



Trucks waiting in Baboua, Central African Republic, at the border with Cameroon where COVID-19 testing has resulted in long delays.



6

Trade profiles of landlocked developing countries

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Trade plays a critical role in achieving the development objectives of LLDCs and is key to realizing the Sustainable Development Goals (SDGs), in particular target 17.11: significantly increase the exports of developing countries.

Figure 14 indicates that LLDC merchandise exports have had an increased contribution to GDP with a recorded growth rate of 0.72 per cent. This growth rate is second only to that of LDC (1.3 per cent) and surpasses developed regions. While there has been steady progression in achieving the set SDG target among LLDCs, additional efforts are still needed to realize the desired socio-economic outcomes.

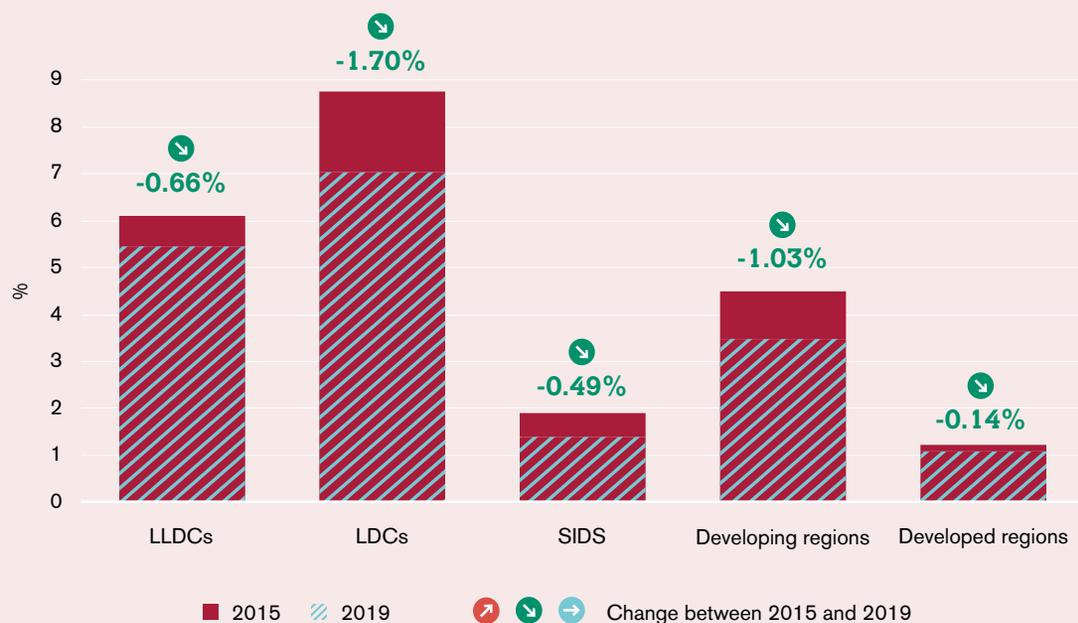
With applied tariff levels trending downwards from 6.1 per cent in 2015 to 5.5 per cent in 2019, LLDCs can be seen as fairly open economies (see Figure 15). They employ slightly higher tariff rates than the recorded average across all developing countries (3.5 per cent in 2019), with protection mechanisms in this regard being for the most part, attributed to a number of LDC who also form part of the LLDC grouping. The LLDC group comprises 32 countries across four continents and are quite varied both in terms of individual trade outputs and economic profiles. However, a common character among LLDCs is a low level of diversity, with



Figure 14: Merchandise exports as a share of GDP, 2015 and 2019



Source: SDG Trade Monitor.

Figure 15: Tariffs applied (including preferences), 2015 and 2019

Source: SDG Trade Monitor.

exports concentrated on a few key sectors. The three main factors for limited diversification in LLDCs are (OECD/WTO, 2019):

- limited industrial or manufacturing capacity;
- limited access to trade finance;
- higher trade costs.

While efforts continue in support of diversification options for LLDCs, attention must also be given to further advancing current export sectors where LLDC members may already hold competitive advantage. This leads to analysis of external tariffs levied against LLDCs (see Figure 16). On exports to developed regions, LLDCs faced an average tariff of 0.85 per cent in 2019. Tariffs

incurred by LLDCs are lower than that of LDC and developing regions in general, albeit higher than that of SIDS. A noted caveat is that in the case of both LLDCs and SIDS, tariff lines have trended slightly upwards since 2015, indicating new impediments during the period reviewed. Deeper investigation of this trend suggests that the reported 0.02 per cent increase in tariffs levied against LLDCs are consigned solely on raw merchandise trade (goods with zero or insignificant levels of processing). While this level of tariff increase on raw merchandise trade was similar across all economic regions studied, the net increase across all product lines and sectors had a greater negative impact on SIDS and LLDCs, respectively.

Figure 16: Tariffs faced (including preferences) on exports to developed regions, 2015 and 2019



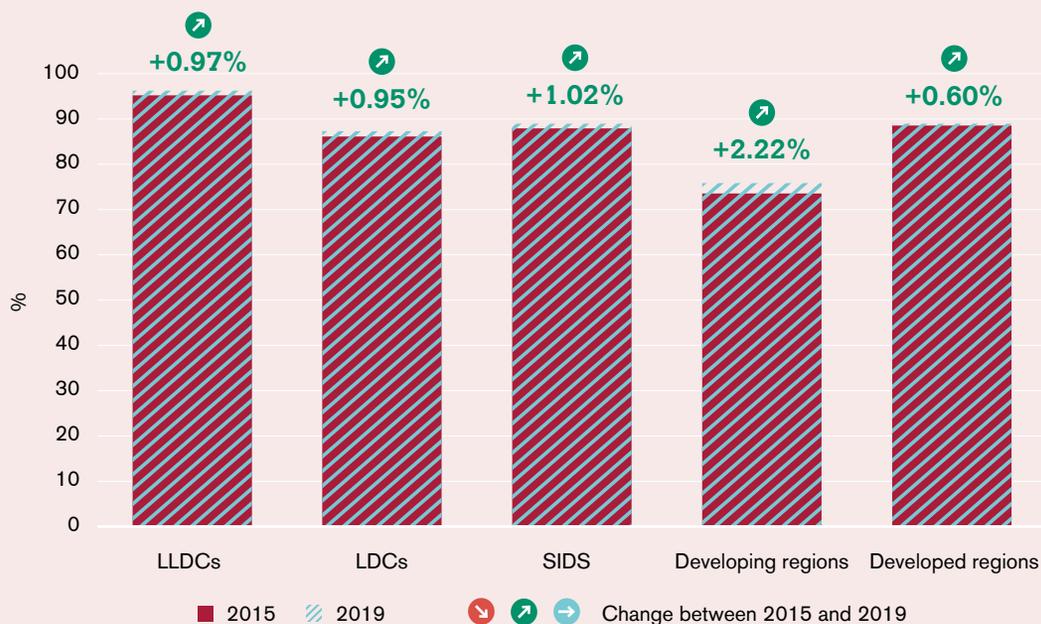
Source: SDG Trade Monitor.

A further scrutiny of applied tariffs considered the proportion of zero-tariff (duty-free) exports to developed regions (see Figure 17). LLDCs received the highest benefits in this regard, with 95 per cent of all exports from LLDCs benefiting from zero-tariff entry. This trend is rising, with a near 1 per cent increase between 2015 to 2019.

There is a downward trend in global zero-tariff exports from LLDCs in both raw and processed goods categories (see Figure 18), in contrast to a near 5 per cent hike in semi-processed goods. Despite the latter retaining the lowest share of zero-tariff exports among the three categories as of 2019, its upwards trend can be welcomed as an added incentive for LLDCs to diversify away from raw product exports.

In general, the analysis suggests that tariff lines may not be a significant impediment to LLDC exports to developed regions, with 95 per cent of LLDC goods benefiting from zero-tariff ratings and with other goods exports incurring comparatively low tariffs at an average of 0.85 per cent. Negative trends are noted, however, including a 0.02 per cent increase in tariff rates imposed particularly on raw goods exports to developed regions along with a reduction in LLDC share of zero-tariff exports (global) on raw and processed goods. This is countered by a growing share of zero-tariff exports in semi-processed goods, a trend which may serve to aid diversification efforts for LLDCs.

Figure 17: Share of duty-free exports to developed regions, 2015 and 2019



Source: SDG Trade Monitor.

Figure 18: Share of duty-free products from LLDCs on raw, semi-processed and processed, 2015 and 2019



Source: SDG Trade Monitor.

A portrait of LLDC trade

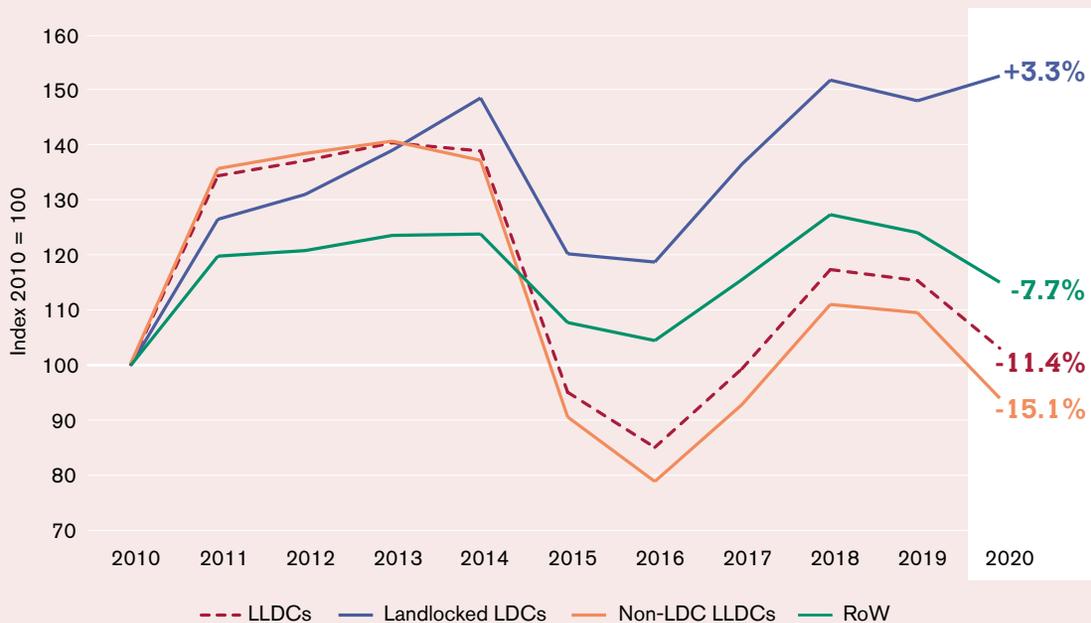
In 2020, LLDC merchandise exports declined by 11.4 per cent year-on-year (see Figure 19), from US\$ 190 billion in 2019 to US\$ 168 billion in 2020, compared with a fall of 7.7 per cent for the rest of the world. The economies of LLDCs that are not least developed suffered an annual decrease of 15.1 per cent, compared to rise of 3.3 per cent for LDCs. Several LDCs profited especially from increases in exports of precious metals and gold, the 2020 rise of gold prices and the stable demand for agricultural products. The UN-OHRRLLS¹ reports that:

“About 80 per cent of LLDCs are dependent on primary commodities for more than 60 per cent of their exports. The

contraction of the demand for commodities in main export markets along with supply challenges because of disruptions to logistics networks have adversely affected the exports of these countries. This drop in exports led to a collapse in some commodity prices and this has resulted in relatively huge loss of foreign exchange earnings and which has serious consequences on socio-economic development including debt sustainability. The immediate repercussions for LLDCs include reduced fiscal space for overall government expenditure, especially healthcare, sourcing of essential medical and food supplies and providing social safety nets to the most vulnerable.”

Figure 19: Merchandise exports of the LLDCs and the rest of the world (RoW), 2010-2020

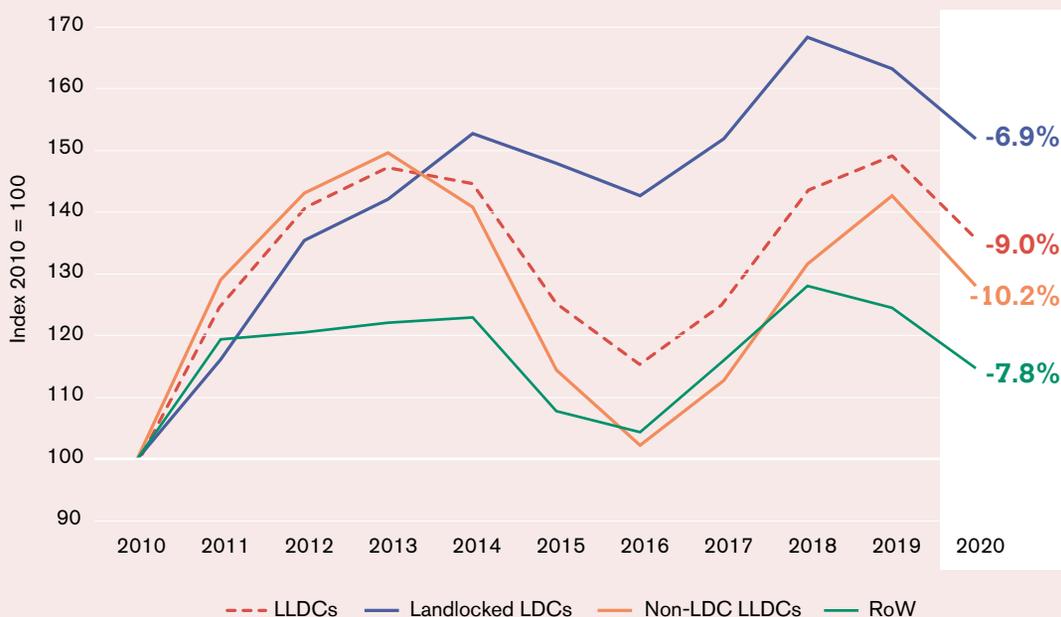
(Index of US\$ values, 2010 = 100)



Source: WTO Secretariat.

Figure 20: Merchandise imports of LLDCs and the rest of the world (RoW), 2010-2020

(Index of US\$ values, 2010 = 100)



Source: WTO Secretariat.

The levels of export values of 2020 were nevertheless above the respective levels of 2010 for all the groups shown, with exception of the non-LDC LLDCs. Exports of landlocked LLDCs were even more than 50 per cent above their 2010 level. Exports of the non-LDC LLDCs were 7 per cent below the 2010 level. The share of the LLDCs in world exports fell from 1.10 per cent in 2010 to 1.03 per cent in 2019 and to 0.99 per cent in 2020.

Merchandise imports of the LLDCs decreased by 9.0 per cent in 2020 (see Figure 20), from US\$ 227 billion in 2019 to US\$ 206 billion in

2020, compared with a fall of only 7.8 per cent for the rest of the world. Non-LDC imports dropped more than LDC imports (-10.2 per cent versus -6.9 per cent).

The 2020 import values of all groups were above their respective 2010 levels, ranging from 15 per cent above for the world to 52 per cent above for landlocked LDCs. The share of LLDC world imports increased from 1.01 per cent in 2010 to 1.20 per cent in 2019 and to 1.19 per cent in 2020.

Figure 21: Merchandise trade balance of LLDCs, 2010-2020

(In US\$ billion)



Source: WTO Secretariat.

The overall merchandise trade balance of LLDCs since 2010 started to become negative as of 2015 (see Figure 21), when the trade surplus of the non-LDC LLDCs fell from US\$ 45 billion in 2014 to only US\$ 7 billion, and thus could no longer compensate for the traditionally negative trade balance of the landlocked LDCs. This drop in 2015 was mostly due to the distinctly fallen oil prices in 2015 and the respective effects on the oil-exporting non-LDC LLDCs such as Azerbaijan, Kazakhstan and Uzbekistan. While back in 2010, the LLDCs still reported an overall trade surplus of US\$ 13 billion, it had turned into a trade deficit of US\$ 38 billion by 2020.

Table 9 lists the ten most-exported products by LLDCs in 2020. Almost 30 per cent of total LLDC exports in 2020 comprised oils and petroleum gases. Of the top ten, only semi-manufactured gold and electrical energy recorded year-on-year increases (129.9 per cent and 7.6 per cent, respectively). The most significant change in ranking was for semi-manufactured gold, which rose from tenth place to fourth in 2020.

None of the top ten products exported by LLDCs in 2020 was agricultural. All agricultural products represented only a combined share of 16 per cent in LLDC total merchandise exports in 2020 (up from 14 per cent in 2019). Table 10 lists the top ten agricultural products exported by LLDC in 2020.

Table 9: Top 10 products exported by LLDCs in 2020

Rank in 2020 (2019)	Commodity description (HS code)	Value (US\$ mn)	Share of total exports (%)	Annual change (%)
1 (1)	Oils; petroleum oils and oils obtained from bituminous minerals, crude (270900)	28,161	21.6	-32.8
2 (3)	Petroleum gases and other gaseous hydrocarbons; in gaseous state, natural gas (271121)	10,341	7.9	-28.9
3 (2)	Metals; gold, non-monetary, unwrought (but not powder) (710812)	9,750	7.5	-46.0
4 (10)	Metals; gold, semi-manufactured (710813)	7,265	5.6	129.9
5 (4)	Copper; refined, unwrought, cathodes and sections of cathodes (740311)	4,664	3.6	-17.2
6 (5)	Copper ores and concentrates (260300)	4,538	3.5	-8.3
7 (6)	Copper; unrefined, copper anodes for electrolytic refining (740200)	4,133	3.2	-14.0
8 (9)	Electrical energy (271600)	3,773	2.9	7.6
9 (7)	Diamonds; non-industrial, unworked or simply sawn, cleaved or bruted, but not mounted or set (710231)	2,463	1.9	-36.0
10 (8)	Coal; bituminous, whether or not pulverised, but not agglomerated (270112)	2,273	1.7	-35.6

Source: UN Comtrade Database (importer data).

Table 10: Top 10 agricultural products exported by LLDCs in 2020

Rank in 2020 (2019)	Commodity description (HS code)	Value (US\$ mn)	Share of total exports (%)	Annual change (%)
11 (12)	Soya beans; other than seed, whether or not broken (120190)	2,203	1.7	22.2
16 (19)	Coffee; not roasted or decaffeinated (090111)	1,293	1.0	-8.3
17 (17)	Tobacco; partly or wholly stemmed or stripped (240120)	1,233	0.9	-15.3
20 (26)	Oil seeds; sesamum seeds, whether or not broken (120740)	864	0.7	2.7
24 (28)	Cereals; wheat and meslin, other than durum wheat, other than seed (100199)	711	0.5	-12.9
25 (25)	Cotton; not carded or combed (520100)	627	0.5	-32.4
30 (20)	Oil-cake and other solid residues; whether or not ground or in the form of pellets, resulting from the extraction of soya-bean oil (230400)	485	0.4	-65.2
31 (33)	Cereals; maize (corn), other than seed (100590)	458	0.4	-27.6
35 (35)	Meat; of bovine animals, boneless cuts, frozen (020230)	348	0.3	-41.6
39 (39)	Sugars; cane sugar, raw, in solid form, other than as specified in Subheading Note 2 to this chapter, not containing added flavouring or colouring matter (170114)	281	0.2	-14.4

Source: UN Comtrade Database (importer data).

The top ten products imported by LLDCs in 2020 are shown in Table 11, which shows that imports are much less concentrated than exports. While the top ten exported LLDC products cover almost 60 per cent of total exports, the share is only 14 per cent for the top ten imported products. The most imported product in 2020 was medicaments – up from fourth place in 2019, with a share of 2.7 per cent of total imports (an annual increase of 2.0 per cent). Despite a drop of 36.8 per cent, cell phones moved from third position to second in 2020, with a share of 2.0 per cent share of total exports. Imports of petroleum oils decreased

by 63 per cent and fell from first position to third in 2020.

The top ten traders accounted for 74 per cent of LLDC exports in 2020 (see Figure 22). The main exporters were Kazakhstan, Azerbaijan and Uzbekistan, which all experienced a fall in exports of 19 per cent, 30 per cent and 5 per cent, respectively. Imports are also concentrated among the top ten importers, which account for 64 per cent of LLDCs imports. The main importers in 2020 were Kazakhstan, Uzbekistan and Ethiopia, which experienced less dramatic falls in imports of 1 per cent, 8 per cent and 3 per cent, respectively.

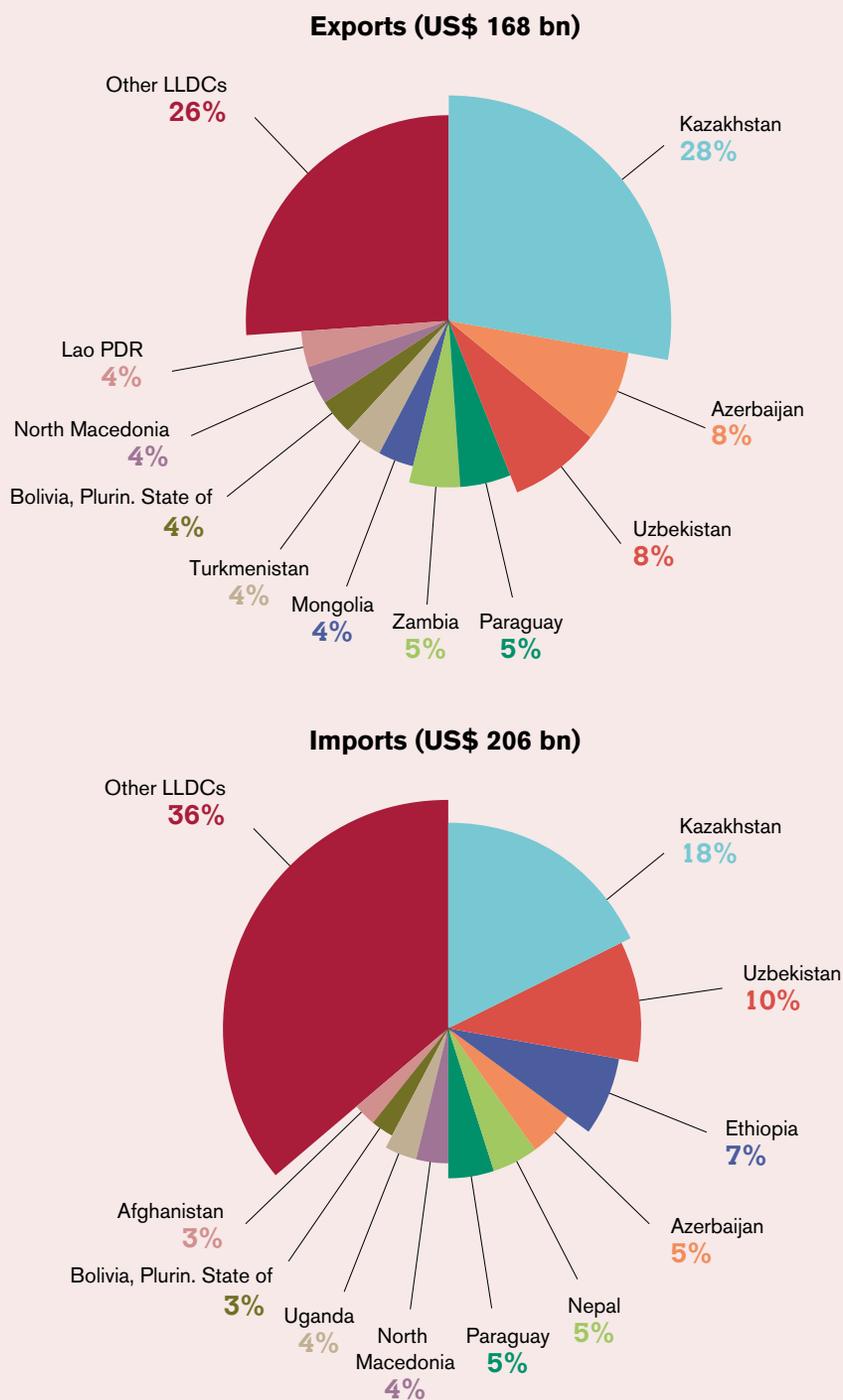
Table 11: Top 10 products imported by LLDCs in 2020

Rank in 2020 (2019)	Commodity description (HS code)	Value (US\$ mn)	Share of total exports (%)	Annual change (%)
1 (4)	Medicaments; consisting of mixed or unmixed products n.e.c. in heading no. 3004, for therapeutic or prophylactic uses, packaged for retail sale (300490)	3,783	2.7	2.0
2 (3)	Telephones for cellular networks or for other wireless networks (851712)	2,736	2.0	-36.8
3 (1)	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c., containing by weight 70% or more of petroleum oils or oils from bituminous minerals; not light oils and preparations (271019)	2,676	1.9	-63.0
4 (2)	Commodities not specified according to kind (999999)	2,559	1.9	-57.5
5 (5)	Petroleum oils and oils from bituminous minerals, not containing biodiesel, not crude, not waste oils; preparations n.e.c, containing by weight 70% or more of petroleum oils or oils from bituminous minerals; light oils and preparations (271012)	1,526	1.1	-56.6
6 (9)	Aeroplanes and other aircraft; of an unladen weight exceeding 15,000 kg (880240)	1,344	1.0	-26.0
7 (7)	Distilling or rectifying plant; not used for domestic purposes (841940)	1,328	1.0	-38.8
8 (6)	Vehicles; spark-ignition internal combustion reciprocating piston engine, cylinder capacity exceeding 1500 cc but not exceeding 3000 cc (870323)	1,172	0.8	-50.9
9 (17)	Diamonds; non-industrial, unworked or simply sawn, cleaved or bruted, but not mounted or set (710231)	1,170	0.8	15.6
10 (39)	Turbo-jets; of a thrust exceeding 25 kN (841112)	1,025	0.7	55.8

Source: UN Comtrade Database (importer data).

Figure 22: Top 10 LLDC traders, 2020

(Share of total LLDC trade)



Source: WTO Secretariat.

The COVID-19 pandemic affected the exports of LLDCs differently (see Figure 23). Of the 32 LDCs, 10 were even in position to increase their exports in 2020. Tajikistan led with an increase of 57 per cent on account of strong growth in gold exports, followed by Burkina Faso with 39 per cent (also mainly gold exports) and Ethiopia with 25 per cent (increases for leguminous vegetables and other agricultural products). The highest decreases were recorded for oil exporters: South Sudan, Chad and Azerbaijan, with drops of 43 per cent, 33 per cent and 30 per cent, respectively.

Export destinations of the LLDCs are rather concentrated (see Figure 24). In 2020, 81 per cent of LLDC merchandise exports went to the top ten partners (compared to 78 per cent in 2019). More than half of total exports went to the top three partners: the European Union (24 per cent); China (22 per cent); and the United Arab Emirates (7 per cent). Imports are similarly concentrated, with 81 per cent of LLDC imports originating from the top ten partners (compared to 77 per cent in 2019): the top three partners – China (21 per cent), the European Union (16 per cent) and the Russian Federation (16 per cent) – accounted for over 50 per cent of total imports in 2020.

Figure 23: Change in merchandise LLDC exports, 2020

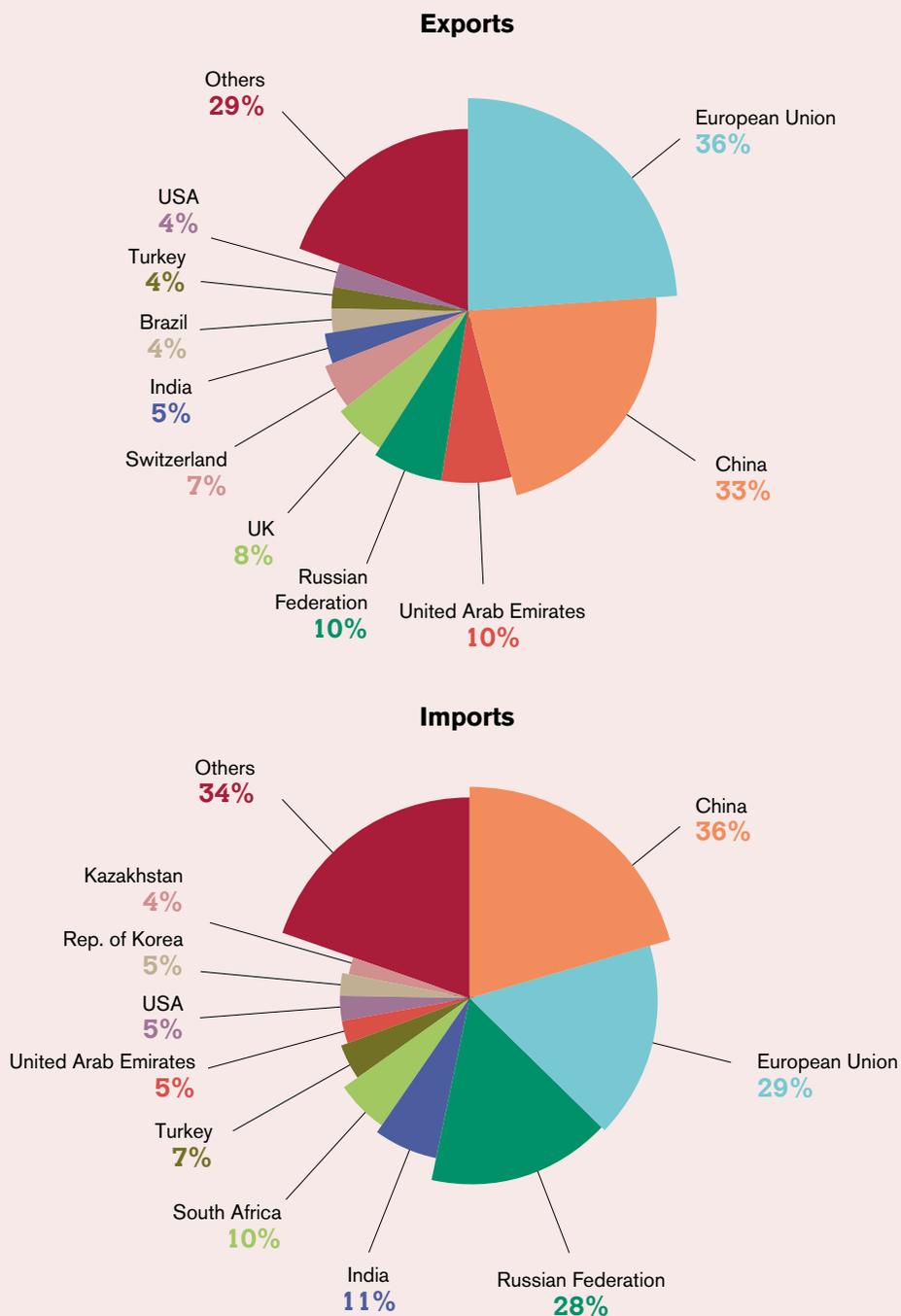
(Annual percentage change, LDCs in shading)



Source: WTO Secretariat.

Figure 24: Top 10 LLDC trading partners, 2020

(Share of total LLDC trade)



Source: UN Comtrade database (partner data).

Notes: Data for the United Arab Emirates are based on WTO estimates.

In the short-term view, estimates indicate a clear recovery of LLDC merchandise exports in the first quarter of 2021 (see Figure 25), reaching a year-on-year percentage change of 10 per cent for total merchandise exports. Exports of manufactured goods had already showed initial recovery during the fourth quarter of 2020 (+9 per cent), rising to 24 per cent in the first quarter of 2021. During the peak of the COVID-19 pandemic in the second quarter of 2020, total merchandise exports dropped by 32 per cent year-on-year, with exports of fuels and mining products affected the most (-46 per cent). Agricultural exports of LLDCs proved to be the most resilient product group, falling by only 9 per cent in the second quarter of 2020 and already increasing as early as the third quarter of 2020.

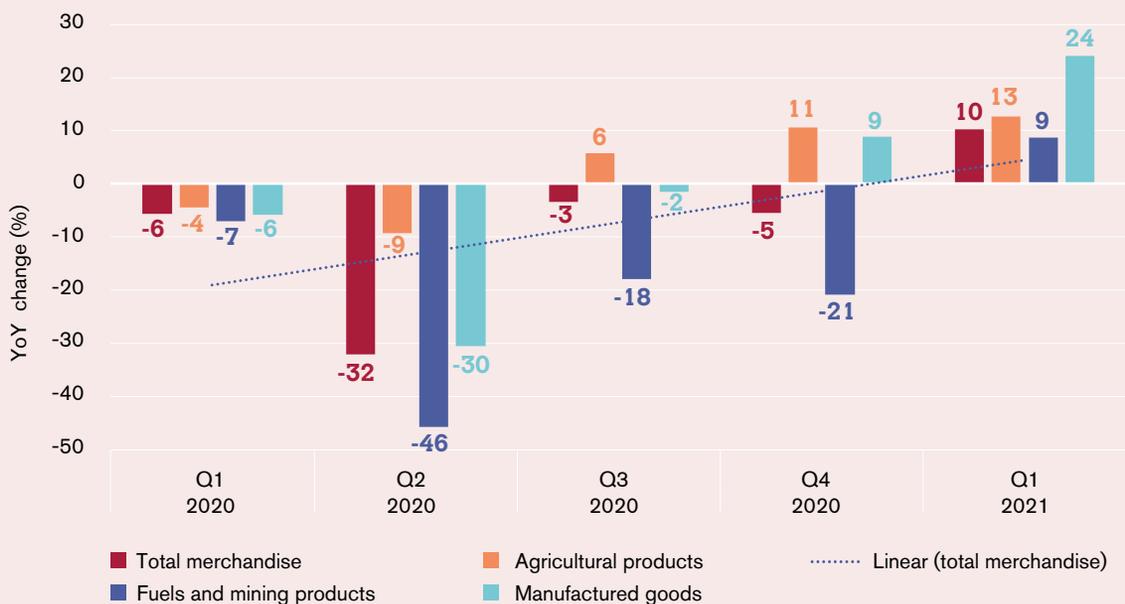
Trade in services and LLDC connectivity

Establishing reliable and effective connectivity to global markets is crucial for LLDCs to ease trade bottlenecks. This connectivity relies not only the infrastructure (i.e. roads, railways, ports, airports, freight terminals) in both LLDCs and their transit countries, but also on LLDC capability to supply efficient transport, logistics and ICT services. Given that the export structure of many LLDCs is highly concentrated in few minerals and agricultural products, LLDCs traditionally suffer from severe inland connectivity constrains which include (Arvis *et al.*, 2010):

- infrastructure shortages;
- inefficient freight transport and logistics services;

Figure 25: Merchandise LLDC exports, 2020Q1 - 2021Q1

(Year-on-year change, in per cent)



Source: WTO estimates based on reported import data of 98 economies in Trade Data Monitor.

- fragile transit arrangements;
- divergent standards (on vehicles, drivers and international transit);
- lack of digitalization (no tracking and tracing, manual practices/ checks at border crossings);
- cumbersome customs procedures.

These constraints produce compounded effects which translate into high cost and low efficiency of freight services and prevent the emergence of a reliable logistics industry. Arvis *et al.* (2010) find:

“Countries become trapped in vicious circles where inefficient regimes sustain low service quality (for example transport, customs broking); as a result, they sometimes turn to informal activities that in turn perpetuate unfriendly regimes ... The shipper (or any operator wishing to develop a logistics business) is therefore trapped in an equilibrium context in which a transit system is optimized for a certain type of trader and service operator, so that it cannot evolve toward a system compatible with the requirements of global logistics networks.”

Many of these constraints were exacerbated during the COVID-19 pandemic as countries worldwide impose border closures and travel restrictions in response to the pandemic.

Transport and logistics services

The road network conditions of LLDCs are below the world average despite the fact that road transport is the leading transport mode for most of them. Road transport is the dominant freight transport mode in LLDCs. A competitive



↑ A Kyrgyz customs official checks papers at the border to Kazakhstan.

trucking industry is critical to develop efficient road transport services. Road transport services generally underperform in LLDCs and are plagued by both poor road infrastructure and dilapidated vehicles and inadequate trade facilitation measures and numerous restrictions.

The Trans-African Highway is crucial for LLDC connectivity in Africa. However, the UN-OHRLLS reports that “it is characterized by missing links and poor maintenance in some key segments. The percentage of paved roads is still low in sub-Saharan Africa where most of the LLDCs are located – it was estimated to be about 13% in 2015” (UN-OHRLLS, 2018). Ongoing transport infrastructure projects in Africa are taking too long to address the needs of the LLDCs (UN-OHRLLS/UNECA, 2019).

ESCAP (2020b) reports that 60 per cent of the roads in the Kyrgyz Republic, 54 per cent in Kazakhstan and 48 per cent in Tajikistan do not have asphalt or concrete cover. UN-OHRLLS (2018) also finds that:

- Many sections of the Asian Highway network that are below class III (minimum desirable standard) connect neighbouring countries.
 - 55 per cent of the Asian Highway Network in LLDCs is still at the standard of class III (38 per cent) or below class III (17 per cent).
 - The African railway network has very low density and is mostly in North Africa and Southern Africa.
 - 17 African countries are without railways, five of which are landlocked.
 - Railways face challenges such as inadequate maintenance, obsolete equipment and missing links.
- Efficient and cost-effective transport and logistics services help LLDCs to overcome geographical constraints. Such services consist of road and rail transport (marginally inland waterways), cargo consolidation and unconsolidation, cargo loading and unloading, customs clearance, warehousing and storage, and local distribution. In many LLDCs, centres of production and consumption are located more than 800 km away from the closest seaport. Long distances to centres of production and consumption translates into long supply chains with numerous links or points of interchange such as freight terminals, border crossings. Flaws

Road transport in LLDCs

Road transport is the dominant freight mode in LLDCs. It is critical to have a competitive trucking industry in LLDCs to develop efficient road transport services.

In Central Asia, World Bank and UN-OHRLLS (2014) find that “regional freight transportation is a mixture of independent, small truck operations, and larger scale oligopolistic activities” due to lack of “proper regulation of entry”.

In Africa, road freight transport is fragmented and cartelized with high rates and high profits. In Western and Central Africa, “the lack of transparency and strict criteria for access to the profession has led to the emergence of a few dominant intermediaries”, which “allocate freight volumes to truckers while pocketing a large commission and leaving the operators physically moving the cargo at barely break even rates” (World Bank/UN-OHRLLS, 2014).

In many LLDCs, and in particular those in Africa, cross-border road transport remains under the quantity-based freight allocation system whereby bilateral agreements restrict the number of vehicles allowed to provide services between the two countries. Kunaka *et al.* (2013) find that: “The restrictions are administered through permits designed to ensure equity of participation in the transport markets of the respective countries, and to limit the activities of other, third-country, foreign carriers.”

Such quantitative system entails heavy institutional, procedural and documentational costs which are borne by road transport operators. Kunaka *et al.* (2013) report that bilateral road transport agreements involving LLDCs in Southern Africa rank the most restrictive as they include “heavily sanctioned restrictive provisions”, such as:

- prohibition of several types of traffic;
- double approval procedures for permits and quotas;
- route restrictions;
- no roadside support services;
- exclusion of third-party carriers.

The TIR Convention and the CMR

UNECE has developed multiple normative instruments on transport that facilitate connectivity, and which are proving particularly useful during the COVID-19 pandemic. The TIR Convention¹ establishes an international transit system to harmonize border-crossing procedures and to create efficient and secure international transit of goods (UNECE, 2018).

Under the TIR² procedure, goods travel across borders with minimum interference from customs, cutting transport times by nearly 60 per cent and costs by up to 40 per cent.³ This can help to maintain or resume trade flows safely and securely.

UNECE and the IRU have been working on an electronic version of the TIR system (eTIR) to create a paperless and contactless operating environment while also continuing to ensure the safe and secure transport of goods. In response to the COVID-19 pandemic, the implementation of eTIR has been accelerated to assist in countering the spread of the virus. Indeed, eTIR can reduce virus transmission risks by minimizing physical contact between customs officers and truck drivers. Of the parties to the TIR Convention, several have initiated or even finalized the connection of their domestic customs systems with the eTIR international system, hosted by UNECE; and 48 have expressed their interest in entering discussions and initiating projects to connect. Furthermore, a proof of concept has been prepared in order to ensure smooth connectivity between eTIR and the New Common Transit System, established by the European Union.

The Convention on the Contract for the International Carriage of Goods by Road (CMR) and its two protocols are also legal instruments which facilitate international road transport by providing a contractual framework (consignment note) for liability in the event of loss of goods or delay. CMR⁴ paper consignment notes have been used by senders and carriers since the 1950s; however, the move towards digitalization of systems, processes and documents has resulted in the introduction of electronic consignment notes under the Additional Protocol to the CMR (eCMR). All of the LLDCs who are members of UNECE are also parties to the CMR.⁵ In 2021, in the wake of the COVID-19 pandemic, the UNECE initiated several activities towards the expansion of eCMR, with the main objective of international road transport without borders.

1 The Customs Convention on the International Transport of Goods under cover of TIR Carnets covers 76 economies around the world to facilitate the movement of goods in international trade and to provide the security required by customs (UNECE, 2018).

2 Transports internationaux routiers.

3 See <https://www.iru.org/news-resources/newsroom/unece-and-iru-partner-highlight-benefits-tir-during-covid-19>.

4 Abbreviation of the French title of the convention.

5 SLLDC members are Armenia, Azerbaijan, Kazakhstan, the Kyrgyz Republic, the Republic of Moldova, North Macedonia, Tajikistan, Turkmenistan and Uzbekistan.

in each link (e.g. multiple lengthy clearance in transit, unreliable services) cause trade bottlenecks, disrupting connectivity.

Modern logistics relies more and more on the provision of multimodal transport services under a single contract so as to ensure track-and-trace of shipment and door to door delivery. In this context, logistics intermediaries (e.g. freight forwarders), third-party logistics

providers as well as operators of freight terminals and warehouses play a critical role in moving goods and organizing supply chains.

Transit corridors are being adopted increasingly across the world, in large part to cater for LLDCs so that they may have faster access to the sea through transit countries (UN-OHRLLS, 2020). LLDCs thus urgently need to develop their modern logistics capacity

Rail transport in LLDCs

Rail transport plays a particularly important role in Central Asia, especially for long distance transportation. In most Central Asian countries, over 40 per cent of freight (in tonne-kilometres) is transported by rail. Particularly in Kazakhstan, 61.9 per cent of freight turnover in 2018 was transported by rail.

Central Asia benefits from an extensive, and relatively well-maintained legacy rail network from the former Soviet Union. Yet, the level of development in rail transport varies across Central Asia. Turkmenistan completed the consolidation of its national railway network into a single system in 2006, Uzbekistan only did so in 2018, while Tajikistan and the Kyrgyz Republic still do not have a fully-fledged national railway network.

Recent years have seen substantial progress achieved in raising the quality of rail transportation links in Central Asia (Rastogi and Arvis, 2014). Compared to Central Asia, railways in LLDCs of Africa and other regions are shorter and have yet to be connected to the transit corridors.

and overcome the fragmentation of supply chains and to ease trade bottlenecks. Currently, only a limited number of international logistics companies are present in LLDCs who are able to integrate services over long distances and track and trace cargo across several territories and borders. Arvis *et al.* (2010) note that low quality of freight forwarding services “hampers transit efficiency” to the extent that supply chains cannot be effectively organized. Rastogi and Arvis (2014) find that in Central Asia:

“Until very recently, the design of supply chains has been developed country by country, with, on the one hand, a strong focus on control rather than trade facilitation, and, on the other hand, the protection of local services (brokers and truckers).
...

“... Such a poor state of the logistics industry serves as a major constraint to developing the role of Central Asia as a land bridge, as well as a major source of fragmentation of supply chains going through the regions of China, Kazakhstan, and Russia. It is a barrier to partnerships with international companies that can

help connect the countries along the Silk Route.”

Most LLDCs underperformed in indicators on the level of logistics services. The World Bank finds that LLDCs are characterized by a higher number of documents, a higher cost per container and a longer period of time required to export or import, compared to coastal transit countries.² In particular, the score for Africa is the lowest: it takes five times longer to comply with border procedures compared to in Europe and Central Asia (excluding high-income countries), which translates into shipment costs three to four times higher.

Further, there is growing evidence that the relationship between LLDCs and coastal and transit countries is mutually beneficial. Transit trade is a key facilitator of economic transformation and regional trade, and can contribute to the growth of employment, incomes and tax revenues in transit countries. Furthermore, transit trade encourages growth across the various subsectors of the transport and logistics service industry, and generates pressure for the country

Maritime transport through transit countries

Ports located in coastal transit countries are gateways connecting LLDCs with global markets. Their performance has significant impact on the connectivity and economic growth of LLDCs. Initial port delays usually exacerbate LLDC's disadvantages due to the multiple lengthy clearance systems on most transit corridors. Ports in Africa generally require improved infrastructure and better governance. Five of the bottom ten ports ranked according to their performance (as measured by average port hours weighted by the size of vessels) are in Africa (UNCTAD, 2020). Underperforming ports in transit countries thus push transport and logistics costs in LLDCs even higher.

The absence of any emerging hub port in West Africa aggravates connectivity constraints of LLDCs in the region. Raballand *et al.* (2012) find that, "With the exception of Durban, cargo dwell times – the amount of time cargo spends in the port – averages about 20 days in African ports, compared with 3 to 4 days in most other international ports." They show that "long dwell times are in the interest of certain public and private actors in the system" and that:

"importers use the ports to store their goods; in Douala, for instance, storage in the port is the cheapest option for up to 22 days. Customs brokers, meanwhile have little incentive to move the goods because they can pass on the costs of delay to the importers. Worse still, when the domestic market is a monopoly, the downstream producer has an incentive to keep the cargo dwell times long, as a way of deterring entry of other producers. The net result is inordinately long dwell times, ineffective interventions such as building berths or privatizing ports, and globally uncompetitive industries in African countries."

to improve its trade facilitation which benefits the wider economy. In Tanzania, not only has the cost, insurance and freight (CIF) value of transit trade increased enormously, from under US\$ 3 billion in 2007 to about US\$ 15 billion in 2015, some analysts consider transit trade to be the third largest source of foreign

exchange after gold and tourism receipts in Tanzania.³ Conversely, countries which see their transit trade shrink, owing to trade and border policies or even conflict, can see higher transport prices and reduced frequency of maritime shipping schedules due to reduced cargo volumes.

World Bank Logistics Performance Index

The World Bank Logistics Performance Index (LPI) provides an international benchmark for comparing logistics performance and supply chain connectivity, based on the evaluation in six dimensions:

- customs efficiency;
- infrastructure efficiency;
- ease and affordability of arranging international shipments;
- competence of the local logistics industry;
- ability to track and trace international shipments;
- timeliness of shipments in reaching destination.

Overall, the LPI score of LLDCs has been poor, lower than that of coastal transit countries, and no LLDC has ever ranked in top 50.

ICT connectivity

Affordable and efficient ICT services are key to enhancing digital connectivity and easing the trade bottlenecks resulting from a lack of access to the sea. ICT reduces trade costs and makes it easier to connect to international markets and raising levels of productivity across sectors of the economy. Broadband internet in particular can help LLDCs to leapfrog in not only trade but also education and health (ITU, 2018). In a report on the economic impact of broadband in LLDCs, LDCs and SIDS, the International Telecommunication Union (ITU) and UN-OHRLLS find that a 10 per cent increase in mobile broadband penetration generates a 2.5-2.8 per cent increase in GDP per capita (ITU/UN-OHRLLS, 2019).

Although ICT infrastructure in LLDCs has expanded and become more accessible, LLDCs continue to rank low in a number of key ICT indicators:

- quality and affordability;
- IT skills limitations;
- reliable electricity supply;
- quality of the regulatory framework.

The ITU finds that countries that have put in place policy environments following best regulatory practices, including through regulations promoting competition and foreign investment, have had more success in achieving market growth and in driving ICT services use and uptake (ITU, 2017). Studies show that markets characterized by more intense competition have seen greater price decreases and improved services; others have linked ICT liberalization to higher GDP growth rates as well as higher productivity of companies in other sectors (OECD/WTO, 2017).

Furthermore, some studies find that higher services trade restrictiveness in ICT services are associated with lower penetration rates for fixed, mobile and broadband internet.⁴

General Agreement on Trade in Services (GATS) commitments on market access, non-discrimination and regulatory matters can help to encourage competition and investment, including by promoting greater predictability and transparency. A number of LLDCs, especially those having gone through the WTO accession process, have taken significant commitments in the ICT sector. Of the 14 LLDCs that have GATS commitments on ICT services, 10 have been through the accession process. However, a high proportion of LLDCs that are WTO Members (12 out of 26) have not undertaken any commitments in the ICT services sector. Eleven LLDCs have undertaken additional commitments on regulatory principles contained in the Reference Paper distributed in 1996 by a Negotiating Group on Basic Telecommunications.

“ 10 per cent increase in mobile broadband generates a 2.5-2.8 per cent increase in GDP per capita.

↓ A farmer stay connects to a mobile Network in Niger.



The EIF in Bhutan

In Bhutan, the EIF is working with the government to build an efficient and dynamic ICT ecosystem for trade development by:

- accelerating access to ICT for goods and services;
- improving data availability;
- facilitating the sharing of information;
- enhancing business opportunities through improved e-platforms.

The project is creating a government data exchange platform to ensure seamless information sharing between government agencies. An online investment portal¹ facilitates increased investment, making information on requirements for both domestic and foreign investment easily available, with the project also supporting an online one stop trade information portal containing trade-related data and information for businesses, individuals and government agencies.

 <https://bhutan.eregulations.org>.

COVID-19, LLDC connectivity and tourism

The COVID-19 pandemic has further exposed LLDC connectivity constraints and associated trade bottlenecks at border crossing and in transit countries. In emergency situations, governments need to take coordinated action to ease bottlenecks and to keep trade flowing smoothly, especially along transit corridors, which are particularly important for LLDCs.

On the other hand, the COVID-19 crisis presents an opportunity for LLDCs and their neighbours to enhance the use of digital technologies which would reduce transport costs and border-crossing times along transit corridors. Therefore, it is important to increase investment in transport and ICT infrastructure in LLDCs and to enable digital solutions for cross-border freight operations, customs clearance and border administration.

COVID-19 has highlighted the critical role transport and logistics services have in enhancing connectivity and organizing supply chains. In addition to investment in transport and ICT infrastructure, the development of a modern logistics industry also requires the effective implementation of trade facilitation and a regulatory framework which promotes market access and competition. Similarly, encouraging competition in all-cargo and passenger air transport services, as well as in air cargo handling services, may contribute to increased aviation efficiency and connectivity.

The effects of the COVID-19 have been especially devastating on LLDCs dependent on tourism. However, assistance such as Aid for Trade can help these countries to revive the sector. Tourism policies, including economic stimulus programmes, need to focus on mitigating the pandemic's impact.

Case study: Digitalizing border processes in Kazakhstan

Border closures and measures to combat the COVID-19 pandemic have caused additional procedural delays and trade bottlenecks, which have led to reductions in economic activity.

During lockdown, government agencies switched to rendering public services remotely, including the automation of customs and tax administration through the introduction of the ASTANA-1 system. This timely decision mitigated the effects of the pandemic by:

- facilitating the cross-border movement of relief and essential supplies;
- supporting the economy;
- sustaining supply chain continuity;
- protecting the public.

The ASTANA-1 system includes:

1. End-to-end complete electronic processing of information to streamline border processes (e.g. electronic declarations and notifications, electronic pre-arrival information).
2. Improved balance between trade facilitation and control:
 - Integration of specialized equipment to receive and process results of technical controls (e.g. automatic number plate recognition, weighbridges, X-ray and radiation equipment, surveillance cameras and images of transport crossing borders);
 - Improved coordination with government agencies and other border agencies and with regard to exchanging information and facilitating interventions (e.g. SPS controls);
 - Increased effectiveness of customs controls by applying risk management techniques at different stages (e.g. pre-arrival stage, upon arrival).
3. Automatic exchange of information at national and international levels:
 - national railway (Kazakhstan Temir Zholy);
 - International Road Transport Union (e.g. TIR-EPD, SAFETIR);
 - Eurasian Economic Union members (both incoming and outgoing).
4. Assisting traders for easy compliance of legal requirements:
 - Mobile phone and email alerts and notifications about the status of documents during transit;
 - Notification of mandatory documents to be presented upon arrival (application of NTMs) and possible interventions to be performed by other government agencies.
5. Allowing better monitoring and supervision of customs procedures to minimize fraud and to protect financial and economic interests (system of automatic notification and alerts).

A continuing shift toward ecotourism – a fast-growing industry focused on conservation and local job creation – may give an additional boost to the industry post-pandemic.

Cancellations of flights and airport closures have decimated air transport services, which in turn have caused trade bottlenecks to form elsewhere. The International Air Transport Association reported a staggering 80 per cent fall in the number of flights globally in April 2020 (compared to 2019); and total revenue passenger kilometres fell by 53 per cent in July 2021 compared to July 2019.⁵

As passenger planes transport about half of all air cargo, the collapse in passenger flights has had a significant impact on air-cargo capacity (see Figure 26). Although capacity has recovered since the lowest point of the pandemic, partially offset by the expanded

use of freighter aircraft and of idle passenger aircraft for all-cargo operations, it was still down 10.3 per cent in July 2021 compared to pre-COVID times.⁶

Simultaneously, global cargo demand (measured in cargo tonne-kilometres) was up 8.6 per cent compared to July 2019. Limited operations at factories, quarantined transport crews and a lack of capacity in other modes of transport have caused trade bottlenecks to form and has increased the time it takes to mean ship goods. Businesses have come to cherish the speed provided by air freight. With levels of inventories comparatively low, shippers are increasingly turning to air cargo to respond to surges in seasonal consumer demand. Although air-freight rates are still higher than maritime ones, the steep rise in container shipping fares has boosted the relative attractiveness of air-freight transport.⁷

Figure 26: Fall in international passenger and cargo flights in LLDCs, 2019-2020

(In per cent, LDCs in shading)



Source: ICAO.

Note: No data available for Eswatini and Lesotho.

E-commerce: spanning the digital divide in LLDCs

According to the United Nations Conference on Trade and Development (UNCTAD), online retail sales as a share of total retail sales rose from 16 per cent in 2019 to 19 per cent in 2020 for selected large economies (UNCTAD, 2021). Retail e-commerce sales worldwide in 2020 are estimated at US\$ 4.28 trillion and are projected to grow to US\$ 4.89 trillion in 2021.⁸ These staggering figures show the promise that increased participation in e-commerce holds for LLDCs.

E-commerce allows businesses, big and small, to reach a broader network of buyers, access the most competitive suppliers, tap into global markets and participate in global value chains. This is very similar to the benefits of trade facilitation, which have had such a positive impact on LLDCs. But transforming this potential into reality is not automatic.

The digital divide still poses a big barrier for LLDCs' ability to engage in e-commerce. These challenges need to be addressed for e-commerce to be a real force for inclusion. A lack of action in tackling these trade bottlenecks risks widening gaps and presenting an even bigger obstacle for LLDCs to pursue their growth and development goals. For example, 27.4 per cent of population in LLDCs were using the internet in 2019. Although this is four times higher than ten years ago, it is well below the share for developing countries (44.4 per cent) or the world (51.4 per cent).

Similar trends are found in mobile network penetration: 74.9 per cent of the population in LLDCs were

covered by at least a 3G network in 2020 (compared to 49.8 per cent in 2015). In comparison, the corresponding share was 92.2 per cent in developing countries, 93.1 per cent for the world, 76.2 per cent for LDCs and 85.7 per cent for SIDS (ITU, 2020). Gaps in digital connectivity in LLDCs are more pronounced in rural areas, with 63.7 per cent of the population covered by a 3G mobile network. For developing countries, mobile network penetration in rural areas is 84.5 per cent. In LLDCs, 16.3 per cent of households had access to the internet in 2019, compared to 28.8 per cent for developing countries. The internet gender gap is also larger in LLDCs than in developing countries. In 2019, the percentage of the male population using the internet was 33 per cent but only 21 per cent for the female population.

Despite the increasing availability of the internet and widespread mobile coverage, billions of people in LLDCs remain offline. A major challenge to the development of e-commerce in LLDCs is access to affordable ICT, as well as connectivity issues. The SDGs also recognize the important role that ICT can play for economic development. In particular, SDG 9.C urges the international community to work to significantly increase access to ICT and strive to provide universal and affordable access to the internet in LDCs.

Ensuring affordable and high-quality internet access requires efforts to promote competition and encourage investment, especially in the rural areas of LLDCs. Trade policies play an important role in creating the right environment for e-commerce to flourish in LLDCs.



Reducing barriers to services and enhancing openness to foreign direct investment, when under the appropriate regulatory regime, can help to create competitive services markets, including essential elements such as financial services, transport, business and computer services, and postal and distribution services.

Connectivity and ICT access are necessary conditions, but they are not sufficient for people in LLDCs to benefit from the greater opportunities offered by e-commerce. Economic and regulatory bottlenecks can still hinder their broader uptake of e-commerce. Underdeveloped financial and online payment systems are an obvious obstacle to online transactions. Developing IT skills is important to ensure that businesses can use e-commerce to improve and expand their activities. In complex and sensitive issues such as consumer protection, privacy, internet neutrality and data flows, the lack of clear legal and regulatory frameworks can undermine confidence in online trade and erode consumer trust.

The digital divide can be viewed as a market access divide, with the cost of digital connections the trade cost. Businesses and consumers that are offline are locked out of the opportunities offered by the rapidly expanding market for goods and services purchased or supplied online. While larger companies are often in a position to overcome most of these obstacles, smaller companies in LLDCs might not have sufficient resources or skills to do so, especially when trading across borders. It is important to look at how new technologies and training in such technologies can facilitate the participation of MSMEs in the global economy.

WTO disciplines, such as those in GATS, already play an important role in supporting enhanced internet access by promoting competitiveness in ICT markets. As e-commerce becomes increasingly important to business activities, further attention to them, both at the national level and at the WTO, can help to develop an environment conducive to the sustainable growth of e-commerce. WTO jurisprudence has also made it clear that that commitments made in the context of GATS and GATT are technologically neutral, which means that WTO obligations also cover delivery by electronic means.

When it comes to electronic goods themselves, WTO members have put in place a moratorium on customs duties on electronic transmissions. However, this moratorium is not permanent and is currently under review. The WTO's TRIPS Agreement also offers international protection of creative goods that are traded online and fosters innovation.

The WTO's Information Technology Agreement (ITA) commits its participants to eliminate tariffs on a number of IT products and makes an important contribution to trade by facilitating the diffusion of technologies around the world. Its expansion in 2015 eliminates import tariffs on an additional 201 new-generation ICT products, including multi-component integrated circuits, touch screens, GPS navigation equipment, telecommunications satellites, portable interactive electronic education devices, and medical equipment. With 95.4 per cent of the 82 participants' import duties on these products fully eliminated by the end of 2019, this will contribute to the affordability and broader dissemination of ICT

“E-commerce allows businesses, big and small, to reach a broader network of buyers, access the most competitive suppliers, tap into global markets and participate in global value chains.

products globally. However, the only LLDC participants currently in the ITA are Afghanistan, Kazakhstan, the Kyrgyz Republic, the Republic of Moldova and Tajikistan.

At the WTO, there has also been growing interest in discussing e-commerce issues in more detail, including the work under the Work Programme on Electronic Commerce as well as the Joint Statement Initiative on E-commerce, launched at WTO's 11th Ministerial Conference. This initiative, which is open to all WTO members, now includes 86 participants representing 90 per cent of global trade, including seven LLDCs. In the negotiations on trade and e-commerce, the group has discussed the unique challenges faced by LLDCs and the assistance they need. Increased LLDC engagement in the Work Programme on Electronic Commerce and the Joint Statement Initiative enables LLDCs to voice their views heard and to make clear their development assistance priorities to narrow the digital gap.

The international community has a unique opportunity to ensure that the digital revolution, which has been accelerated by the COVID-19 pandemic, is truly inclusive. Cross-border digital trade can deliver on its development promise if its challenges are addressed in a concerted manner and its benefits are more equitably distributed. By reducing the digital gap in LLDCs and opening up new trade opportunities for all, e-commerce can ease trade bottlenecks and help to make trade more inclusive. The WTO's efforts contribute to a more universal, rules-based, open, non-discriminatory and equitable multilateral trading system that works for inclusive economic growth,

structural economic transformation and sustainable development.

Trade costs

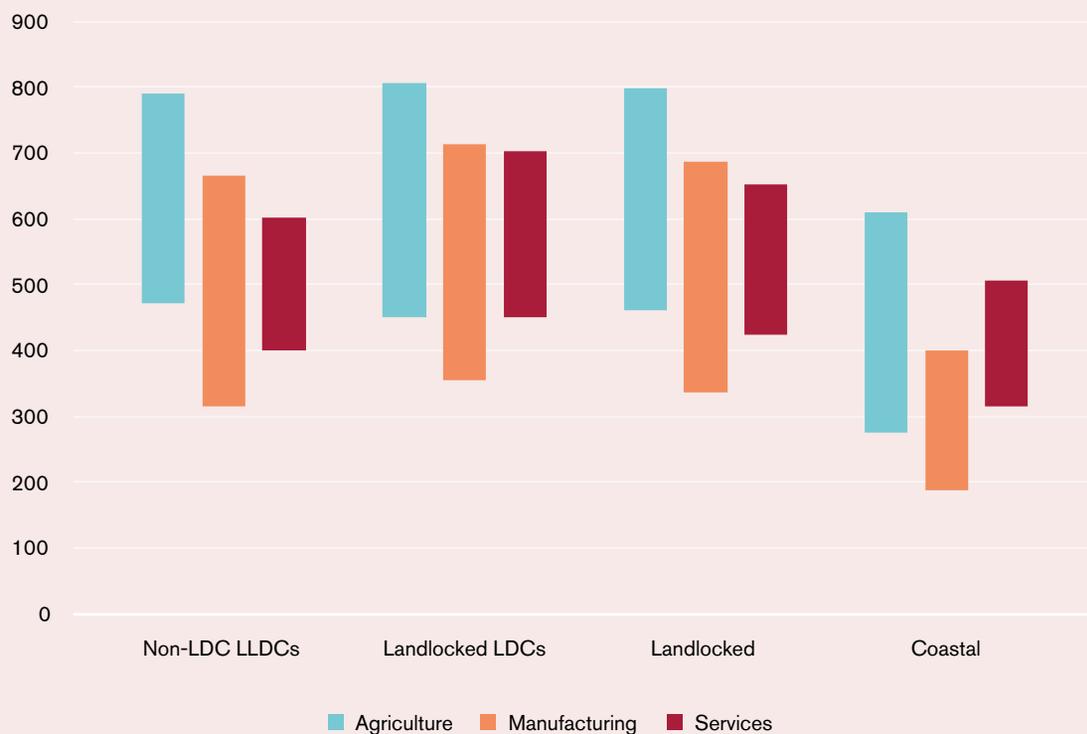
According to WTO estimates for 2017, trade costs LLDCs face on manufactures are on average the equivalent of a 540 per cent tariff and are about 1.4 times higher than the trade costs for coastal developing countries (on average equivalent to a 386 per cent tariff). As shown in Figure 27, trade costs are on average higher for LLDCs than for landlocked countries and lowest for coastal countries.

Which factors are driving total trade cost differences across countries? Based on a subsample of high-income landlocked economies,⁹ the WTO estimates that trade policy barriers are a major factor in explaining differences in trade costs for landlocked countries (whether or not they trade with another landlocked economy). As shown in Figure 28, trade policy accounts for approximately as much as transport and travel costs.

“Trade costs LLDCs face are the equivalent of a 540 per cent tariff.”

↓ Aktau seaport, Kazakhstan.



Figure 27: Trade cost by sector, 2017*(Ad valorem equivalent)*

Source: WTO calculations based on data from the Global Trade Analysis Project for 122 economies.

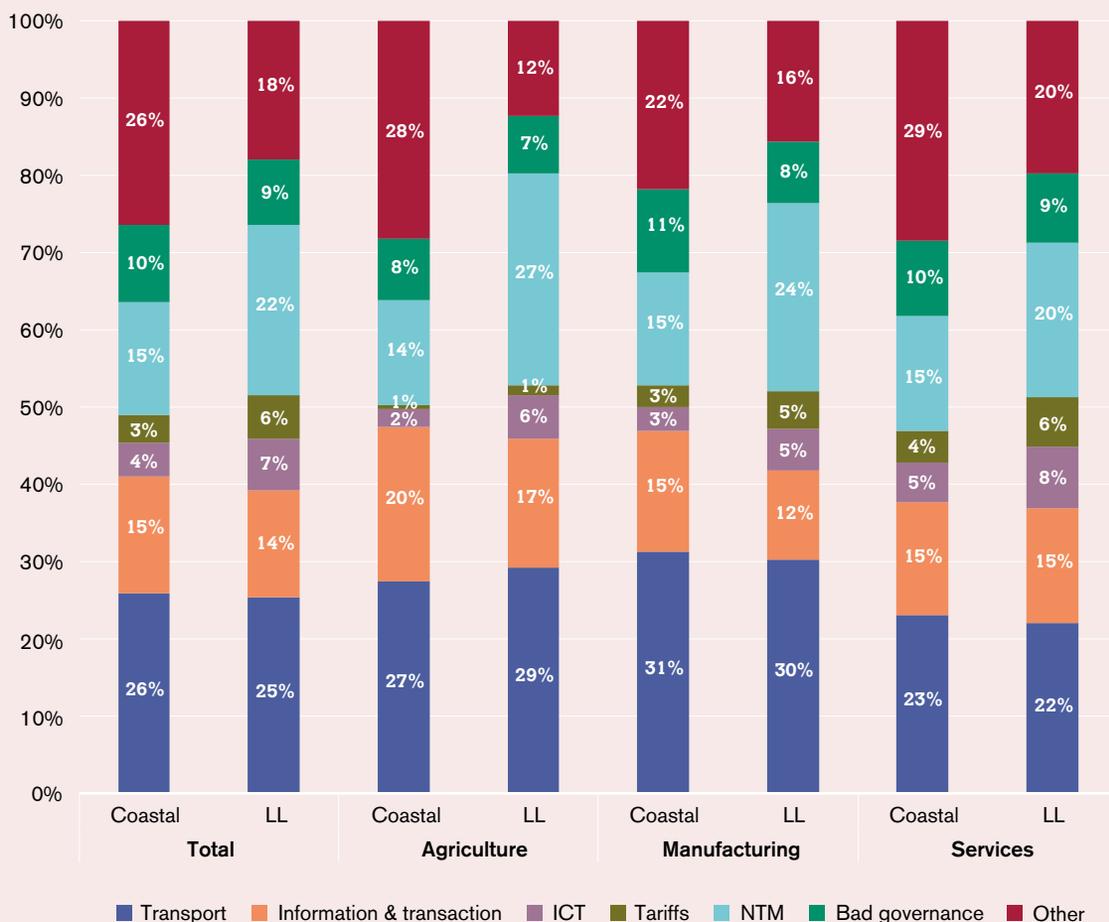
Note: Landlocked indicates that at least one trade partner is a landlocked economy.

Non-tariff measures (NTMs) appear the most important driver of trade costs differences. NTMs alone account for around one quarter of differences in trade costs for landlocked economies and 15 per cent for coastal. The importance of NTMs for landlock economies is particularly high in agriculture, accounting for 27 per cent of trade cost difference. This speaks to the importance of addressing SPS concerns as a source of trade costs.¹⁰

Trade bottlenecks in LLDCs from maritime disruptions

COVID-induced supply and demand shocks generated trade bottlenecks to the container supply chain, which resulted in a shortage of empty containers in LLDCs. Port congestions have disrupted the supply chain to LLDCs, which rely on ports as gateways to global markets. Since April 2021, nearly 5000 Mongolian shipping containers have

Figure 28: Factors explaining differences in trade costs, coastal versus landlocked
 (Shapley decomposition of trade costs by main source of trade costs)



Source: WTO Secretariat.

Note: Bilateral directional trade costs at the sector level in 2016 are decomposed into six categories (plus a residual category, Other). See Rubino and Sebti (2021) for further details on variables and respective sources.

Transport: distance, common border, distance weighted exporter/importer infrastructure.

Information & transaction: common language, colonial relationship, common religion, previously same country, common legal origin, migrants from exporter to importer and vice versa.

ICT: mobile and broadband coverage.

Tariffs: tariffs imposed by the importer.

NTM: regional trade agreement, European Union, common currency, (average) Services Trade Restrictiveness Index heterogeneity, (average) SPS (only in the agriculture industry), (average) TBT.

Bad governance: distance weighted corruption of exporter/importer and difference in corruption.

been stalled at some ports in China, disrupting not only China-Mongolia trade, but trade between Mongolia and third countries. An ironic effect of the congestion in Chinese ports is that it has forced some companies to send empty containers by road and rail through the LLDCs in Central Asia on their way to European ports. This means containers that are so needed by exporters in Mongolia, Kazakhstan and the Kyrgyz Republic may be going through these countries empty. These congestions have further impaired the fragile container supply in LLDCs, as shipping lines and container owners typically do not allow containers to travel to the destination because of the risk of either delay in the return or total loss of the container. As a

result, LLDC cargo is often unloaded and reloaded in ports or along borders, leading to delays, increased costs and a risk of deterioration of the goods.

The high freight rates undoubtedly affect the import price of goods, forcing many shippers, particularly those with relatively low-value goods or limited financial reserves, to retreat from overseas markets. MSMEs have been very much affected which particularly affects LLDCs, where they prevail. LLDCs are already paying more for shipping owing to small markets, trade imbalances, poor port performance in transit countries and longer distances to foreign markets. They now encounter higher international transport costs.

“ Nearly 5000 Mongolian shipping containers have been stalled at some ports in China.

COVID-19 and rising shipping rates: What are the factors in play and what can be done?

In recognition of the immense import and export challenges faced by developing countries, the WTO held an information session on 10 November 2021. Participants included WTO members and observers as well as representatives from the shipping industry. Panellists highlighted potential short- and long-term policy measures that could be taken to ease the trade bottlenecks faced by developing countries, including LLDCs:

- better collaboration and coordination between trading partners, including shipping companies;
- WTO technical assistance on implementation of trade facilitation measures;
- enhanced trade facilitation, including the digitalization of customs procedures;
- digital infrastructure along every level of transport operations, from finance and accounting to container tracking;
- embracing market opening in transport and logistics services;
- increasing inter-regional links;
- flexibility to adopt emergency measures with regard to customs fees and charges;
- renewed focus on improving global supply chains.

Contributors noted the impact of climate change on future shipping costs. In particular, the need to upgrade fleets to make them climate-friendly. There is also significant pressure to decarbonize maritime shipping and to eliminate fuel subsidies. However, alternative fuel sources are difficult to acquire, much less those of green origin. Panellists spoke of a need for cooperation between key players, as patchwork solutions will lead to slow adoption. Moreover, commercial mechanisms that incorporate finance and new business models are necessary in order to make this transition sustainable.

Baltic Dry Index

The Baltic Dry Index takes into account 23 different shipping routes carrying commodities, including coal, iron ore and grains, and is deemed a benchmark for the price of moving major raw materials by sea.

It has reached its highest since 2009, which means transport costs have increased across the board, as over 80 per cent of world trade is carried by sea.

This has meant a 7-fold increase in shipping cost for Mongolia and a staggering 10-fold increase for Zambia.

Rules of origin and preference utilization

The specific connectivity challenges faced by LLDCs arising from their geographical location, distance from international markets and relative high transit costs affect the ability of LLDCs to fully utilize trade preferences, be they reciprocal (bilateral or regional trade agreements) or non-reciprocal preferences (unilateral preferential schemes). In fact, to claim a trade preference, companies must in practice comply with three origin requirements:

- compliance with criteria defining the general or product-specific origin;
- proof of origin (i.e. a certificate);
- direct consignment of goods to the preference-granting country.

This latter requirement is particularly challenging for companies in LLDCs. It hampers their ability to fully utilize trade preferences offered to them and further squeezes trade bottlenecks in LLDCs. Utilization rates (or the inverse “underutilization” rates) are thus a useful tool to examine the ability of companies to claim preferential market access.

High rates of preference utilization indicate that exporters successfully meet origin criteria and can use

trade preferences to benefit from lower or zero import tariffs. However, low utilization rates indicate that exports must pay most-favoured-nation (MFN) duties despite being eligible for preferences. This could be because companies are unable to meet the minimum origin requirements set in such preferential trade agreements (PTAs). Perhaps the costs of complying with origin criteria may be too high or certificates of origin too costly to obtain, which can be particularly acute for companies in LLDCs.

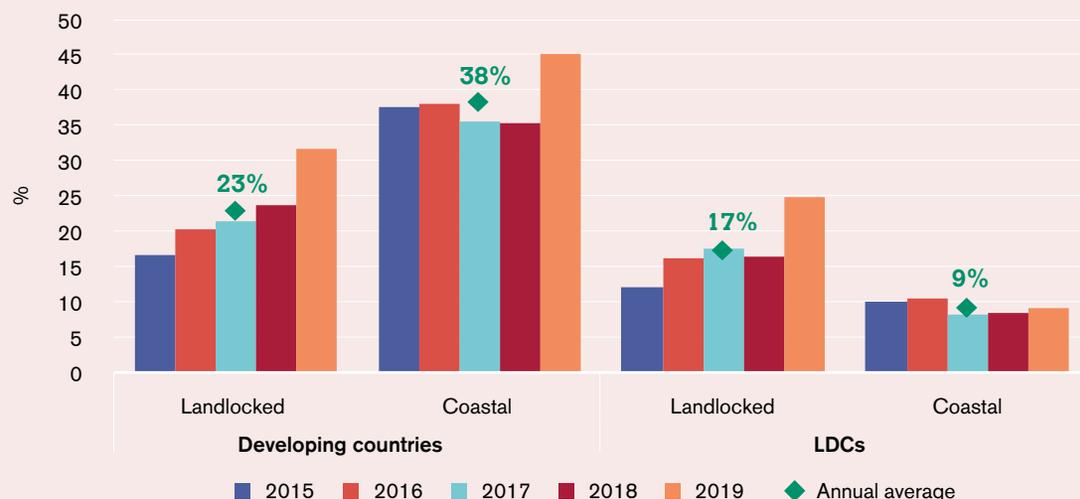
Data notified to the WTO¹¹ do not allow to differentiate imports which are consigned directly from those that are consigned indirectly. Hence, it is not possible to directly verify the hypothesis that businesses in landlocked countries face higher challenges in meeting direct consignment obligations. An indirect

Underutilization rates

They are the percentage of trade under MFN preferences despite being eligible for at least one preference under any scheme. They show missed opportunities to save import duties because some preferences were available.

See WTO documents G/RO/W/179 and G/RO/W/204.

Figure 29: Underutilization rates of developing countries and LDCs, landlocked versus coastal



Source: WTO Integrated Database.

Notes: Underutilization shares are calculated based on import values. All non-reciprocal and reciprocal trade preferences for which data are available with the WTO Secretariat are examined (i.e. trade preferences offered by Australia, Canada, Chile, the European Union, Japan, the Republic of Korea, Norway, Switzerland, Chinese Taipei, Thailand, Turkey and the United States). The analysis could gain accuracy with more countries notifying detailed import statistics to the WTO (see WTO document G/RO/W/163/Rev.9 for more detailed information).

approach would be to verify whether there are differences in preference utilization between landlocked preference-beneficiary countries and other beneficiary coastal countries (see Figure 29).

Companies exporting in both groups should have a similar ability to utilize trade preferences if direct consignment obligations had no impact. However, higher underutilization rates for landlocked countries could be an indication that direct consignment obligations (and hence challenges relating to connectivity) affect the ability of exporters to utilize preferences.

Figure 29 compares underutilization rates for landlocked and non-landlocked preference beneficiaries.

Lower underutilization rates indicate that most trade is effectively benefiting from preferences.

Conversely, higher underutilization rates indicate that most trade is not using the trade preferences that are available. Landlocked LDCs clearly face greater challenges in utilizing trade preferences. In 2019, the average underutilization rate for landlocked LDCs was about three times higher (25 per cent) than for coastal LDCs (9 per cent). This pattern might be an indication that direct consignment obligations are harder to be met by companies based in landlocked LDCs (see WTO document G/RO/W/187).

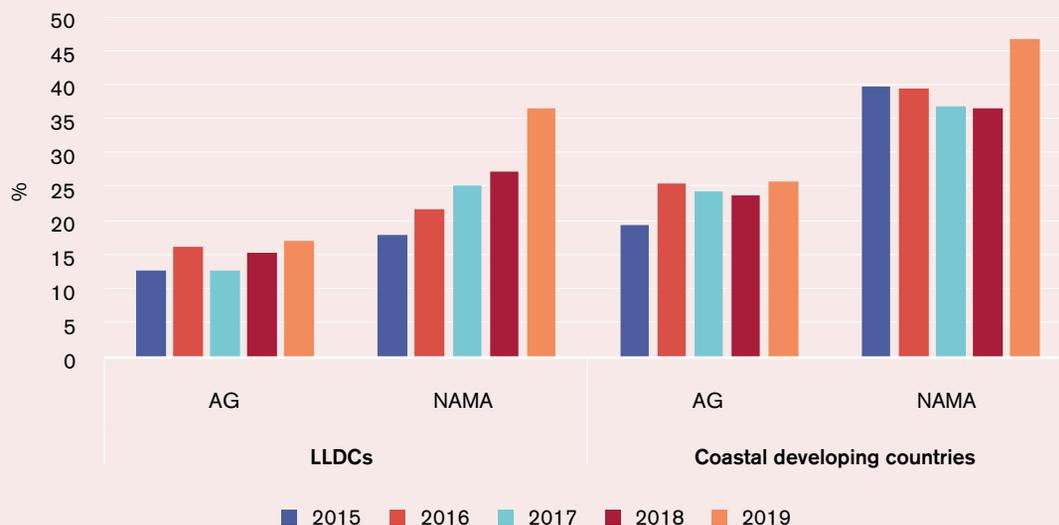
However, the opposite observation can be made when all preference beneficiary developing countries

are considered together: it seems that beneficiary LLDCs better utilize trade preferences when compared to beneficiary developing coastal countries (23 per cent versus 38 per cent). However, the ability of LLDCs to utilize trade preferences has deteriorated over recent years (i.e. underutilization rates have increased) while the ability to utilize trade preferences has remained stable in other beneficiary countries. This could be an indication that direct consignment obligations (and connectivity challenges) play a more moderate role for businesses in developing countries; or it could also be an indication that factors such as stringency of rules of origin, preferential margins or that a greater variety and greater complexity of

exports explain differences in the utilization of trade preferences.

To narrow down the analysis, underutilization rates can be calculated for two subgroups of products: agricultural (AG) and non-agricultural products (NAMA) (see Figure 30). All beneficiary countries are better able to utilize trade preferences for agricultural products (irrespective of being landlocked or not). In fact, LLDCs have a slightly better ability to utilize trade preferences, which might be because agricultural products tend to be subject to simpler rules of origin than non-agricultural products. However, it may also simply reflect the variety of products, exporters and preferential markets and be a

Figure 30: Underutilization rates, agricultural (AG) versus non-agricultural (NAMA) products



Source: WTO Secretariat.

Notes: Underutilization shares are calculated based on import values. All non-reciprocal and reciprocal trade preferences for which data are available with the WTO Secretariat are examined (i.e. trade preferences offered by Australia, Canada, Chile, the European Union, Japan, the Republic of Korea, Norway, Switzerland, Chinese Taipei, Thailand, Turkey and the United States). The analysis could gain accuracy with more countries notifying detailed import statistics to the WTO (see WTO document G/RO/W/163/Rev.9 for more detailed information).

function of the data used (significant preferential markets are not covered in Figure 30). Nevertheless, the utilization of trade preferences has diminished over recent years for LLDCs, particularly for non-agricultural goods.

A more detailed analysis would be needed to identify specific patterns in the utilization of trade preferences by LLDCs. However, the connectivity challenges they face do seem to affect their ability to comply with direct consignment rules and to utilize trade preferences more fully. This is especially acute for landlocked LDCs. Improving the ability of companies in LLDCs to fully seize preferential market access opportunities would require improving their ability to connect with international markets, in addition to building LLDC capacity to comply with rules of origin and cheaper transportation and more flexible transportation rules to reflect specific challenges, easing trade bottlenecks would businesses in LLDCs to fully seize preferential market access opportunities by improving their ability to connect with international markets.

Endnotes

- 1 <https://www.un.org/ohrrls/events/impact-covid-19-landlocked-developing-countries-llcds-and-implications-resilient-recovery>.
- 2 See <https://www.doingbusiness.org/en/data/exploretopics/trading-across-borders>.
- 3 See <https://www.theigc.org/blog/assessing-economic-benefits-transit-trade-tanzania>.
- 4 See Mattoo *et al.* (2006), Eschenbach and Hoekman (2006), Balchin *et al.* (2016) and Nordås and Rouzet (2016).
- 5 See <https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthly-analysis--july-2021>.
- 6 See <https://www.iata.org/en/pressroom/2021-releases/2021-08-31-01>.
- 7 See <https://www.iata.org/en/iata-repository/publications/economic-reports/air-freight-monthly-analysis---july-2021>.
- 8 See <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales>.
- 9 See WTO (2021b) for details on the methodology used for the WTO estimations of trade costs and Rubinova and Sebti (2021) for their decomposition. The landlocked sample included Austria, the Czech Republic, Hungary, Slovakia and Switzerland. The coastal sample included Australia, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, India, Indonesia, Italy, Japan, the Republic of Korea, Latvia, Lithuania, Malta, Mexico, the Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, Slovenia, Spain, Sweden, Chinese Taipei, Turkey, the United Kingdom and the United States of America.
- 10 See Egger *et al.* (2021), Huettner and Sunder (2012), Rubinova and Sebti (2021) and WTO (2021b).
- 11 The collection of data on preference utilization arises from the PTA Transparency Mechanism, adopted in 2010 (WTO document WT/L/806). The WTO Integrated Database stores the data; relevant documents, list of beneficiaries and key statistics are provided in the PTA information portal (<http://ptadb.wto.org>).

↓ Maseru bridge is the main border between Lesotho and South Africa.

