWAS, where member states now use a single customs document for import, export and transit. ECOWAS members also adopted the harmonized system as customs nomenclature, and use a common certificate of origin. The WAEMU subregion is currently undertaking a comprehensive project to set up joint border posts;
- (b) COMESA, which has advanced in the area of cross-border transport facilitation through the adoption of the COMESA Carrier's Licence, the COMESA motor vehicle third-party insurance scheme, and the harmonization of road transit charges. In the area of customs, COMESA members adopted the COMESA Customs Declaration Documents (COMESA-CD) and the World Customs Organization's harmonized system as customs nomenclature, also as part of the implementation of the ASYCUDA system in the subregion. In addition, members plan to launch a regionally recognized customs bond guarantee – the RCBG;
- (c) SADC members' adoption of the common customs document SAD 500 for import, export and transit customs regimes, which is also promoted by ASYCUDA projects in member countries; and,
- (d) Regulation by SACU members of cross-border traffic rights for the transportation of goods using SACU cross-border transport permits.

Table 47

## Global Enabling Trade Index, Africa, 2008

Country	Rank/25 <sup>a</sup>	Rank/118 <sup>b</sup>	Score
Mauritius	1	40	4.50
Tunisia	2	49	4.23
South Africa	3	59	3.98
Morocco	4	74	3.71
Namibia	5	77	3.66
Uganda	6	79	3.63
Zambia	7	85	3.52
Kenya	8	86	3.51
Egypt	9	87	3.51
Madagascar	10	88	3.49
Mali	11	90	3.42
Cameroon	12	92	3.42
Lesotho	13	95	3.36
Mauritania	14	97	3.34
Benin	15	98	3.34
Burkina Faso	16	99	3.33
Senegal	17	100	3.33
Mozambique	18	101	3.30
United Republic of Tanzania	19	112	3.27
Ethiopia	20	106	3.06
Algeria	21	108	3.04
Nigeria	22	111	3.02
Zimbabwe	23	112	2.98
Burundi	24	117	2.70
Chad	25	118	2.60
<b>Africa</b>			3.80
<b>North Africa</b>			3.80
<b>Sub-Saharan Africa</b>			3.90
<b>ASEAN</b>			4.61
<b>Latin America and the Caribbean</b>			3.79

Source: World Economic Forum. *Africa Competitiveness Report 2009*.



Table 48

## Major African regional economic communities

Major regional economic communities	Type	Areas of integration and cooperation	Date of entry into force	Member States	Specified objective
<b>Arab Maghreb Union (UMA)</b>	Free trade area	Goods, services, investment, migration	17 Feb 1989	Algeria, Libyan Arab Jamahiriya, Mauritania, Morocco, Tunisia	Full economic union
<b>Common Market for Eastern and Southern Africa (COMESA)</b>	Free trade area	Goods, services, investment, migration	8 Dec 1994	Angola, Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, Zimbabwe	Common market
<b>Community of Sahel-Saharan States (CENSAD)</b>	Free trade area	Goods, services, investment, migration	4 Feb 1998	Benin, Burkina Faso, Central African Republic, Chad, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Gambia, Libyan Arab Jamahiriya, Mali, Morocco, Niger, Nigeria, Senegal, Somalia, Sudan, Togo, Tunisia	Free trade area and integration in some sectors
<b>Economic Community of Central African States (ECCAS)</b>	Free trade area	Goods, services, investment, migration	1 Jul 2007	Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Sao Tome and Principe, Rwanda	Full economic union
<b>Economic Community of West African States (ECOWAS)</b>	Free trade area	Goods, services, investment, migration	24 Jul 1993	Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo	Full economic union
<b>Intergovernmental Authority on Development (IGAD)</b>	Free trade area	Goods, services, investment, migration	25 Nov 1996	Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan, Uganda	Full economic union
<b>Southern African Development Community (SADC)</b>	Free trade area	Goods, services, investment, migration	1 Sep 2000	Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe	Full economic union
<b>Economic and Monetary Community of Central Africa (CEMAC)</b>	Customs union	Goods, services, investment, migration	24 Jun 1999	Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea, Gabon	Full economic union

Table 48 (continued)

Major regional economic communities	Type	Areas of integration and cooperation	Date of entry into force	Member States	Specified objective
East African Community (EAC)	Customs union	Goods, services, investment, migration	7 Jul 2000	Kenya, United Republic of Tanzania, Uganda, Rwanda, Burundi	Full economic union
Southern African Customs Union (SACU)	Customs union	Goods, services, investment, migration	15 Jul 2004	Botswana, Lesotho, Namibia, South Africa, Swaziland	Customs union
West African Economic and Monetary Union (UEMOA)	Customs union	Business law harmonized. Macroeconomic policy convergence in place	10 Jan 1994	Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo	Full economic union

Source: UNCTAD secretariat. *Economic Development in Africa Report 2009*.

These recent implementation efforts have taken place against the background of the ongoing negotiations on trade facilitation at WTO aimed at clarifying and improving relevant aspects of General Agreement on Tariffs and Trade (GATT) articles V, VIII and X (on freedom of transit; fees and formalities; and the publication and administration of trade regulations; respectively). The negotiations started in late 2004, and delegations have put forward numerous proposals on trade facilitation provisions in areas such as:

- (a) Access to trade-related information;
- (b) Expediting the clearance and release of goods;
- (c) Strengthening the uniform administration of trade regulations;
- (d) Simplifying and reducing procedures and formalities; and
- (e) Strengthening transit guarantee systems, and national and cross-border border agency coordination.

Many of the provisions proposed have a regional dimension for implementation. Hence, to the extent that regional trade facilitation objectives are in line with the negotiated commitments at WTO, the multilateral negotiation process can contribute to advancing regional reforms – provided that technical assistance for implementation is forthcoming. One of the objectives of

the WTO negotiations is to enhance trade facilitation–related technical assistance and assist delegations in the design of special and differential treatment provisions that link the application of commitments to countries' individual implementation capacity. African members individually, and the African group as a whole, have been very active in the negotiations. They expect to be both key actors in the negotiating group and main beneficiaries when implementing the outcome of the negotiations (through technical assistance and capacity-building activities).

### E. SPECIAL CASE: TRANSIT AND INLAND TRANSPORT FOR LANDLOCKED DEVELOPING COUNTRIES IN AFRICA

Sixteen of the world's 31 landlocked developing countries (LLDCs) are amongst the poorest countries in the world, and of the world's 31 LLDCs, 15 are located in Africa. The macroeconomic difficulties of LLDCs are evident. Over the period 2003–2005, the GDP per capita of LLDCs was approximately 50 per cent of the GDP per capita of transit-developing countries, and only a quarter of the GDP per capita of developing countries in general.<sup>21</sup>

The main problems for LLDCs with regard to overseas trade are geographical remoteness from the sea and dependence on transport systems in neighbouring and/or coastal countries. This transit dependence increases

transaction costs and complicates the countries' export and import processes. As a result, LLDCs trade less and grow more slowly than neighbouring coastal countries. None of the landlocked countries – except Ethiopia – depends exclusively on one trade route. LLDCs often have the choice of two or more ports. The choice of transit route depends mainly on transport costs, time to transport, and the quality and reliability of the trade support services available for goods in transit.

Landlocked countries are affected by high cost in freight transport and unpredictability in transportation time. Countries such as Burundi, the Central African Republic, Mali and Uganda spend an average of 15 per cent of their export earnings on transport, and for some this cost is as high as 50 per cent. According to recent World Bank figures, the cost of transporting a container from an LLDC to a port in a developed country is about 20 per cent higher than transporting from a coastal country.<sup>22</sup> The main factors behind the higher costs are unreliable transport chains due to inadequate transit procedures, over-regulation, multiple controls, and poor services.

The cost of importing appears to be rising, especially in landlocked countries (fig. 32). A recent study on the trading costs of landlocked countries suggests that improving the condition of road infrastructure is not sufficient to eradicate inefficiency and high transport costs. The main problems are associated with port infrastructure and the quality of port services, which affects the process of dispatching goods out of transit ports.<sup>23</sup>

Various landlocked countries are planning to design or upgrade railway lines connecting them to neighbouring ports (for existing transit corridors; see fig. 33). For example, railway lines have been proposed to link the United Republic of Tanzania's main port of Dar-es-Salaam with Burundi, the Democratic Republic of the Congo, southern Sudan, and Uganda. These links will make the Dar-es-Salaam route cheaper and more direct than the Mombasa route, and may divert cargo transiting through Uganda, thereby affecting Uganda's trade sector. This is why Uganda plans to improve its network connections, so that its current rail and road network remains the shortest link from the Indian

Ocean to East and Central African countries. The plans include connecting a wider standard-gauge rail to replace the abandoned northern link to Gulu then Juba, and also connecting to Rwanda and the eastern part of the Democratic Republic of the Congo. The standard-gauge railway is planned to run from the port of Mombasa, through Kenya and Uganda, to Rwanda and Burundi, and also to connect in the north with Ethiopia and southern Sudan by the year 2017.<sup>24</sup>

The African Development Bank is funding the direct rail project linking Dar-es-Salaam with the Rwandan capital, Kigali. This new link, along with planned upgrades of cargo handling facilities, is aimed at helping Dar-es-Salaam secure a significant share in Rwanda's growing foreign cargo exchange. The project, which is expected to be completed by 2013, involves laying new tracks over a distance of 770 kilometres. The track will be designed to carry heavy cargo at a faster speed, and this is expected to improve security during transit (by diminishing the vandalism of railroads and reducing attacks on trucks in transit).<sup>25</sup>

Goods destined for landlocked countries spend too much time crossing borders, and are subject to unnecessarily lengthy clearance procedures. Much of the delay is caused by red tape at border clearance, as well as inefficient and complicated customs processes. For example, cargo bound for Kenya's inland destinations remains in the port of Mombasa, on average, for five days less than similar goods that are destined for Uganda. This is also the case for goods transported to other LLDCs from other transit ports in Africa. A steady reduction in the number of documents required for imports to landlocked countries in East and Central Africa has been observed in recent years (fig. 34), however more work is needed to reduce these obstacles to trade, by implementing policies that improve bilateral operations between neighbouring countries.

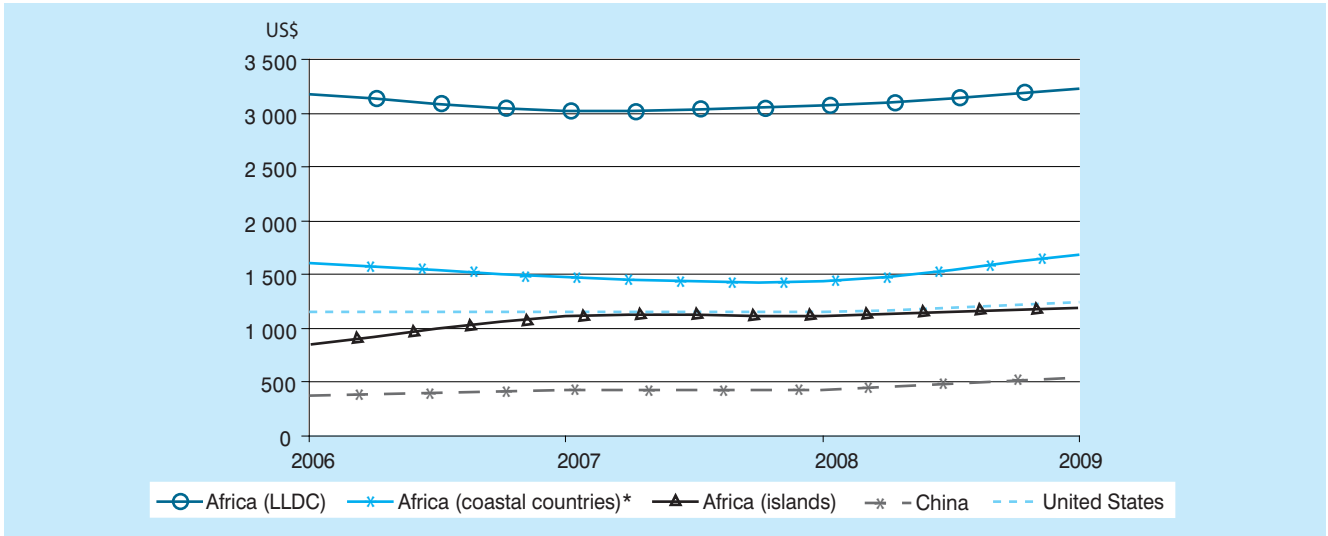
In 2006 and 2007, import times were shorter for landlocked countries in southern Africa than for other landlocked countries, especially those in West and Central Africa (fig. 35). In 2008, East African landlocked countries significantly reduced the time it took to import. These developments could be attributed to the introduction of measures aimed at enhancing transparency

---

**Landlocked countries are affected by high cost in freight transport and unpredictability in transportation time. Countries such as Burundi, the Central African Republic, Mali and Uganda spend an average of 15 per cent of their export earnings on transport, and for some this cost is as high as 50 per cent.**

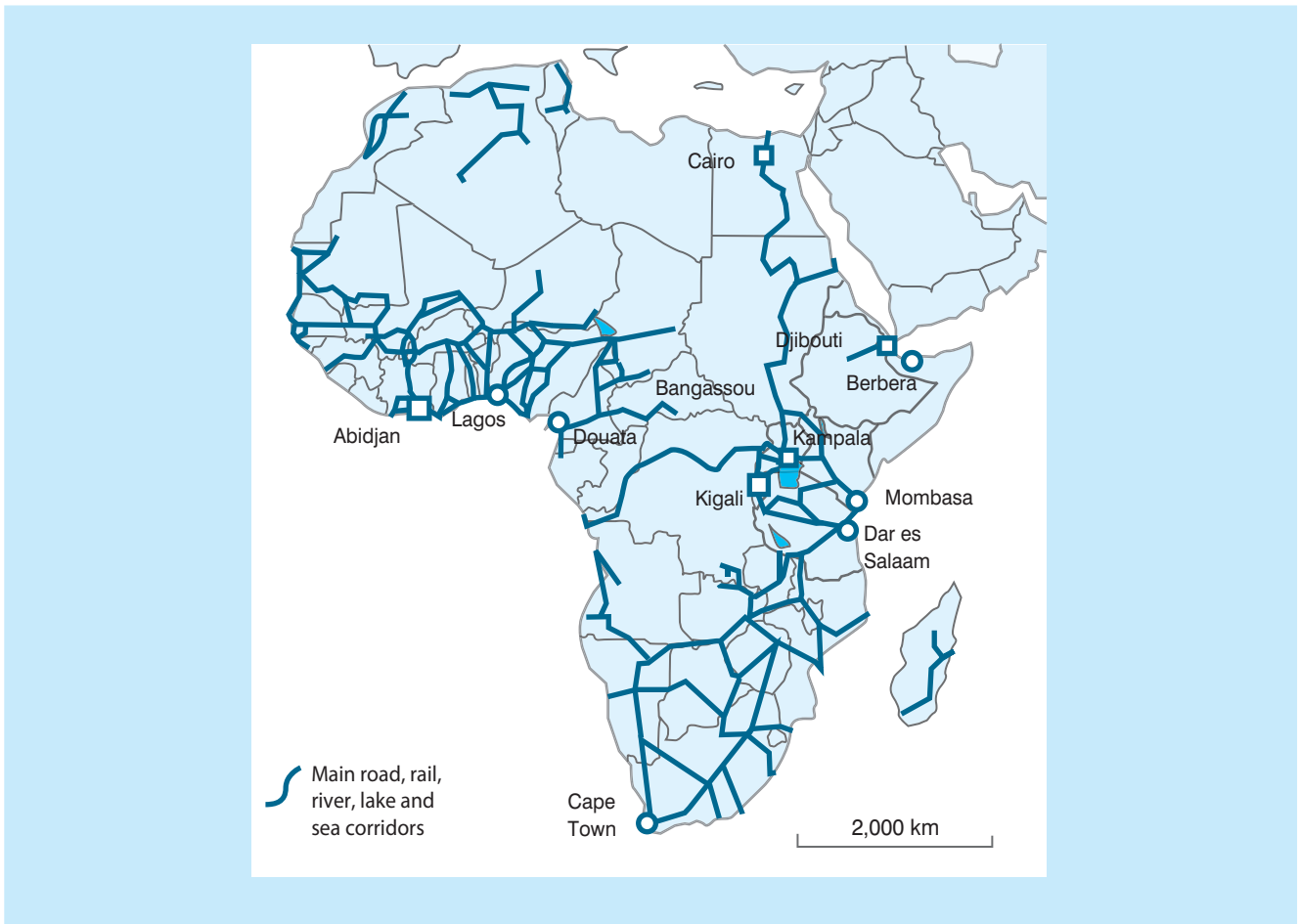
---

Figure 32  
Annual average cost of importing a container



Source: World Bank. *Doing Business: Trading Across Borders*.

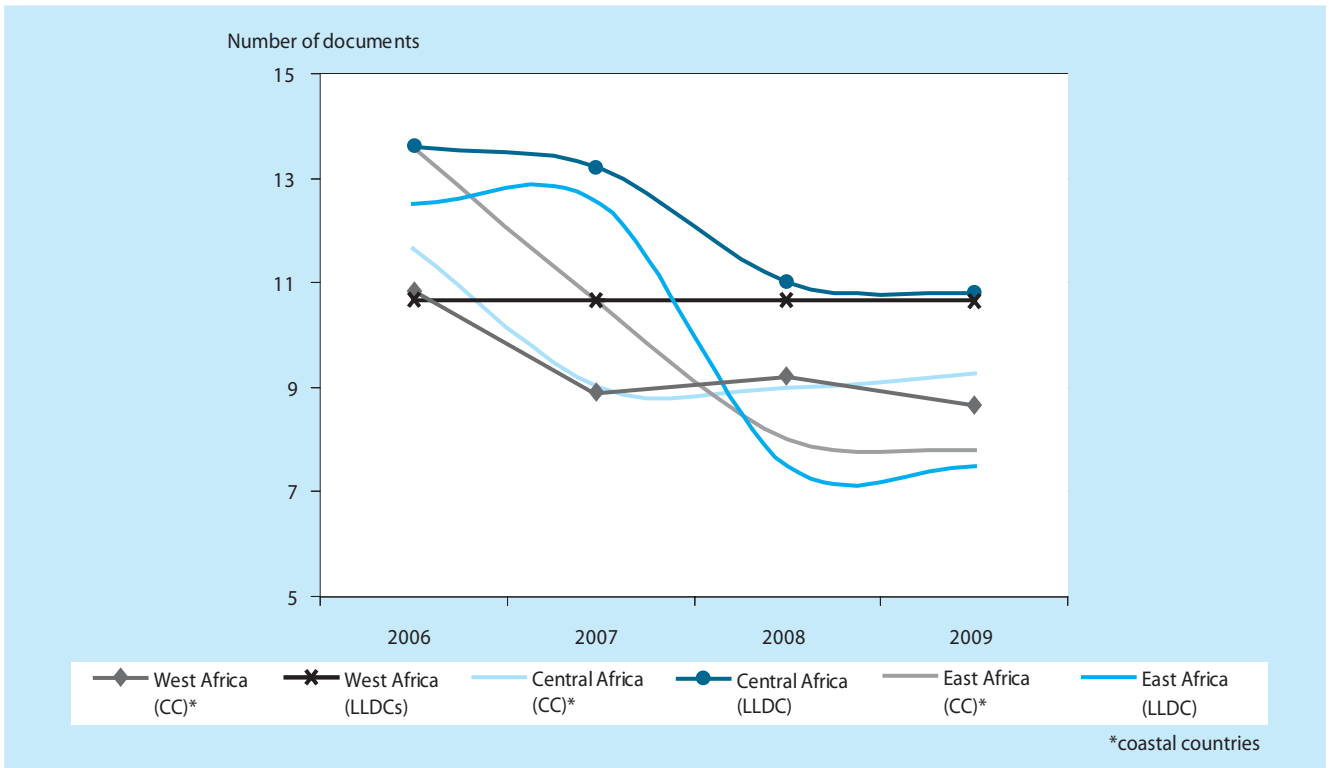
Figure 33  
Main road, rail, sea, lake and river corridors in Africa



Source: Bolloré, *The Economist*.

Figure 34

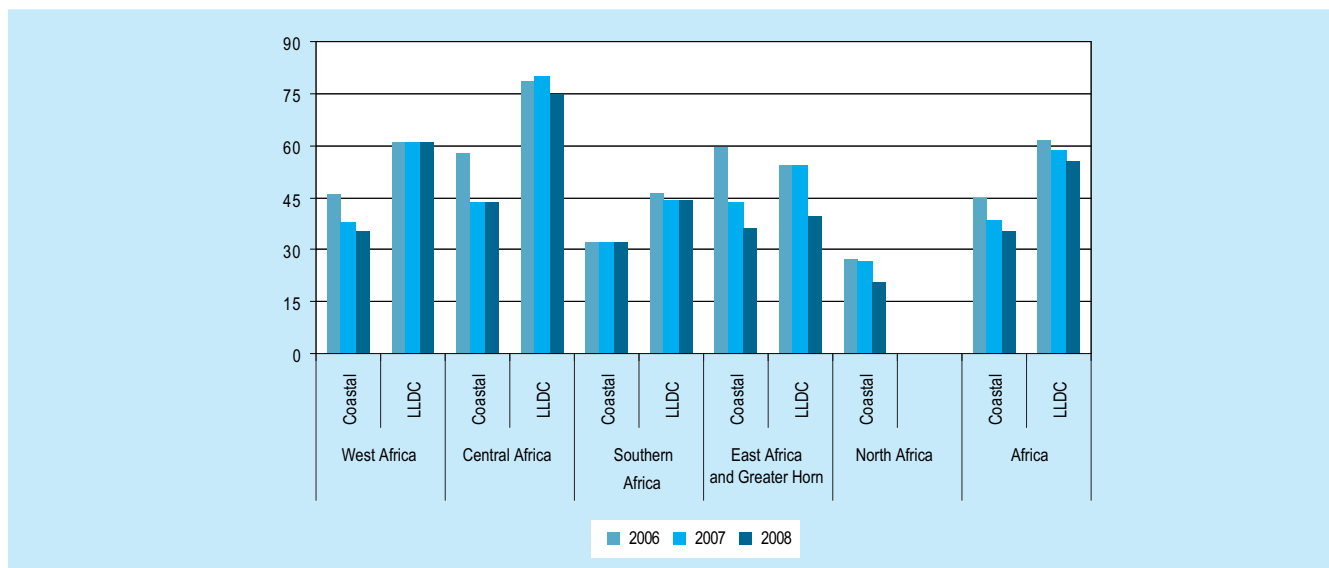
Average number of documents required for import



Source: World Bank. *Doing Business: Trading Across Borders*.

Figure 35

Time to import (days)



Source: World Bank. *Doing Business: Trading Across Borders*.

in intraregional trade and efficiency of custom clearing procedures. In fact, very recently, the East African Community, at its third steering committee in Kampala, adopted a common Authorized Economic Operator (AEO) scheme, based on the internationally recognized WCO Framework of Standards to Secure and Facilitate Global Trade (the “SAFE Framework”). This model is designed to implement modern customs procedures and ensure structured dialogue between customs and the private sector at national and regional levels.

Many busy ports in Africa are located within cities, and congestion is therefore prevalent. This characteristic makes it difficult for ports to effectively manage the growth in trade volume, which is why countries in Africa are considering expanding their seaports and improving port processes and infrastructure. Dry ports/inland container depots present a possible solution to this growing problem, and are becoming an integral part of port logistics design in Africa. Their function varies among countries, and depends on the characteristics of the country. For landlocked countries, inland container depots are a gateway to the world’s trade routes, while inland container depots in coastal countries often serve to reduce rising congestion on roads and in areas within close proximity to ports.

Solutions to trade and transport facilitation for LLDCs have, in recent years, focused on collaborative solutions between LLDCs and transit countries, and were discussed in October 2008 at the mid-term review of the Almaty Programme of Action. UNCTAD’s report to the global preparatory meeting on the mid-term review of the Almaty Programme of Action, entitled “Trade and transport facilitation opportunities for landlocked and transit-developing countries”, highlighted areas of concrete action, including:

(a) Deepening the understanding of the costs of landlockedness by pursuing and disseminating the results of research programmes on the economics and political

economy of transit corridors, notably through surveys and case studies;

(b) Implementing capacity-building programmes aimed at setting up collaborative mechanisms on specific corridors, and developing competences accordingly;

(c) Promoting targeted projects within transit and landlocked countries to implement, when required, core reforms related to facilitation, especially in the area of transport and customs;

(d) Assisting groups of countries on a corridor or within a trading subregion to address systemic issues, including the design and implementation vehicles of transit regimes, based on international best practices; and,

(e) Developing transit corridor performance measurement systems that are cost-effective and sustainable, and facilitate benchmarking of performance between corridors, using toolkits and capacity-building initiatives to help transit and landlocked countries implement them.

This brief overview of recent developments relating to transport and trade facilitation in Africa shows that due to its continuing, and sometimes growing, dependence on overseas markets, efforts will be needed to improve the performance of the maritime transport sector, including in ports and shipping connectivity. At the same time, if intraregional trade is not to be hampered, sea–land connections, as well as transport and border crossing services, will require major improvements. These may take place at the subregional level, and when appropriate at the bilateral level in the case of some landlocked countries and their coastal neighbours. UNCTAD works on these issues by monitoring developments and partnering with countries and regional schemes to build capacity and to design suitable actions to bring about improvements.



## ENDNOTES

- 1 Economic Report on Africa 2009.
- 2 Economic Report on Africa 2009.
- 3 Economic Report on Africa 2009.
- 4 Excluding intra-EU 27 trade. The total value of exports for Africa in 2007 was \$424.14 billion. Figures from WTO's International Trade Statistics 2008.
- 5 Excluding intra-EU 27 trade. Figures from WTO's International Trade Statistics 2008.
- 6 WTO, International Trade Statistics 2008.
- 7 WTO, International Trade Statistics 2008.
- 8 Figures for other regions are: North America (6.0 per cent), South and Central America (8.7 per cent), Europe (9.2 per cent), the Commonwealth of Independent States (10.9 per cent), the Middle East (10.2 per cent) and Asia (7.4 per cent). Figures from International Trade Statistics, WTO, 2008.
- 9 Figures for other regions are: North America (9.6 per cent), South and Central America (25.1 per cent), Europe (9.0 per cent), the Commonwealth of Independent States (7.6 per cent), the Middle East (2.5 per cent) and Asia (5.6 per cent). Figures from International Trade Statistics, WTO, 2008.
- 10 WTO, International Trade Statistics 2008.
- 11 WTO, International Trade Statistics 2008.
- 12 WTO, International Trade Statistics 2008.
- 13 International Monetary Fund (2008). *Regional Economic Outlook: Sub-Saharan Africa*. Washington D.C.
- 14 More developed Asian ports can handle up to 452 container moves per hour (see: <http://tradeinservices.mofcom.gov.cn/en/f/2008-01-10/22497.shtml>).
- 15 Pálsson G, Harding A and Raballand G (2007). Port and maritime transport challenges in West and Central Africa. Sub-Saharan Africa Transport Policy Programme. Working paper 84. World Bank. Washington D.C.
- 16 *The Statesman* (June 2007). GUTA (Ghana Union Traders Association) educated on import procedures. Article by Adu Koranteng.
- 17 Roll-on roll-off (RORO or ro-ro) ships are vessels that are designed to carry wheeled cargo.
- 18 These data are derived from *Containerisation International Online*.
- 19 For more detail, please refer to UNCTAD's *Economic Development in Africa Report 2009* at <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=4923&lang=1>.
- 20 For further detail on experiences in regional integration in Africa, refer to UNCTAD's *Economic Development in Africa Report 2009* at <http://www.unctad.org/Templates/WebFlyer.asp?intItemID=4923&lang=1>.
- 21 Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (UN-OHRLLS). Indicators and statistics for Landlocked Developing Countries 2007.
- 22 Improving trade and transport for landlocked developing countries: World Bank contributions to implementing the Almaty Programme of Action. A report for the mid-term review October 2008.
- 23 Arvis J-F, Raballand G and Marteau J-F (2007). The cost of being landlocked: logistics costs and supply chain reliability. World Bank Policy Research working paper 4258.
- 24 "Tanzania/Rwanda plan to build rail link" from *Containerisation International Online* on 1 May 2008; and "Uganda rail at crossroads as attention shifts to Dar – US gives Shs 1.8 trillion for rail link from Dar to Kigali", article by Patrick Kagenda writing in *The Independent* on 11 February 2009.
- 25 "Tanzania/Rwanda plan to build rail link" from *Containerisation International Online* on 1 May 2008.



