



WORLD TRADE
ORGANIZATION

Easing Trade Bottlenecks in Landlocked Developing Countries



The World Trade Organization (WTO) is the international body dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible, with a level playing field for all its members.

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Foreword by Director-General Ngozi Okonjo-Iweala

Among the outreach activities I have undertaken since becoming Director-General have been very detailed and substantive meetings with landlocked developing countries (LLDCs). They have told me how the particular barriers they face due to a lack of territorial access to the sea and isolation from the world's largest markets restrict the free flow of trade and impose constraints on their socio-economic development. The COVID-19 pandemic has been especially damaging to their fragile economies, which has brought new challenges such as container shortages, high shipping costs and the closure of borders to stop the spread of COVID-19. In response, I requested the WTO Secretariat to conduct this study on the logistical constraints impacting the trade performance of LLDCs and how trade bottlenecks could be reduced. I am very happy that the study has been produced in such a short time.

This report is being launched during the WTO's 12th Ministerial Conference, which is a crucial milestone in the longer process of reforming and modernizing the WTO. Launching this report at this time provides an excellent opportunity to increase awareness of the problems that LLDCs face and show the world that the WTO is fit-for-purpose and can deliver on today's problems – especially for its most vulnerable members – by providing certainty and predictability to cross-border trade in a changing global economy.

The study confirms the LLDC concerns that they face very high trade costs. On average, it is almost double that which is faced by coastal countries, and is largely a result of transport costs and non-tariff measures. Goods transit therefore must remain a focus for our efforts. Implementing the WTO's Trade Facilitation Agreement (TFA), which calls for simplifying border procedures, will help to reduce trade-related friction such as *ad hoc* restrictions and non-tariff barriers that drive high trade costs. The WTO-led Aid for Trade initiative is a priority in the Vienna Programme of Action (VPoA) and our work in this area has resulted in increased aid flows targeted at the needs that have been expressed by the LLDCs, such as connectivity and capacity building for implementation of the TFA. We are already a year and a half after the onset of the COVID-19 pandemic and a clearer picture of its effects on the



global economy and the LLDCs is starting to emerge. LLDCs are in a weaker position with regard to access to vaccines and the financial capacity to adopt stimulus measures. The multilateral community needs to step forward to make up for these shortcomings. The WTO is deeply committed to the implementation of the VPoA through its work with the Trade Facilitation Agreement Facility (TFAF), the Enhanced Integrated Framework (EIF) and the Standards Trade and Development Facility (STDF). Since its adoption, significant progress has been made in trade-related priority areas highlighted in the VPoA. Sadly, the COVID-19 pandemic has adversely affected, and in some cases even reversed, progress made. I remain committed to coordinating actions with the United Nations and further strengthening our cooperation in implementing the VPoA, where the WTO has a clear and important role to play.

The study also reveals that we must go beyond TFA implementation at the national level. LLDCs and the transit countries through which they trade must form meaningful and enduring partnerships. Accelerating the joint development and improvement of key infrastructure and interoperable customs systems by LLDCs and transit countries is a win-win proposition for all involved: better port access and lower trade costs for LLDCs, and more jobs and scale-related reductions in shipping costs for transit countries. Transit corridors such as the Northern Corridor in Africa, which connects Burundi, the eastern part of the Democratic Republic of the Congo, Rwanda, South Sudan and Uganda to the Kenyan port of Mombasa, show how these partnerships can be real game changers. There is the opportunity for landlocked countries to redefine themselves as landlinking, providing important overground transit infrastructure for neighbouring countries.

LLDCs are highly vulnerable to the impacts of climate change and have already started to feel its effects on their trade. Falling water levels in navigable rivers in Paraguay have reduced vessel capacity and driven up costs. Therefore, we need to build a multilateral trade system that is climate resilient – a system that promotes trade in the goods, services and technology needed for a low carbon future by accelerating a just transition to clean and affordable energy for all.

The trade in services and e-commerce areas have the potential to be less affected by the geographical challenges and represent an opportunity for significant growth. However, the lack of services diversification and dependence on international tourism and transport made LLDCs extremely vulnerable to the effects of COVID-19 because of restrictions placed on the movement of persons to fight the pandemic. Consequently, LLDCs suffered a 36 per cent decline in services exports in 2020 – sharper than in the rest of the world.

But it is not all bad news. There has been a pandemic-induced shift toward remote work, which has boosted computer services exports from various LLDCs, which grew more than in the rest of the world, helping to diversify their economies. Digital connectivity is a key means of easing the trade bottlenecks resulting from a lack of access to the sea, and e-commerce allows businesses to reach a broader network of buyers, access the most competitive suppliers, tap into global markets and participate in global value chains, much like increased trade facilitation. Narrowing the digital divide and improving information communications technology infrastructure would help to build on this trend.

Inclusive trade, which creates jobs and opportunities, promotes sustainability and reduces inequality, must continue to be a priority – and no one should be left behind. The international community must ensure that the gains from trade are being equally distributed, in particular to women, youth and small businesses. Supply chain bottlenecks and increased shipping costs may be temporary, but they are making access to international trade prohibitive for the small traders. We must deliver quick solutions if trade is to remain inclusive.

On a final note, I would like to thank the Development Division and all the other WTO divisions who worked on the study to make it truly collaborative. We hope it provides useful insights to assist trade analysts and policymakers, and most importantly LLDCs themselves.



Dr. Ngozi Okonjo-Iweala
Director-General

Key messages

- LLDCs should lead the discourse on transparency, through timely and detailed notifications, and even counter-notifications if required.

 - A more coordinated response to future pandemics is needed so that no country is left behind.

 - For resilient economic recovery, LLDCs need enhanced connectivity by digitalizing border processes, enhanced implementation of the TFA and targeted Aid for Trade support.

 - Implementation of the TFA is critical to guarantee transparent and predictable trade and will play a major role in supporting recovery and resilience in LLDC economies.

 - The development of transit corridors has produced tangible results for LLDCs, particularly in Africa, and should be encouraged and further supported by bilateral donors and regional development banks.

 - It is important for LLDCs and transit countries to adopt digital interconnected and interoperable systems to expedite the flow of goods at the border and during transportation.

 - LLDCs need support to tackle the challenges of a lack of human and financial resources, such as insufficient capacity or shortages of skilled and professional staff, to promote better understanding of the TFA and to increase its implementation.

 - Improving trade-related infrastructure should be a priority for Aid for Trade projects.

 - Trade Policy Reviews of LLDCs and transit countries should have increased focus on transit and transport infrastructure policies.
- To avoid disruptions in the export of products, it is essential for LLDCs to be informed of requirements established by transit countries that affect international trade.

 - LLDCs should actively participate in the standard-setting processes under the Codex, the OIE and the IPPC to ensure that the SPS standards developed meet their needs and that they are applied to goods in transit only where the goods present a risk.

 - The establishment of a facility modelled on the STDF could help LLDCs to develop the quality infrastructure necessary to meet international standards.

 - To encourage businesses in LLDCs to increase the use of preferences granted in bilateral and multilateral agreements and arrangements, direct transportation rules need to be more flexible and better reflect the connectivity challenges LLDCs face.

 - LLDCs should prioritize investment in industries and services that are less affected by a lack of access to the sea and a long distance to markets.

 - LLDCs must place connectivity and digital technology at the forefront of their policy priorities.

 - It is vital for LLDCs to continue to engage in current discussions at the WTO in the area of e-commerce to close the digital divide.

 - Greater coordination and information gathering from international logistic organizations and federations, in cooperation with multilateral organizations, are needed to keep trade accessible for LLDCs.

 - LLDCs can benefit from the close cooperation with – and the support offered by – non-governmental organizations and international agencies and organizations, which in turn benefit from greater inter-agency cooperation.

YOU ARE NOW
ENTERING
ZAMBIA

STOP

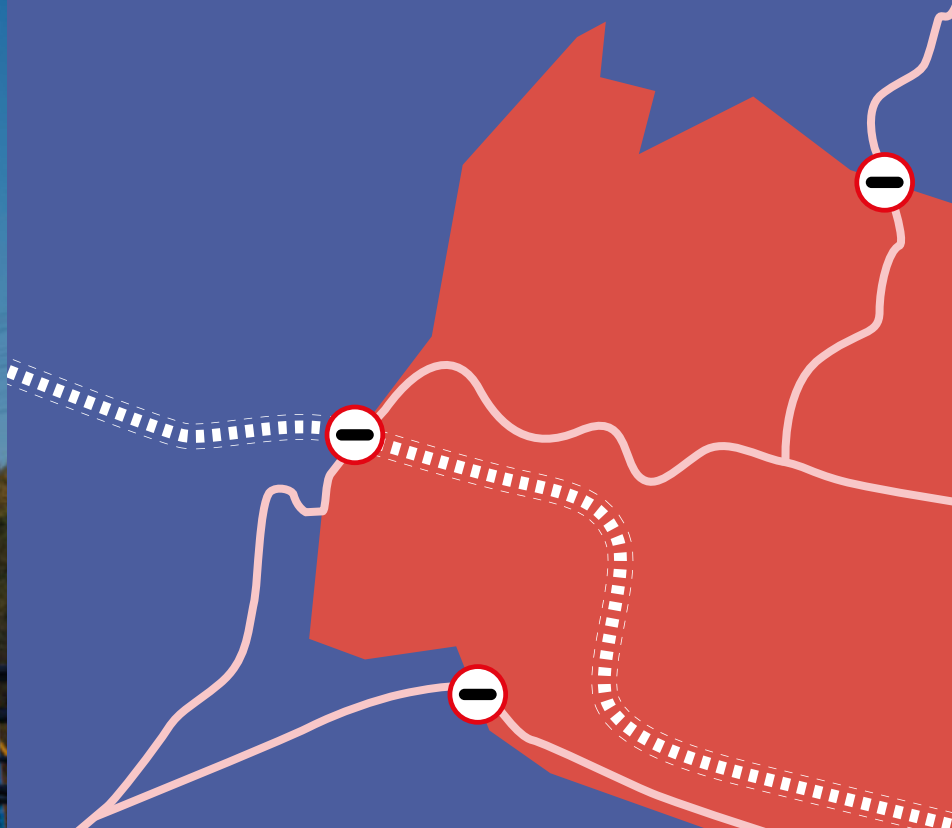


Customs checkpoint for road freight, Zambia/Zimbabwe.

1

Landlocked developing countries and trade bottlenecks

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Trade is critical to the economic growth of countries, which means facilitating trade is a priority for governments. Landlocked developing countries (LLDCs) are without direct territorial access to a sea or ocean, so ease of trade is linked to their survival (see Table 1). The unique challenges due to isolation from the world's largest markets and high transit costs impose additional constraints on socio-economic development in LLDCs – compounded by the devastating effect of the COVID-19 pandemic.

International trade plays an essential role in LLDCs economies, the value of which was 59 per cent of gross domestic product (GDP) in 2019. However, WTO data show that LLDC exports declined by 40 per cent between April 2019 and April 2020, which is almost twice the decline in global exports caused by the COVID-19 pandemic.

Even as world trade recovered towards the end of 2020, LLDC exports continued to decline by as much as 8 per cent, while global exports grew by 7 per cent. This trend in LLDC trade highlights the

importance of implementing the WTO's Trade Facilitation Agreement (TFA) in LLDCs to simplify, modernize and harmonize export and import processes. The COVID-19 pandemic has highlighted the importance of digital technologies. Without the digital infrastructure, however, LLDCs will not benefit from the potential gains of e-commerce. Undoubtedly, COVID-19 has compounded the challenges faced by LLDCs. It is therefore important to identify the specific trade bottlenecks LLDCs face and which are causing their trade to decline more sharply and for longer than the rest of the world.

Trade bottlenecks in LLDCs

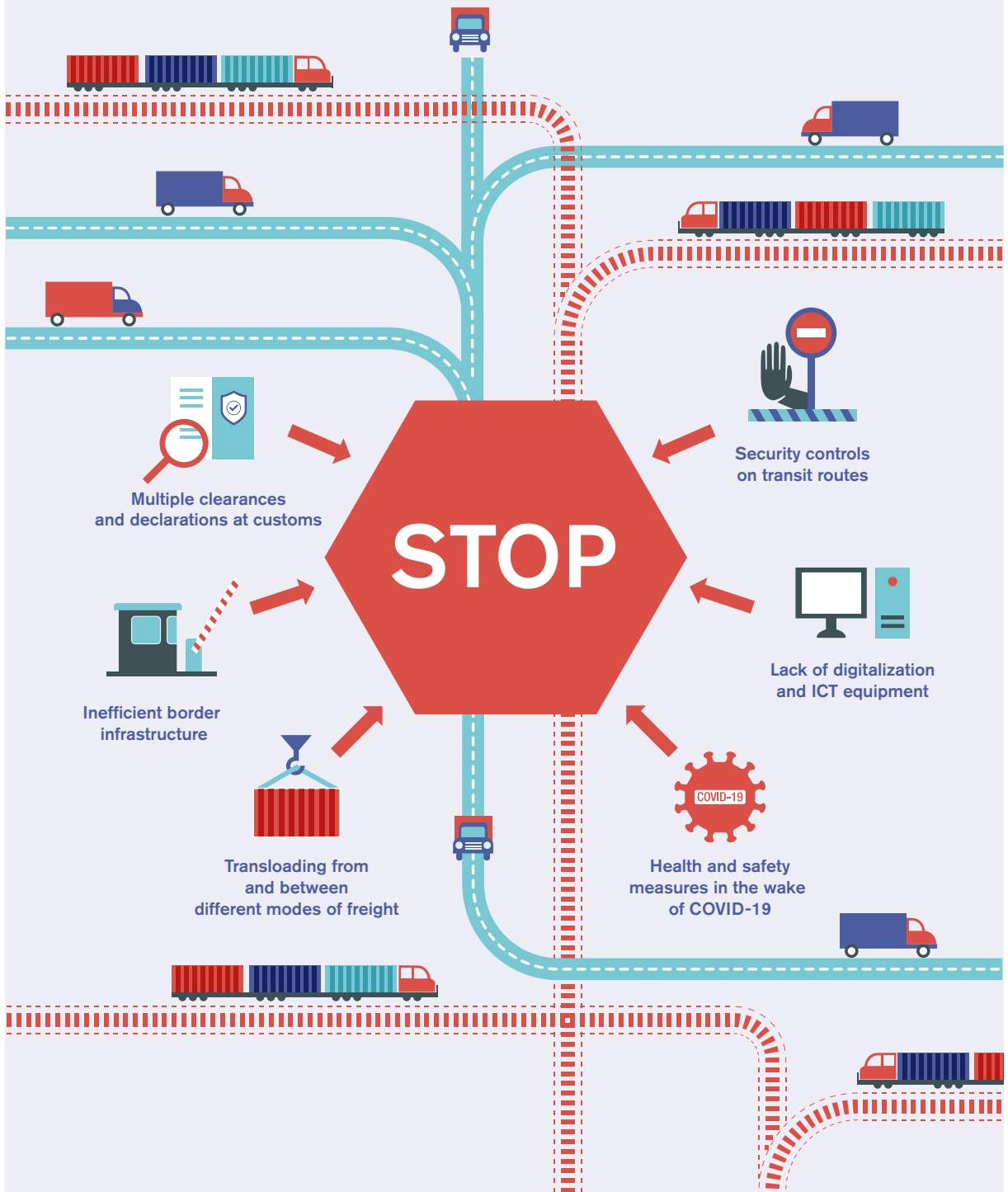
Higher trade costs for businesses in LLDCs result from the many challenges they face in trying to integrate into global supply chains, and the COVID-19 pandemic has magnified those challenges across a number of areas. The main trade bottlenecks identified (including examples), both at the border and within LLDCs, commonly include the following (see Figure 1):

Table 1: Landlocked developing countries

Africa		Asia	Commonwealth of Independent States	Europe	South America
Botswana	Lesotho*	Afghanistan*	Armenia	North Macedonia	Bolivia, Plurinational State of Paraguay
Burkina Faso*	Malawi*	<i>Bhutan*</i>	<i>Azerbaijan</i>		
Burundi*	Mali*	Lao People's Democratic Republic*	Kazakhstan		
Central African Republic*	Niger*	Mongolia	Kyrgyz Republic		
Chad*	Rwanda*	Nepal*	Moldova, Republic of		
Eswatini	<i>South Sudan*</i>		Tajikistan		
<i>Ethiopia*</i>	Uganda*		<i>Turkmenistan</i>		
	Zambia*		<i>Uzbekistan</i>		
	Zimbabwe				

Notes: Asterisks indicate least-developed country designation. Italics indicate WTO observer status.

Figure 1: The main trade bottlenecks



- a lack of coordination in the development and maintenance of transport infrastructure (e.g. inefficient border infrastructure);
- a lack standardization and harmonization (e.g. transloading from and between different modes of freight);
- a lack of border coordination and cooperation between customs and other border agencies and traders (e.g. unwarranted long waiting times at customs);
- burdensome documentary requirements and paper processing of documentation (e.g. multiple clearances and declarations at customs);
- a lack of human and financial resources (e.g. shortage of skilled staff to promote better understanding of the TFA);
- a lack of equipment and digital infrastructures (e.g. information communications technology (ICT) and laboratory equipment for the implementation of the TFA).

In response to a survey conducted by the WTO's Trade Facilitation Agreement Facility (TFAF) in cooperation with partner organizations on cross-border trade restrictions resulting from COVID-19, LLDC respondents reported the following:

- release and clearance of goods and freedom of transit processes had become harder;
- trade bottlenecks as a result of the closure of borders by neighbouring countries;
- restrictive measures imposed at borders;
- disruptions to the smooth flow of goods, as well as information and documentation at customs;
- delays in receiving cargo at customs, resulting in congestion at borders;



- slow process of customs cooperation at regional and local levels during the pandemic;
- a lack of harmony in how regulations are being applied by domestic agencies, especially COVID-19 measures;
- border posts interpret regulations differently and inconsistently, making it difficult for traders to access information;
- a lack of regional coordination of quarantine measures;
- instances of border posts refusing to accept digital copies of documents during the pandemic;
- uncertainty of which goods and services are deemed essential (including across transit corridors, where the classification of essential can differ from country to country).

↑ Local traders cross the border between the Plurinational State of Bolivia and Peru, in the town of Lajas.

LLDCs, including least-developed countries (LDCs) that are landlocked, highlighted how the pandemic magnified the existing challenges they face arising from a great digital divide among and within countries. A large portion

of their businesses have not digitalized and have had to close during the pandemic. Only a few domestic online business operators concentrated in major cities have been able to run their business smoothly due to insufficient health protective measures and disruption in domestic transportation and supply systems. Many businesses are located far from the border, so without a fully integrated domestic business structure (including an ICT system), it is not possible for the domestic supply chain to be fully operational and linked with cross-border trade.

LLDCs need to strengthen their infrastructure and connectivity with the world to reduce logistics and transport costs and to achieve greater commercial and economic activity for the benefit of the most vulnerable and affected sectors, such as women entrepreneurs, young people, micro, small and medium-sized enterprises (MSMEs) and agriculture. Located far from the border, improvements made at border points are often insufficient.

During the COVID-19 pandemic, solutions have been largely targeted towards facilitating bulk trade, yet challenges still persist for MSMEs and women traders. In a communication to the Committee on Trade Facilitation (WTO document G/TFA/W/53), LLDCs have called for the constructive cooperation of transit countries for the early and effective implementation of disciplines that will contribute to reducing transit time and costs, simplifying procedures and introducing greater certainty in cross-border trade.

LLDC exports

LLDCs are mostly commodity exporters (see Table 2). The export of commodities itself is not the main economic development hindrance for LLDCs, as other developing countries primarily export commodities as well. However, LLDCs exports are not as competitive due to higher transport costs. According to the United Nations Office of the High Representative for the Least

Table 2: Top 10 LLDC exports in 2020

Commodity description	Value (US\$ mn)	Share in total exports (%)
Oils; petroleum oils and oils obtained from bituminous minerals, crude	28,161	21.6
Petroleum gases and other gaseous hydrocarbons; in gaseous state, natural gas	10,341	7.9
Metals; gold, non-monetary, unwrought (but not powder)	9,750	7.5
Metals; gold, semi-manufactured	7,265	5.6
Copper; refined, unwrought, cathodes and sections of cathodes	4,664	3.6
Copper ores and concentrates	4,538	3.5
Copper; unrefined, copper anodes for electrolytic refining	4,133	3.2
Electrical energy	3,773	2.9
Diamonds; non-industrial, unworked or simply sawn, cleaved or bruted, but not mounted or set	2,463	1.9
Coal; bituminous, whether or not pulverised, but not agglomerated	2,273	1.7

Source: UN Comtrade Database (importer data).

Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), LLDCs on average pay more than double in transport costs than transit countries and experience longer times to send and receive merchandise from overseas markets.¹ These high transport costs discourage investors, impede economic growth and limit the capacity of LLDCs to achieve sustainable development.

Since LLDCs rely solely on transit countries for their external trade, they are subject to the quality of transport infrastructure, transit laws (i.e. insurance, licensing) and bureaucracy of their neighbours, who often are themselves developing countries.

Freedom of transit has always been part of the international trade architecture. Article V of the General Agreement on Tariffs and Trade (GATT) 1994 and Article 11 of the TFA makes provision to facilitate the freedom of transit for goods between WTO members. Although the freedom of transit provisions help to establish guidelines to facilitate LLDC trade, they are insufficient and would benefit from recognition of the special needs of LLDCs.

Trade bottlenecks in transit countries

The trade bottlenecks that stem from the layers of measures between LLDCs and transit countries include:

- multiple clearances and declaration at the ports;
- transloading from and between different modes of freight;
- security controls on transit routes;
- extended periods for chain of operations;
- inefficient border infrastructure;

- health safety measures during the COVID-19 pandemic.

Some of the trade bottlenecks can be addressed through the development of transit corridors, which can serve to enhance the efficiency of transit traffic through improved cooperation. Joint development and maintenance of transit infrastructure and harmonization of transport standards and border measures can reduce the time required to clear and move goods across borders (World Bank/UN-OHRLLS, 2014). Transit developing countries provided information to the WTO that although many of the challenges found during the pandemic were COVID-specific, they considered it notable that a number of trade facilitation challenges and policy reforms, had they been implemented before the pandemic struck, would likely have greatly lessened the shock, including:

- a lack of trade-related regulatory information being openly accessible digitally to the private sector;
- insufficient border agency coordination;
- pre-existing red tape and a bureaucratic culture of over-regulation;
- a lack of private sector coordination in providing structured advice to governments.

Efficient transit policies that facilitate trade are key to enhancing the competitiveness of LLDCs. However, restrictive measures to curb the spread of COVID-19 at its outset such as border closures, mandatory testing and quarantine, sanitization of trucks and the limiting the number of crew members on trucks have all increased transport costs and times

“High transport costs discourage investors, impede economic growth and limit the capacity of LLDCs to achieve sustainable development.”

for the flow of goods to and from LLDCs. This, of course, has also had a significant effect on the delivery of essential goods such as fuel, food and medical supplies.

In the area of trade facilitation, the creation of transit corridors which comprise a mix of soft infrastructure in the form of implementation of trade facilitation measures with hard transport and border-crossing

infrastructure has proven to be particularly effective in helping LLDCs trade. One such corridor frequently used as an example of best practices is the Northern Corridor, in Africa (see below).

Transit corridors have been effective at easing trade bottlenecks for LLDCs because they adopt a partnership model in which both LLDCs and transit countries

The Northern Corridor

The Northern Corridor is a multimodal trade route in Africa linking Burundi, Rwanda and Uganda and the eastern regions of the Democratic Republic of the Congo with the port of Mombasa, in Kenya. Since its launch in 2014, the Northern Corridor had reduced transit times from 284 hours in 2015 to only 90 hours in 2019.*

However, the effects of the COVID-19 pandemic increased transit times to 378 hours in January 2021, which marks a big setback in achieving the 45 hour target set for that section of the road.

*Time it takes a truck to go from the port of Mombasa to Busia, on the border with Uganda.



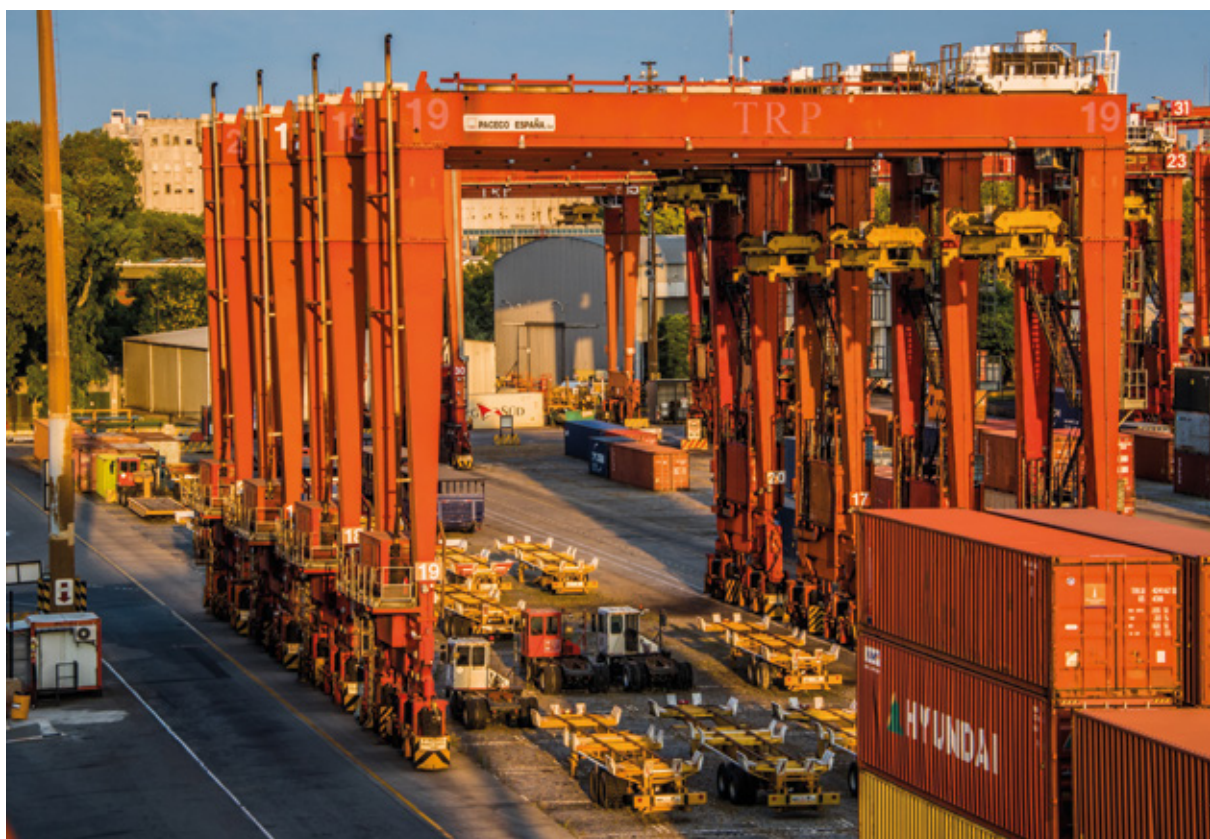
↑ Truck drivers wait near Busia to test for COVID-19 before entering Uganda.

share the benefits and shoulder responsibilities. One example of how coastal countries benefit from cargo to their ports is that it raises the volume of trade passing through them, thereby increasing their attractiveness for shipping lines, expanding the offer and driving costs down. To reap these benefits, however, coastal countries have the responsibility to improve the transit conditions for LLDCs to facilitate their access to their ports. In return, the LLDCs should understand and collaborate with regard to the constraints of transit countries. In many cases, transit operations are overloaded and do not always respect the rules of the road. This in turn leads to excessive controls along the transit route, leading to higher prices.

The importance of collaboration with regard to transit cannot be overstated, and the use of international legal instruments, such as the International Vehicle Weight Certificate provided in the International Convention on the Harmonization of Frontier Controls of Goods, can assist partners in setting standards and providing guidance on best practices. Moreover, a potential game changer to facilitate better trade flows and transit to and from LLDCs is interconnectivity and interoperability of transit procedures and systems. While the TFA addresses some of these issues at the national level through the implementation of electronic single-window processes, the interconnection of national

↓ A freight train carries goods to the town of Chaman on the Afghanistan and Pakistan border.





↑ The Port of Buenos Aires, in Argentina, a transit country.

systems and the electronic transfer of data between countries along a transit route will lead to significant improvements in reducing the time and cost of transit.

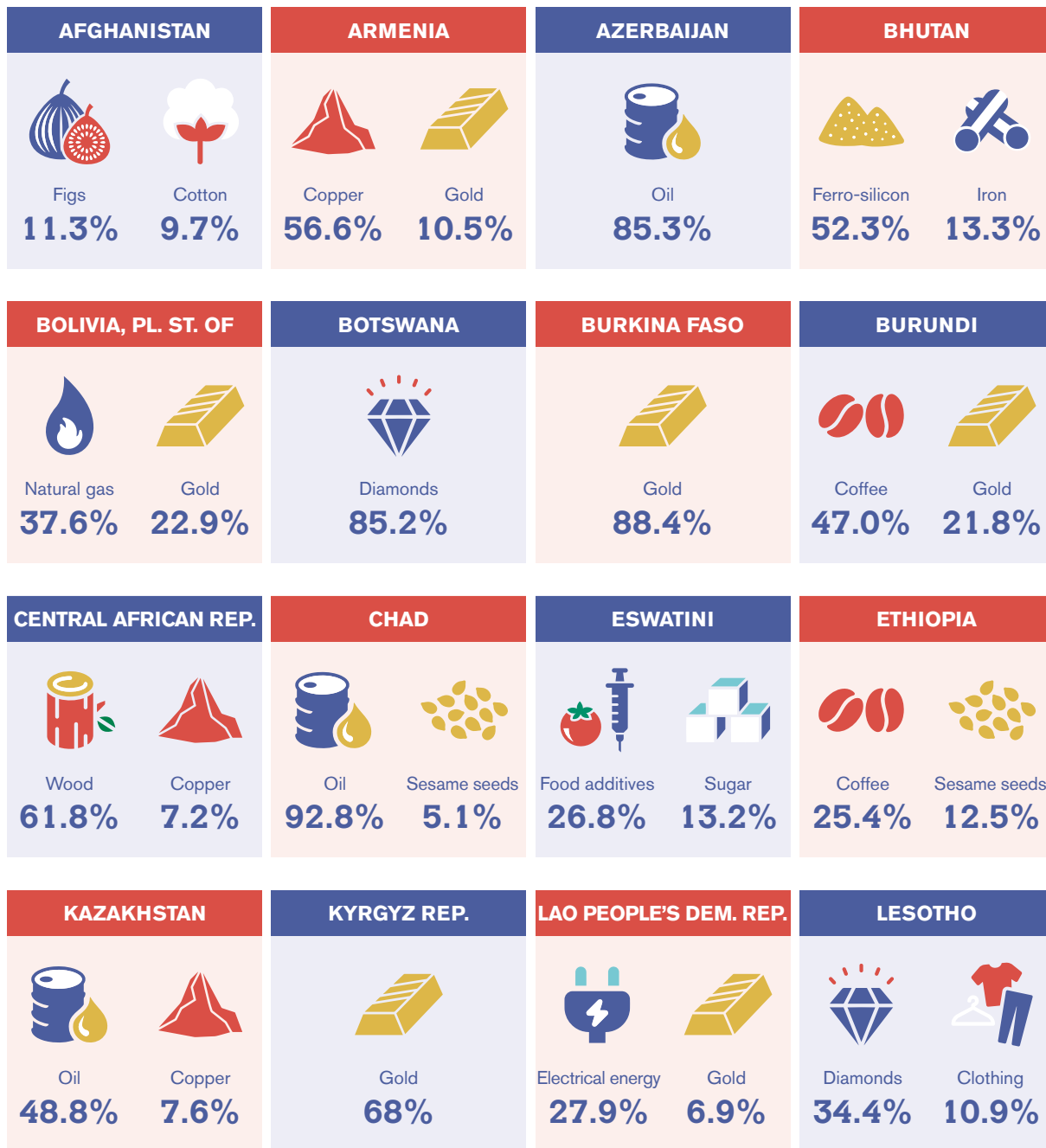
Most LLDCs are actually landlinking countries and thus are also transit countries themselves. As demonstrated in the example of the Northern Corridor, Uganda is not just an LLDC but also the main transit link for trade flowing to and from Burundi and Rwanda. This notion of landlinked countries is important to fully understand the development potential of transit, as well as the challenges.

“Transit corridors have been effective at easing trade bottlenecks because both LLDCs and transit countries share the benefits and shoulder responsibilities.”

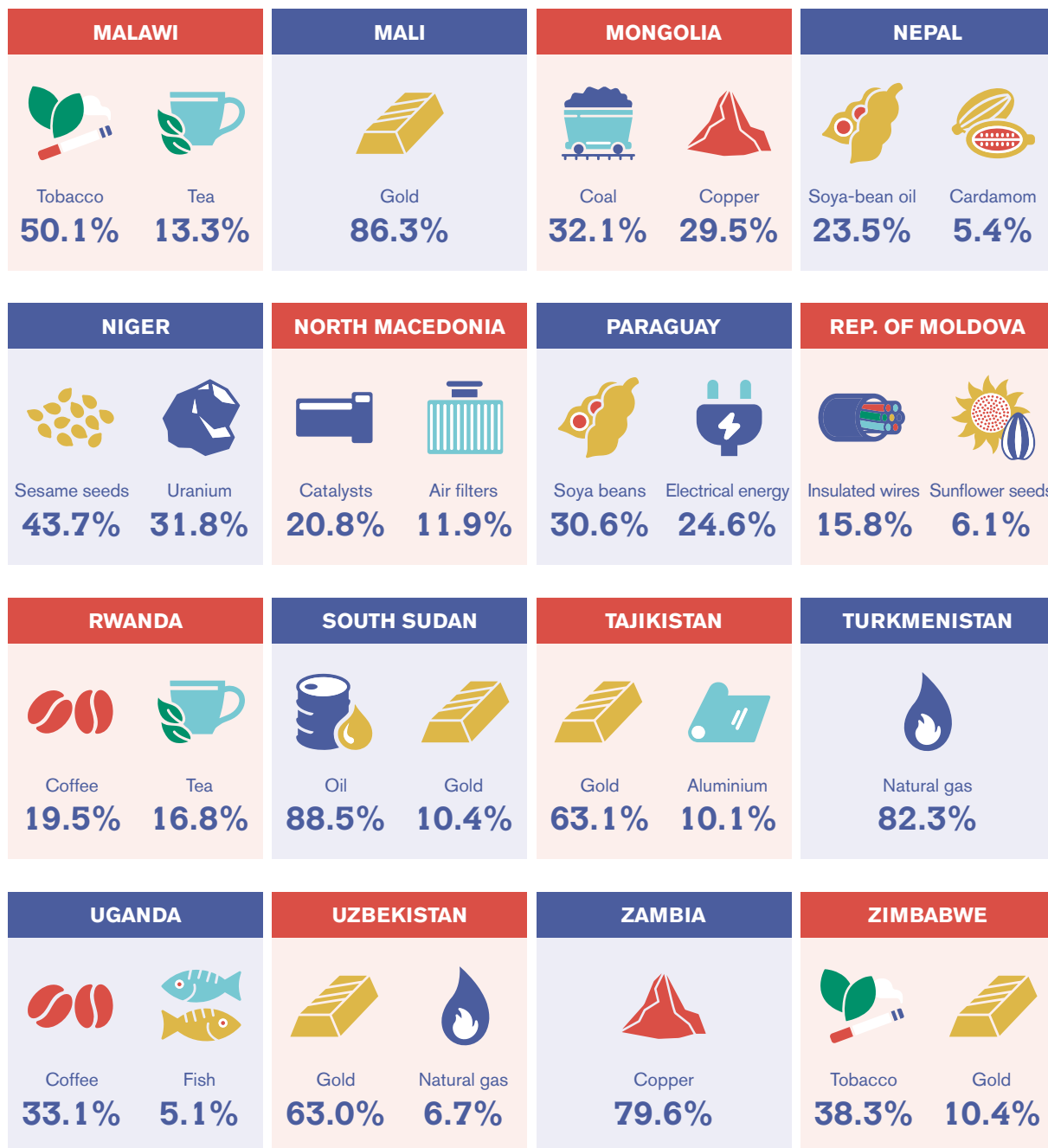
Endnote

- 1 See <https://www.un.org/ohrrls/content/about-landlocked-developing-countries>.

Figure 2: Top LLDC goods exports, 2020
(Percentage share)



Note: The dollar values of the top two exports as a percentage share of the country's total exports. Where the second largest export contributes less than a 5 per cent share, it is not listed.





A driver at the Zambian border takes precautions against COVID-19.



2

COVID-19 and border measures

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Countries have put in place a range of restrictions on the movement of persons across borders, especially for non-essential purposes, as well as export prohibitions on essential goods and food. There has been a proliferation of measures banning the export of essential medical supplies as well as food, paired with measures to facilitate the import of the same types of product (i.e. value added tax and import duty exemptions).

As the COVID-19 pandemic continues, border measures adjust, deepen and become increasingly complex. Although they serve to protect people, they risk triggering trade bottlenecks, leading to a reduction in trade and in access to essential goods. The risk is particularly significant to LLDCs, as their trade is extremely vulnerable to exogenous shocks. LLDCs rely heavily on overland transport and are deeply affected by border measures enforced by transit countries. The sudden shock of the pandemic has exposed cracks in transit corridors and a general absence of international coordination.

Trade bottlenecks and border closures

A significant and popular measure has been to close borders to passenger traffic. The World Tourism Organization (UNWTO) monitors travel restrictions and facilitation measures. It noted that, for the first time in history, all destinations worldwide in April 2020 had imposed travel restrictions, including the full closure of borders in many destinations (UNWTO, 2020; UNECE, 2021). These restrictions can be broadly classified as follows:

- total or partial border closures;
- total or partial flight suspensions;



- differentiated border closures (e.g. banning entry from specific countries);
- less restrictive measures (e.g. quarantine, self-isolation, visa restrictions).

↑ **Temporary closure of the border between Rwanda and the Democratic Republic of the Congo.**

These border closures often have unintended effects on trade bottlenecks, since many border closures also apply to traders and maritime, road and rail transport workers. Restrictions that directly affect their ability to transport goods is particularly relevant to LLDCs, as their services exports are highly concentrated across both travel receipts (40 per cent) and transport services (37 per cent). The lack of services diversification and dependence on international tourism and transport make LLDCs extremely vulnerable to the measures put in place to counteract the COVID-19 pandemic.

Other border closures and trade bottlenecks more specifically affect goods. The simplest and most common is export restrictions,

Case study: Border-crossing bottlenecks in Paraguay

At the beginning of 2020, most governments established policies to combat the spread of COVID-19, such as closing borders and adopting new border protocols. In Paraguay, these measures exacerbated existing difficulties with regard to the cost of transport and the time needed at border crossings. The bottlenecks which have formed have caused considerable reductions in trade flows.

The COVID-19 pandemic has made it clear that it is vitally important to reduce the transaction costs associated with export processes through, for example, the digitization of certificates of origin, licences and other procedures. With regard to transit countries, there is room for improvement in customs facilitation and international transit.

Despite the pandemic and measures, exports of primary products (e.g. beef, soya beans) to neighbours, mainly Brazil and Chile, have risen compared to 2019. However, excessive bureaucratic procedures at the border continue to represent a trade bottleneck for the potential and competitiveness of export products.

A major trade bottleneck is the delay in import licence approval for the destination country. For exports which require a licence to enter the destination country, exporters need to send to the client the proforma invoice or the commercial export invoice. Companies can experience delays of between 5 business days for Argentina, 15 business days for the Plurinational State of Bolivia and up to 45 business days for meat exports to Brazil.

Without authorization, the merchandise waits at the border, which generates storage costs for exporters in Paraguay. The situation is particularly serious for perishable products, such as meat, since delays and trade bottlenecks can result in the products passing their expiration date while held up at the border and the sale – or even the merchandise – can be lost.



↑ Trucks parked at the border between Argentina and Paraguay.

especially on medical items used in the treatment and prevention of COVID-19. Other essential items and food have also faced export prohibitions due to COVID-19 shortages and shipping delays. Another goods-specific measure in both LLDCs and transit countries is mandatory inspection.

Border measures in LLDCs and transit countries have evolved over the course of the pandemic. Border closures to non-essential traffic and export bans were common first responses. This began to vary, often as countries released comprehensive economic support packages, many of which implemented differentiated border measures in response to the pandemic and to ease trade bottlenecks:

- streamlined procedures for clearance of essential items (even items in transit);

- reduced value added tax and duties on a wide variety of goods (in particular essential items);
- fast-tracking procedures;
- increased customs clearance hours;
- increased checks for identifying counterfeit medical goods.

A broad trend in border measures includes testing and sanitation measures. These include not only testing requirements for traders and tourists but also the provision of specific facilities or even routes to ensure that traders do not come into contact with the local population. Sanitation measures make strict provisions for the condition of equipment and facilities used to transport goods to reduce the risk of transmission at border crossings.

Monitoring the scale of the economic impacts of the pandemic is difficult due to the delay in publishing

International Think Tank for Landlocked Developing Countries

The International Think Tank for LLDCs is a relatively new intergovernmental body created to support LLDCs. It was proposed by the Mongolian government with the support of LLDCs to develop and strengthen LLDC analytical capacities. The think tank was established in 2017 in Ulaanbaatar, Mongolia. It is backed by a multilateral agreement¹ and is open to any LLDC.

The overall goal of the think tank is to use high quality research and advocacy to enhance the capacity of LLDCs to benefit from international trade, improve human development and reduce poverty. The Think Tank pursues activities that will:

- produce research on trade-related topics, transport and transit issues of interest to LLDCs;
- promote cooperation between LLDCs, with a focus on strengthening analytical capacity;
- share information between LLDCs to encourage understanding of common challenges;
- stimulate convergent views and approaches among LLDCs on global economic issues;
- develop partnerships with international organizations and development agencies to raise awareness and to attract support.

In August 2021², the Think Tank in collaboration with UN-OHRLLS, published a report on the impact of COVID-19 and responses in LLDCs, which called for open cross-border transport networks for goods and services, stressing that better transit systems and operations at borders can help LLDCs to build back better and to enhance capacity in dealing with future pandemics and emergencies.

¹ See <http://land-locked.org/wp-content/uploads/2013/09/X-19.pdf>.

² See https://www.un.org/ohrlls/sites/www.un.org.ohrlls/files/impact_of_covid19_and_responses_in_llcds.pdf.

macroeconomic indicators, the complexity of untangling impact mechanisms from large scale aggregate data, and the limited data available for LDCs. However, Verschuur *et al.* (2021) find, for example, a negative relationship between volume of trade and the implementation of COVID-19 school and public transport closures, with the most negative effects being felt by small island developing States (SIDS) and low-income countries.

Challenges caused by trade bottlenecks at borders

According to International Road Transport Union (IRU), revenue decreased by 40 per cent during the 2020 confinement period compared to 2019. This pattern is set to continue with the IRU estimating that global losses for the goods road transport sector will reach US\$ 347 billion in 2021 (IRU, 2021):

- Although this is approximately half of the US\$ 679 billion losses in the sector in 2020, liquidity shortages remain a serious challenge for goods transport operators.
- Mobility services have also been extremely hard hit by the pandemic, particularly international coach and tourism services.
- Revenue losses in the passenger transport industry in 2021 are forecast to climb to US\$ 543 billion, US\$ 43 billion more than in 2020.

Measures introduced worldwide to contain the transmission of COVID-19, which mainly restrict the mobility of people, have significantly affected transport and logistics



services globally from ocean shipping to parcel delivery and led to supply chains disruptions and loss of revenues for transport and logistics operators. According the Shippers Council of Eastern Africa, more than 75 per cent of the transport and logistics businesses in the region have been severely affected (or worse) by the COVID-19 pandemic. In a survey¹ of 20 transport and logistics companies:

- 90 per cent experienced delays leading to increased turnaround time;
- 70 per cent faced more/new clearance procedures;
- 60 per cent experienced system failures;
- 60 per cent faced challenges relating to COVID-19 tests.

The Economic and Social Commission for Asia and the Pacific (ESCAP, 2020a) report that in Asia and the Pacific, transport services “faced export and import declines of 9.6% and 8%, respectively, in the first quarter of 2020, and 25% and

↑ A truck driver has his temperature taken before entering South Africa at the border with Zimbabwe, near Musina.

30.6%, respectively, in the second quarter. This half-year decline in transport service trade for 2020 amounts to a US\$ 25.6 billion reduction in export revenue for regional economies, compared to the first half of 2019.”

Given pre-existing trade bottlenecks and dependence on transit countries, LLDCs have been hit harder than countries with access to the sea. There has been a general increase in truck turnaround times between ports and LLDCs. Compounded by the shortage of drivers, the result has been increased transport rates and higher costs (e.g. late return of empty containers lead extra charges).

From the outset of the COVID-19 pandemic, LLDCs responded similarly to other countries, such as declaring states of emergency, curfews and lockdowns in major cities or even country-wide. Most LLDCs have kept borders open for freight transport to ensure the supply of fuel, food and medical supplies, trade bottlenecks have arisen owing to:

- reduced border-crossing points and customs working hours;
- shortage of labour due to social distancing and sanitary measures;
- significant delays in crossing borders.

Tightened tests and checks at borders had the immediate effect of decreased traffic which meant additional costs, customer service failures from, for example, missed pickups and deliveries, and an escalation in transport costs.²

In a report on the Plurinational State of Bolivia and Paraguay, Rivera (2020) notes that: “International inland connectivity was hindered in both countries due to additional costs and time at border-crossing

points, delays with customs and phytosanitary clearances, and limitations on inter-operability with road and rail networks of neighboring countries, specially Argentina and Uruguay.”

ESCAP reports on freight transport in the Commonwealth of Independent States (CIS) and notes that Azerbaijan, Kazakhstan and the Kyrgyz Republic experienced a decrease in freight turnover between January to April 2020 (ESCAP, 2020b). In Azerbaijan in 2020, freight turnover declined by almost 20 per cent compared to 2019 (see also Musengele and Kibiru, 2020).

Despite their temporary nature, restrictive border measures taken to contain COVID-19 were mostly introduced by governments without consulting neighbouring countries, at least at the early stage of the pandemic. These measures often lacked clarity and changed rapidly. The United Nations Economic Commission for Europe (UNECE, 2021) notes “the imposing of

↓ **Railway construction from Poyle to Salakhle in Azerbaijan.**



Case study: Does COVID-19 provide an opportunity to realize transit potential for LLDCs in Central Asia?

The Central Asian LLDCs of Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan are strategically located between the two main markets of Europe and East Asia, with China, the European Union, Japan and the Republic of Korea four of the world's top five traders. However, the Central Asian LLDCs have not been able to exploit this huge transit potential, and they all rank poorly in transport connectivity and logistics performance. Despite recent progress, they continue to suffer from inadequate transport infrastructure, high transport costs and inefficient logistics services.

The COVID-19 pandemic has highlighted the connectivity challenges they face, as border closures and additional border controls introduced to deal with COVID-19 has exacerbated the costs and inefficiency of transport operations.

However, the pandemic has given new opportunities to rail carriers. Strict checks, quarantine and the shortage of drivers have slowed down the speed of delivery by road and have opened new perspectives for rail. The cancellation of passenger trains freed capacity for freight trains. The high volatility in rates on air and sea transport meant volumes were redistributed towards land transportation, especially on Asia-Europe routes. Most recent data show that railway became an important logistics channel for ensuring uninterrupted trade between China and Europe, and in particular the delivery of anti-epidemic medicines and other medical supplies.

According to the Ministry of Commerce of China, freight trains between China and Europe increased significantly in 2020: the China Railway Express to Europe ran a total of 10,108 trips carrying 927,000 TEU (20-foot equivalent unit) of containers, increasing 54 per cent year-on-year as of 5 November 2020.

The United Transport and Logistics Company-Eurasian Rail Alliance (UTLC-ERA), a joint stock company of railways from Belarus, Kazakhstan and the Russian Federation, provides container transit services as part of regular container rail transportation between China and Europe through the three countries. Responsible for 90 per cent of all Eurasian transit freight, its volume grew from 333,000 TEU in 2019 up to 546,900 TEU in 2020, with even stronger growth expected in 2021 (volumes had reached 427,700 TEU in the first eight months of 2021).

Central Asian countries, collaborating with transit countries (e.g. China, Russia Federation), have been actively striving to facilitate railway transit and to strengthen their position as a Eurasian land bridge. Improved capacity enables them to take the opportunity emerging in the context of the COVID-19 pandemic.

One such example is the Khorgos Gateway dry port, near the border to China, which was established in 2015. At nearly 130 hectares, it is the largest dry port in Central Asia, and the most important transport and logistics centre of Kazakhstan. It connects the markets of China and Europe, with routes continuing through Central Asia and on to Turkey in the west and the Persian Gulf to the south. Despite the pandemic, cargo flows have been increasing: working around the clock, the dry port handled 200,000 TEU of goods in 2020 and 102,000 TEU in the first six months of 2021. The port is equipped with modern transshipment equipment, the latest automated accounting system for wagons and containers, and provides a full range of services in processing, storage and transshipment of goods crossing the Kazakh-Chinese border, including:

- receiving and sending trains;
- reloading cargo to and from cars of different gauge widths;
- reloading trucks;
- performing operations at warehouses and container sites (e.g. loading, sorting, storage, dispatch of goods, storage of dangerous goods and special goods with temperature requirements).

different measures, restrictions and policies by Governments at different moments in time brought to light the absence of international coordination in the inland transport sector of an agreed protocol to be implemented during pandemics.”

The lack of international coordination has revealed the vulnerability of international inland transport systems, which means higher risk for LLDCs in emergency situations given their dependence on transit countries. It is when the COVID-19 pandemic unfolded that the international community gradually realized the necessity of coordinated actions to facilitate cross-border transport to ease trade bottlenecks to keep trade flowing smoothly.

Numerous international and regional organizations have issued guidelines providing a framework for harmonized health measures at borders. In Africa, for example, where half of the LLDCs are located, the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC) have published a set of standardized regulations to facilitate essential trade among their members amid COVID-19 (see ECA, 2020).

Fortunately, the impact of the pandemic has not all been negative. Many LLDCs have taken the

↓ Cargo being processed at Kality Dry Port, Addis Ababa, Ethiopia.



opportunity to adopt trade and transport facilitation measures to ease both bilateral and transit freight transport across borders (see Table 3). The increased use of ICT and accelerated digitalization in transport and logistics is noteworthy, which will improve connectivity in LLDCs in the long term and ease trade bottlenecks. For example, several countries in Centra Asia have piloted new digital solutions in support of cross-border freight operations and invested efforts in raising the level of coordination during the COVID-19 pandemic (see ESCAP, 2020b).

The pandemic has underscored the regulatory role in improving the efficiency of transport and logistics services in both LLDCs and transit countries. The African Development Bank (AfDB) launched the Trade and Transport Facilitation Due Diligence Tool in 2020 to focus on 'soft' infrastructure aspects of transport, such as the harmonization of transport regulations and policies, and One Stop Border Posts.³ The pandemic has also tested transport corridors which are designed to increase LLDCs' connectivity and promote their trade and economic development.

Table 3: Examples of inland transport and logistics facilitation measures adopted by LLDCs to ease trade bottlenecks

Transport and logistics facilitation measures	
Armenia	Green corridor for cargo of members of the Eurasian Economic Union Separate cargo area allocated across from Georgia and at border-crossing point Verkhniy Lar
Azerbaijan	Transit corridor for freight vehicles Special priority for the movement of goods required for the treatment of COVID-19
Bhutan	Contactless customs clearance procedure Fast track clearance for all essential cargo relating to COVID-19
Botswana	Online processing of declarations and e-payment for cross-border movement of essential goods
Kazakhstan	Green corridors for road freight movement of medical and socially significant goods
Kyrgyz Republic	Special permits for trucks were cancelled Green corridor for all freight vehicles that transport medicines and essential goods No fees or penalties for storing cargo on the container site and on the wagon located at Kyrgyz Temir Zholy railway stations
Rwanda	A 24/7 dry port established near the border to facilitate faster clearance of essential and relief goods Priority and immediate release of relief goods based on pre-clearance mechanisms of essential goods with help of WCO tools and instruments Online services provided in the Rwanda Electronic Single Window, including online payment Engagement with the private stakeholders (e.g. clearing agencies, importers, exporters, warehouse operators) to facilitate clearance of essential goods
Uzbekistan	Operational headquarter set up to ensure expedited passage of goods Uninterrupted customs clearance Expedited customs clearance of imported food products by issuing permits before arrival Software developed for processing and providing preliminary electronic information to customs authorities on goods transported by rail
Zambia	One Stop Border Posts established to guarantee the smooth flow of transport and decongest borders Cargo registration with the Zambia Revenue Authority before arrival

Source: UNECE and ESCAP.

Border measures in LLDCs

A total of 94 border measures across 32 LLDCs were recorded by the UNECE Observatory on Border Crossings Status due to COVID-19. Many of these measures are broad and include both trade facilitating and trade restrictive elements. For example, some measures restrict the export of food and essential medicines, while at the same time increasing customs operating hours to ease trade bottlenecks by speeding up the processing of goods and borders.

Measures included elements requiring disease testing and detailed sanitation procedures. These are the most common requirements for entry at borders not completely closed to passenger traffic. Such measures also include detailed sanitation procedures for

customs facilities and equipment involved in transshipment. In Azerbaijan, for example, the government has set aside a zone in which all drivers must be tested before continuing into the country.

Measures also include procedures for exchanging drivers at border points as well as requirements that only local drivers are allowed to transport goods. Measures for trade in goods vary greatly and include provisions for expediting the release of essential medical supplies and food or facilitating the shipment and clearance of humanitarian and donated goods. However, restrictive measures such as export prohibitions on medical goods and food are also commonplace. Of the measures affecting trade in services, the vast majority are restrictions on passenger traffic and social

Observatory on Border Crossings Status due to COVID-19

Established in March 2020 by the UNECE, United Nations Regional Commissions and partner organizations¹, this online platform collects and provides information on the status of inland-freight border crossings, including policies and regulatory requirements in place. While its use has decreased in recent months, the observatory remains a useful library of measures taken during the pandemic.

There is a rich tapestry of interlocking border measures and wider economic support programmes. Many governments closed their borders to non-citizens and non-residents through measures such as visa suspensions. There have also been difficulties in obtaining health certificates and following extensive self-isolation requirements.

With tens of thousands of trucks and ships stuck at borders around the world, essential goods such as fuel, food and medical supplies face delivery delays.

Social distancing and working from home policies has created a massive drive toward e-business and remote consumption. The patchwork and everchanging nature of the measures combined with the lack of international coordination has created high unsurpassable disruptions to international supply chains.

¹ United Nations Economic Commission for Africa; Economic and Social Commission for Asia and the Pacific; Economic Commission for Latin America and the Caribbean; United Nations Economic and Social Commission for Western Asia; International Civil Aviation Organization; World Customs Organization; International Transport Forum; International Road Transport Union; Fédération Internationale de l'Automobile; Economic Cooperation Organization; International Union of Railways. Available at <https://wiki.unece.org/display/CTRBSBC/Observatory+on+Border+Crossings+Status+due+to+COVID-19+Home>.

distancing measures, which in many cases severely curtail the trade of services within borders. For international passengers, there are testing requirements and quarantine procedures, as well as the suspension of tourist visa regimes.

Although there were no border measures recorded for several LLDCs (Burundi, Chad, South Sudan), this means that none had reported to the UNECE Observatory and not that these countries have not implemented any border measures.

Border measures in transit countries

A total of 103 border measures were recorded by the UNECE Observatory across 34 transit countries, with the exception of Eritrea and Somalia. (As before, this means only that there were no border measures recorded by the UNECE observatory.) A total of 22 measures explicitly outlined procedures for both testing and sanitation. Others include outright bans of shore leave for maritime crew and detailed procedures for no-contact exchange of goods and customs paperwork. There were 25 measures directly affecting traders. In the case of maritime crew, this can be restrictions on shore leave. In Pakistan, cargo ships are subject to mandatory inspections, and crew rotations and shore leave are not permitted.

The measures explicitly affecting goods numbered 42. In India, for example, all major ports are not to levy penalties, demurrage, charges, fee, rental on any port user for any delay in berthing, loading/unloading operations or evacuation/arrival of cargo caused by reasons attributable to lockdown measures. There were

62 measures affecting trade in services, largely due to the closure of borders to non-essential travel and tourism, as well as more generalized social distancing measures.

There have also been positive developments with regard to several countries who have made special efforts toward directly addressing their roles as transit countries for LLDCs, with specific facilitating procedures toward LLDCs:

- Cameroon: foreign trade continues, in particular for landlocked countries for which it serves as a transit country.
- Côte d'Ivoire: customs clearance for goods in transit streamlined from seven stages to five.
- Namibia: a series of guidelines facilitate the free movement of essential and transit goods through appointed routes.
- Senegal and Viet Nam: blanket exemptions to goods in transit.
- Turkey: GPS tracking systems to ensure that vehicles in transit follow designated isolated routes as well as adhere to strict timelines, and that truckers do not come into contact with the local population.

Quantitative analysis of the interventions

The COVID-19 pandemic has impacted international trade and global economic development at an unprecedented rate. While the advent of COVID-19 vaccines and myriad support measures taken by governments have been useful in reaffirming social and economic stability, there remains a growing disparity in the rate of recovery between the global north and global south. The forecasted recovery

“The increased use of ICT and accelerated digitalization in transport and logistics will improve connectivity in LLDCs in the long term and ease trade bottlenecks.”

Measures adopted by LLDCs and transit countries

LLDC: Border measures in Azerbaijan

Foreign drivers of freight vehicles can enter or transit through Azerbaijan without obstacles.

Maritime transport (including trucks and container transshipment) is open and ongoing, with certain restrictions with neighbouring countries (Kazakhstan, Turkmenistan).

All drivers are to test at the Port of Baku (Caspian Sea) before loading. Only the drivers with negative test result certificates can leave for Kazakhstan and Turkmenistan. The test results are made available within 6-8 hours. Truck drivers wait for the ship in dedicated clean zones and food is provided.

All border-crossing points (Georgia, Iran, Russian Federation, Turkey) are open for road transport (freight only). Accompanied (police escort) freight vehicles from Iran and the Port of Baku, heading in the Georgia direction, are allowed to cross the borders of Azerbaijan.

Free food and resting places are provided for international truck drivers.

Source: International Road Transport Union; Azerbaijan Ministry of Transport, Communications and High Technologies.

Transit country: Measures adopted by Senegal to protect the public

Temporary suspension of re-exports of foodstuffs (rice, oil, dairy products, pasta) and strategic products (soap, hand sanitizers) – does not apply to Exceptional Temporary Admission operations arising out of a binding order from abroad or an international transit arrangement.

Publication of information about COVID-19 on the Customs official website (<https://www.douanes.sn>).

Increase of surveillance throughout Senegal to combat all types of fraud.

Source: WCO.

Transit country: Border measures in Turkey

Foreign drivers showing symptoms of COVID-19 cannot enter and Turkish drivers are quarantined.

Transit through Turkey:

- vehicles will be equipped with GPS;
- allowed to enter and exit within 24/36 hours, based on distance to border gate;
- extensions up to 48 hours dependent on road and weather conditions;
- vehicles will use designated routes and stations.

Transport operations to and from Turkey:

- foreign drivers can enter without 14-day quarantine if exiting Turkey within 72 hours;
- extensions of 24 hours, depending on road, weather and border conditions.

Turkish drivers can leave Turkey without waiting 14 days.

Medical supplies and food for the Turkey will be given priority.

Roll on roll off operations are carried out without drivers (only semi-trailers/trailers are accepted).

Source: Ministry of Interior.

will be guided by the particular conditions within each country and the specifics of each policy response.

Trade bottlenecks place LLDCs at a distinct disadvantage, as some had already been operating within limited fiscal space among other challenges even before the COVID-19 pandemic. The added burden of socio-economic stimulus, and the bolstering of health and medical capacities means that such countries are now faced with growing public debt amidst continuing uncertainty surrounding the course of the pandemic. LLDCs have experienced lower rates of recovery compared to other WTO members. While there has been significant progress in

reducing such barriers, the ongoing pandemic has served to exacerbate pre-existing issues and further places LLDCs at a disadvantage.

Since the start of the pandemic, WTO members have experienced increased trading costs, time delays and barriers to trade on two fronts:

- measures within their own borders, including self-imposed logistics adjustments, export prohibitions and restrictions, and other technical barriers to trade (TBT);
- new protective measures imposed by direct trading partners, including heightened sanitary and phytosanitary (SPS) controls, quantitative restrictions, and other related TBT.



“Success in the post-pandemic era will reflect a constellation of policies and capacities peculiar to each country, including national vaccination rates, integration into major economic blocks, the ability to provide fiscal and monetary stimulus, and the restoration of solvency in the private sector.”¹⁴



Police officers wearing protective suits check drivers at Erenhot Port, on the border between China and Mongolia.

However, LLDCs face a third layer of complexity from the COVID-19 protective measures and restrictions implemented by the transit countries upon which they rely. The WTO Secretariat has compiled a quantitative analysis of the measure and interventions on LLDCs and transit countries across five regions (see Table 4).

The analysis of the triple tiered interventions shows no distinct pattern or evolution. Measures taken at each level are largely based on individual concerns of the LLDC or transit country. Motivations are not specific trade strategies but rather a domestic response to

COVID-19 related concerns. Table 5 indicates LLDC interventions and their respective transit countries as a share of all reports from WTO members and was updated in August 2021.

A regional analysis of these interventions suggests that notifications and other measures taken were more closely aligned to infection rates and other regional and country specific health concerns as opposed to solely trade and trade strategy. Figures 3 and 4 provide an analysis of interventions reported by LLDCs and their transit country partners respectively based on their region.

Table 4: Transit countries

Main transit countries	
Africa	
Botswana, Eswatini, Lesotho, Zambia, Zimbabwe	Angola, Mozambique, Namibia, South Africa
Burkina Faso, Mali, Niger	Benin, Côte d'Ivoire, Ghana, Guinea, Nigeria, Senegal, Togo
Burundi, Ethiopia, Malawi, Rwanda, South Sudan, Uganda	Djibouti, Eritrea, Kenya, Somalia, Tanzania
Central African Republic, Chad	Cameroon, Democratic Republic of Congo
Asia	
Afghanistan, Bhutan, Nepal	Bangladesh, India, Iran, Pakistan
Mongolia	China
Lao People's Democratic Republic	Cambodia, Myanmar, Thailand, Viet Nam
Commonwealth of Independent States	
Armenia, Azerbaijan, Kazakhstan, Kyrgyz Republic, Republic of Moldova, Tajikistan, Turkmenistan, Uzbekistan	Belarus, Russian Federation, Ukraine
Europe	
North Macedonia	Albania, Bulgaria, Greece, Romania
South America	
Plurinational State of Bolivia, Paraguay	Argentina, Brazil, Chile, Peru, Uruguay

Source: UNECE and ESCAP.

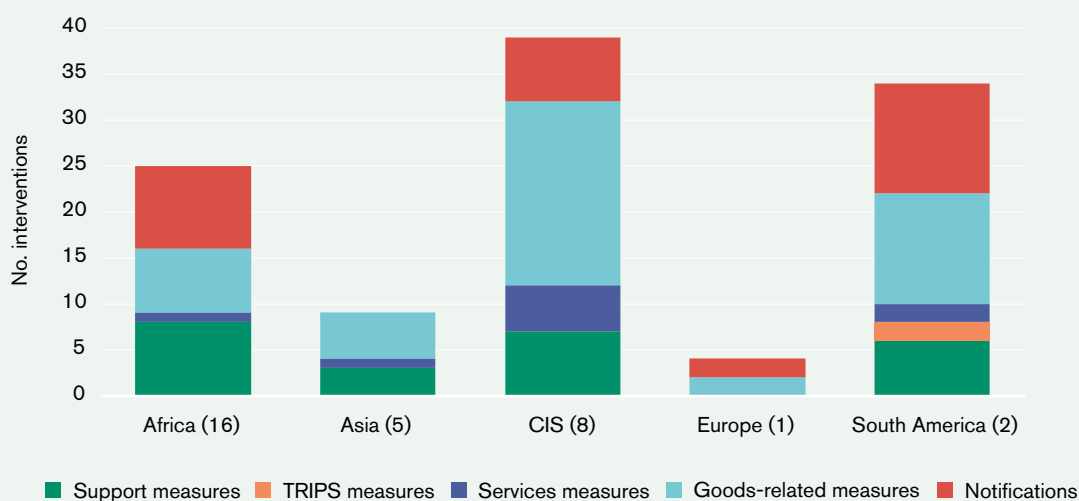
Table 5: Reported COVID-related interventions

Interventions	Total reported	LLDC reports		Transit country reports	
		No.	Share of total (%)	No.	Share of total (%)
Notifications*	409	30	10	195	50
Goods related measures	352	46	13	131	37
Agriculture measures (subset of goods trade)	101	22	22	27	27
Services measures	147	9	6	30	20
TRIPS measures	74	2	3	20	27
Support measures	962	24	2	254	26

* Notifications reported jointly by several members are counted as one notification.

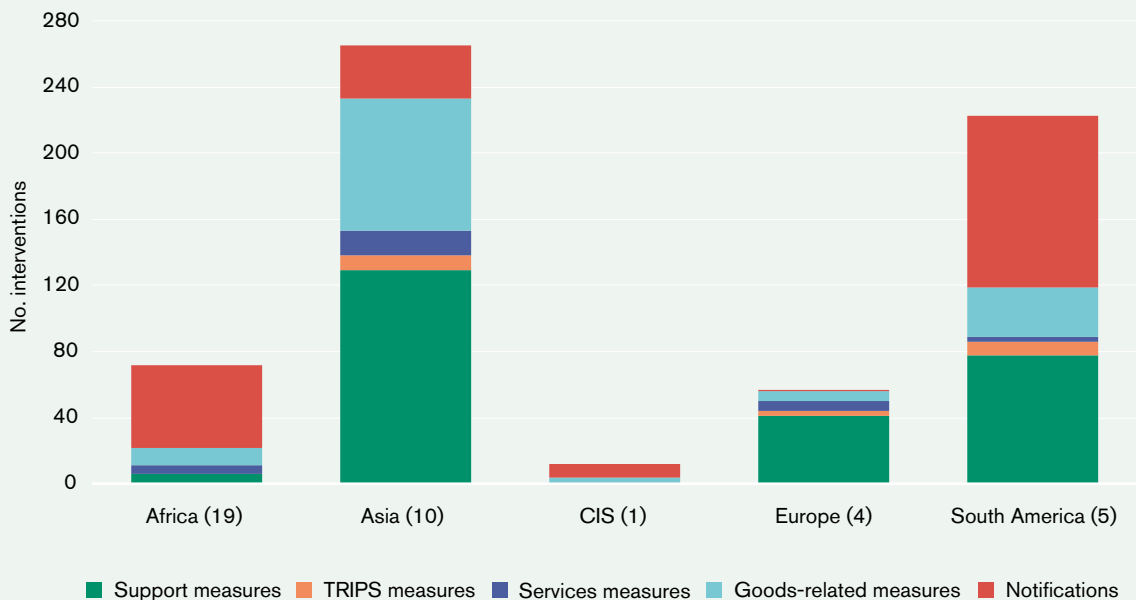
In Figure 3, LLDCs in South America (Plurinational State of Bolivia, Paraguay) had more interventions in most categories than African (represented by 16 WTO members). This may coincide with the higher COVID-19 infection

rates and other economic impacts associated with South America compared to the impact on Africa. LLDCs in the CIS reported a higher number of goods-related measures during the early stages of the pandemic, most of which focused

Figure 3: LLDC COVID-related interventions by region


Source: WTO Secretariat.

Figure 4: Transit country COVID-related interventions by region



Source: WTO Secretariat.

on securing relevant medical supplies and maintaining food security.

With regard to transit countries, a similar trend is seen in Figure 4, with South America recording a higher number of interventions in comparison to Africa. With regard to Asia, the most significant number of interventions were reported by transit countries: India with 43 goods-related measures; and China with 55 support measures (albeit spread across various trade regions). With only four European transit countries included in the study, the interventions recorded form only a small part of the total interventions across Europe.

Notwithstanding the above quantitative analyses, more in-depth research would be needed in order to grasp the full qualitative impacts of each measure on the implementing member, its direct trading and transit partners as well as other third-party partners along international value chains. While one region may have a greater occurrence of COVID related interventions to navigate, others may be more heavily impacted by a single or a few measures. This can be due to several causes, including the economic and other conditions within the respective regions and members, the category of goods being traded and factors relating to the targeted consumer and market segments.

LLDCs lost US\$ 15.7 billion in export revenue in 2020

LLDC imports down by 24%

US\$ 68.3 billion in 2019 to US\$ 52.0 billion in 2020

Impact of COVID-19 on LLDC trade in services

Figure 5 shows that LLDC commercial services exports dropped 36 per cent last year to US\$ 27.7 billion from a peak of US\$ 43.4 billion in 2019. This was a significantly sharper decline than in the rest of the world (-20 per cent).

Services trade is dominated by a few LLDCs. Kazakhstan, Ethiopia, Azerbaijan, Turkmenistan and Uzbekistan rank as the leading services exporters and importers. In 2020, they accounted for 75.5 per cent of commercial services exports and 70.4 per cent of imports.

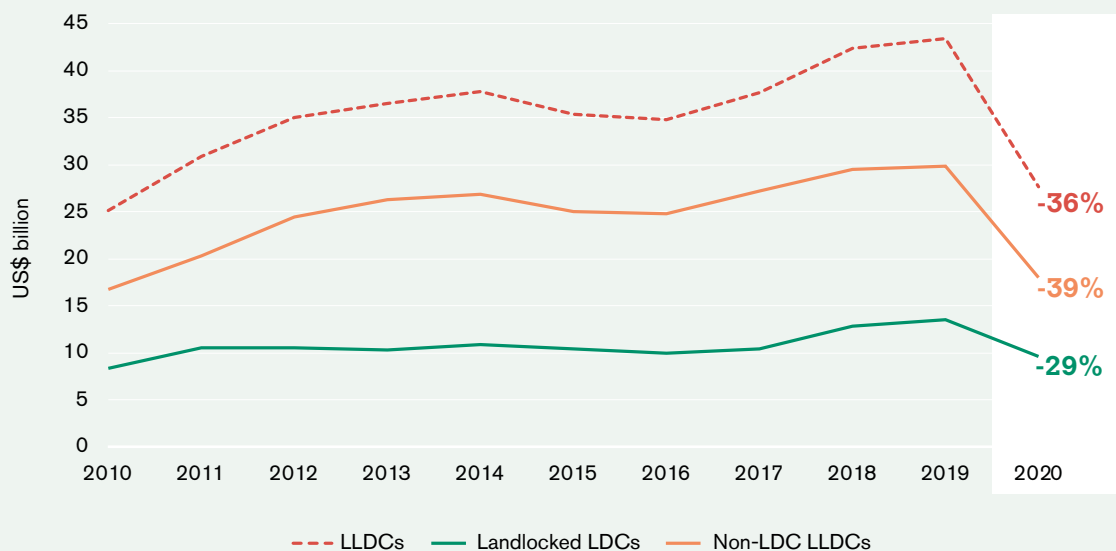
LLDC world services imports fell

1.17% in 2019 to 1.13% in 2020

LLDCs net services importers 2020 trade balance = -US\$ 24.3 billion

Figure 5: Commercial services exports, 2010-2020

(US\$ billion)



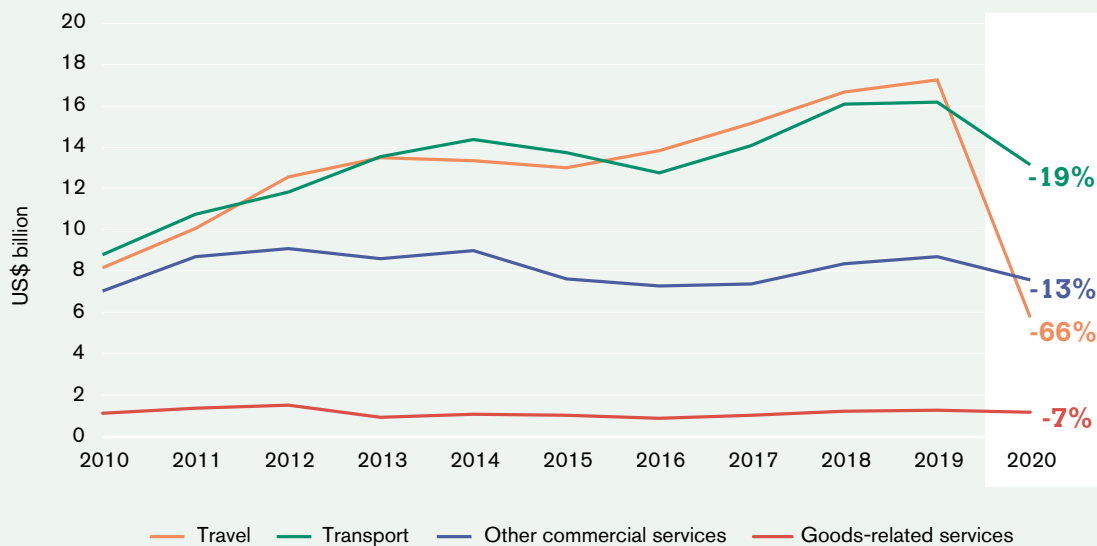
Source: WTO-UNCTAD estimates.

LLDCs services exports are very concentrated. Prior to the pandemic, the travel sector accounted for almost 40 per cent of services exports. Transport services held a similar high share (37 per cent). Other commercial services represented only 20 per cent, less than the half the share than in the rest of the world (56 per cent). The lack of services diversification and dependence on international tourism and transport as main export sectors makes LLDCs extremely vulnerable to this global health crisis. The COVID-19 pandemic and associated restrictions to cross-border mobility resulted in a 66 per cent drop in LLDCs travel exports, and a 19 per cent fall in transport services exports in 2020, which returned to 2015-2016 levels (see Figure 6).

LLDCs were hit harder than other economies in most sub-sectors of other commercial services, which fell by 13 per cent. Exports of personal, cultural and recreational services experienced the steepest decline (see Figure 7). Similarly, construction was profoundly impacted by COVID-19 restrictions: LLDCs suffered a 30 per cent drop compared to 17 per cent for the world. LLDCs also lagged in technical, trade-related and other business services, as well as in financial services. On a positive note, the shift during the pandemic toward remote working and digitalization boosted computer services exports. LLDC computer services grew by 10 per cent in 2020, more rapidly than in the rest of the world.

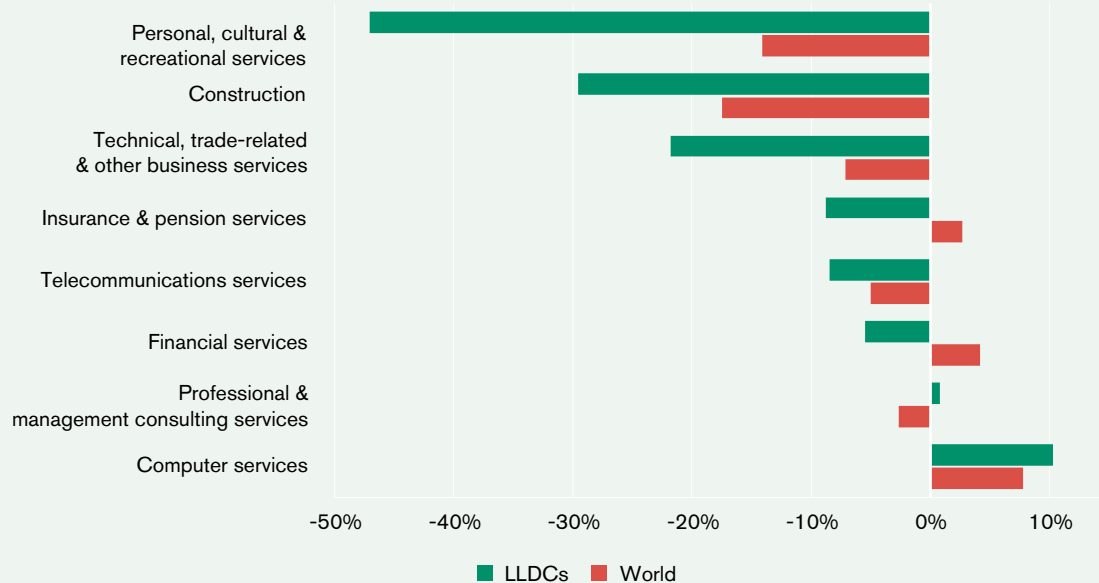
Figure 6: LLDC exports of commercial services by sector, 2010-2020

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



Source: WTO-UNCTAD estimates.

Figure 7: LLDCs exports of other commercial services, by selected subsector, 2020
(Annual change in per cent)



Source: WTO-UNCTAD estimates.

Figure 8 shows the significant but different impact of the COVID-19 pandemic on individual LLDCs. Among landlocked LDCs, the Lao People’s Democratic Republic experienced a 71 per cent drop as its intra-regional travel exports fell 85 per cent (Ministry of Information, Culture and Tourism, 2020). The 50 per cent and 45 per cent contractions in Uganda and Zambia, respectively, also reflect the lack of international tourists, especially from Europe. By contrast, Afghanistan’s commercial services exports expanded by 18 per cent due to a doubling exports of business services. Ethiopia, the second largest LLDC services exporter after Kazakhstan, recorded only a 5 per cent decline. The steep fall in exports following the drop in air passenger

traffic – its main service sector – was partly offset by an 87 per cent increase in air freight services, and a more than tripling of exports of airport supporting services such as cargo handling, storage and warehousing. Air cargo has been essential to ship rapidly personal protection equipment (PPE) and other medical goods during the pandemic. In addition, global demand in many goods has been fostered by e-commerce.

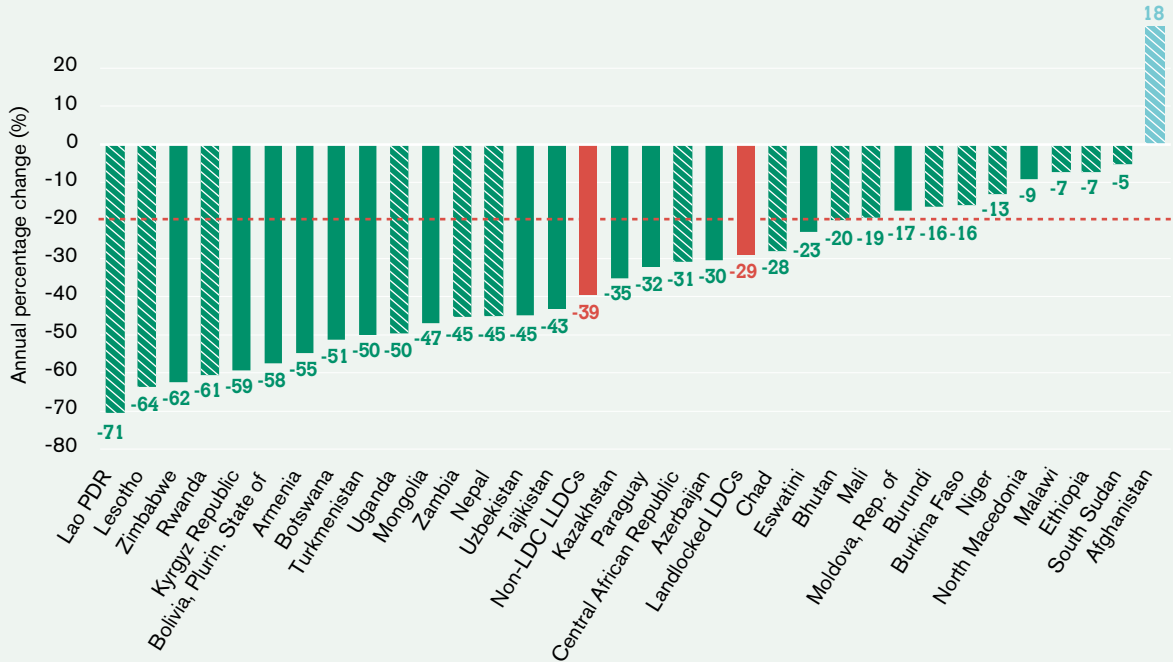
The same uneven export performance was observed in non-LDC LLDCs:

- North Macedonia was the least affected, with commercial services exports down by 9 per cent, sustained by computer services, which were up 17 per cent.

“LLDC computer services grew by 10 per cent in 2020, more rapidly than in the rest of the world.”

Figure 8: LLDC commercial services exports by individual economy, 2020

(In per cent, LDCs in diagonal shading)



Source: WTO-UNCTAD estimates.

- Zimbabwe’s services exports fell by 62 per cent owing to low travel receipts as international tourist arrivals dropped by 82 per cent (ZTA, 2021).
- A lack of tourists is the main reason for the 58 per cent contraction in the Plurinational State of Bolivia.
- A lack of tourists to Botswana also meant exports declined by 51 per cent. Prior to the pandemic, Botswana’s travel receipts accounted for almost two thirds of services exports, almost the same share as Armenia.
- Armenia experienced a 55 per cent decrease in commercial services exports – not only accommodation and food serving services exports plummeted following restrictions to cross-border movement, but also health services and education services.
- Kazakhstan, the leading LLDC trader, recorded a 35 per cent decline in services exports. More than half of Kazakhstan’s services exports relate to transport services (including pipeline transport) which fell overall by 16 per cent.

Available data show that LLDCs services exports remained severely depressed in the first quarter of 2021. While world services exports were down on average 7 per cent year-on-year, several LLDCs recorded sharper drops:

- Plurinational State of Bolivia, -59 per cent;
- Nepal, -48 per cent;
- Armenia, -46 per cent;
- Rwanda, -42 per cent;
- Uzbekistan, -30 per cent;
- Kazakhstan, -17 per cent;
- Uganda, -14 per cent.

In LLDCs, services trade recovery will take longer, as they continue to experience productivity capacity and connectivity challenges. In some cases, while drivers of other nationalities have not been allowed to cross international borders, countries have made facilities available and allowances for transshipment at border crossings.

International responses and best practices

These differentiated responses have also targeted traders and transit goods specifically, creating COVID-19 testing requirements for traders and strict sanitation protocols for customs areas, sometimes including the creation of special facilities for traders crossing national borders. As vaccines became more widespread and countries began to determine their national health system capabilities and individual risk tolerance levels, there has also been an increase in non-essential passenger traffic, usually with COVID-19 requirements and medical isolation.

While an internationally coordinated transit response to global health crises and the resulting trade

bottlenecks remains far away, there are some positive signs, including evolving best practices from international as well as rail transport inland waterway transport, aviation and maritime sector responses. Given the interconnected nature of today's world and global economy as well as the increasing likelihood of emerging communicable diseases, it is now abundantly clear that disease resilient, seamless and efficient transport and logistics systems with strong elements of international coordination are necessary. The international community has taken efforts to formulate responses and best practices to specific transit issues, including efforts by the WTO as well as the WHO, the World Customs Organization (WCO) and the United Nations. Moreover, an analysis of country measures reveals an increasing awareness of the role of transit countries in LLDC access to global economies, as well as the importance of easing trade bottlenecks.

Endnotes

- 1 See https://unctad.org/system/files/non-official-document/tlb_20210415_webinar_gilbert_en.pdf.
- 2 See https://www.un.org/ohrrls/sites/www.un.org.ohrrls/files/impact_of_covid19_and_responses_in_lldcs.pdf.
- 3 See https://www.un.org/ohrrls/sites/www.un.org.ohrrls/files/session_3_zodwa_mabuza_final_-_addressing_soft_infrastructure_-_zodwa.pdf.
- 4 <https://blogs.worldbank.org/developmenttalk/uneven-global-economic-recovery-2021-promises-invert-longstanding-principle-success>.



↑ Border checkpoint in the Lao People's Democratic Republic, Mekong River, before entering Thailand.



Unloading a recently arrived delivery in Jomsom, Nepal.



3

WTO's Trade Facilitation Agreement

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The TFA contains several provisions for expediting the movement, release and clearance of goods, including goods in transit, and easing trade bottlenecks at borders. It sets out measures for effective cooperation between customs and other appropriate authorities on trade facilitation and customs compliance issues. A key pillar of the TFA is a series of provisions for technical assistance and capacity building (TACB). Entering into force on 22 February 2017, all 26 LLDCs who are WTO members have completed their domestic ratification process.

The TFA plays a vital role in boosting world trade and output and in facilitating trade by simplifying, modernizing and harmonizing the movement, release and clearance of goods. In particular LLDCs are expected to increase not only the volume and range of products exported but also the number and range of markets reached. By improving timeliness and predictability in the delivery of intermediate goods, the TFA is predicted to increase the opportunity for developing countries to participate in global value chains.

The TFA helps with the development of e-commerce and the trade of physical goods bought and sold across borders through the internet. The TFA contains measures which help exporters and importers engaged in digitally enabled trade:

- publication and availability of information;
- advance customs rulings;
- expedited shipments;
- rapid release and clearance;
- reducing customs formalities.

Digital approaches to trade facilitation encouraged by the TFA can also reduce trade bottlenecks at borders, increase revenues and facilitate the movement and participation of small traders and women in cross-border trade. Implementation of the TFA has already resulted in greater customs efficiency, more effective revenue collection and better access for MSMEs to new export opportunities. Improved transparency in customs practices, fewer documentation requirements and less red tape, together with trade facilitating measures such as allowing for processing of documents before goods arrive, all provide huge benefits to LLDCs.

“The TFA is predicted to increase the opportunity for developing countries to participate in global value chains.”

UNCTAD's Automated System for Customs Data: ASYCUDA

ASYCUDA is a computerized customs management system, developed by UNCTAD, which covers trade procedures (e.g. manifests, customs declarations, accounting, transit), provides an electronic data exchange between traders and customs administrations, and generates trade data for economic analysis. ASYCUDA can be tailored to individual customs regimes and modified to take account of any changes.

ASYCUDA reports increases in customs revenue, greater availability of reliable trade statistics and reductions in average clearance times.¹ With more than 100 countries having adopted ASYCUDA, the programme is UNCTAD's largest technical assistance initiative, with 51 operational projects.

¹ See <https://asycuda.org/en/programme>.

COVID-19 and implementation of the TFA

Just three years in force at the onset of the COVID-19 pandemic, the TFA has played a key role in ensuring security, stability and continuity of global supply chains, including facilitating and expediting the global supply of emergency relief goods, medicines and vaccines. The predictability, transparency and uniformity in customs and other border procedures resulting from TFA implementation is vital to overcoming the crisis.

Since September 2020, the WTO Committee on Trade Facilitation (CTF) has been working to support members to implement the TFA as one means to mitigate the challenges of the pandemic. This chapter draws on information provided by WTO members to the CTF through their notifications of individual TFA implementation roadmaps, TACB support requirements, and progress reports on the securing of TACB. It also draws on a series of information sharing activities within the CTF. Convinced of the value of continuing to share experiences with the view to improve their individual and collective response to the pandemic, members informed the CTF of the trade facilitating measures that they had taken to address COVID-19. Members also informed the CTF of the challenges they were facing as a result of the pandemic.¹

Implementation progress of the TFA

In order to get a clear picture of the implementation progress of the TFA, it is necessary to understand some of the special and differential treatment provisions it contains. Developed country WTO members implemented the TFA upon its entry into force.



↑ Aktau seaport serves as a multipurpose terminal on the Caspian Sea, Kazakhstan.

However, developing country members, including LDCs, have the possibility of implementation under the flexibilities provided in the TFA, which allow them to draw up their own roadmap for implementation by classifying their TFA commitments into three categories:

- category A commitments: they are in a position to implement upon entry into force.
- category B commitments: they need additional time after entry into force to implement.
- category C commitments: they need not only additional time after entry into force to implement them but also capacity support and technical assistance.

The current TFA implementation commitments figures are based on:

- (i) implementation of the TFA upon entry into force by developed country members;
- (ii) the commitments by developing country members to implement their category A designations by 22 February 2017;

- (iii) the commitments by LDCs to implement their category A designations by 22 February 2018; and
- (iv) category B and C commitments of both developing and LDCs with notified dates² for implementation which have lapsed at the time of writing.

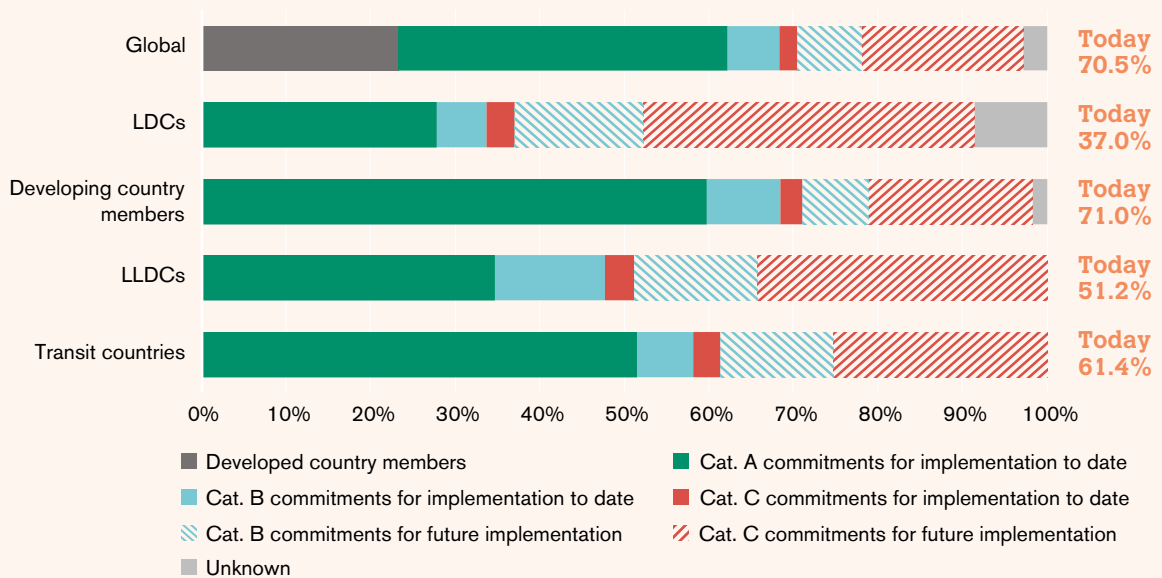
As of October 2021, the rate of TFA implementation commitments across the WTO membership was at over 70 per cent (see Figure 9).³ Approximately, 8 per cent of implementation commitments have been notified to take place after a transition period from 2022 onwards (as category B commitments), while almost 20 per cent of implementation commitments are notified to take place after a transition period from 2022 onwards, upon receipt of

necessary TACB support (as category C commitments). Just under 3 per cent of commitments are yet to be notified under any category.

With regard to LLDCs, as of October 2021 the rate of their TFA implementation commitments stands at over 34 per cent. Almost 15 per cent of implementation commitments have been notified to take place after a transition period from 2022 onwards, while 34 per cent of implementation commitments are notified to take place after a transition period from 2022 onwards, upon receipt of necessary TACB support.

LLDCs depend on transit countries for most of their merchandise exports to reach their intended market, it is therefore very important to monitor the progress of implementation

Figure 9: Progress of TFA implementation commitments



Source: TFAD.



commitments of the TFA in transit countries. In this regard, there is a positive outlook, as transit countries have notified 61 per cent of their commitments as being implemented. In addition, approximately 13 per cent of their commitments have been notified to take place after a transition period from 2022 onwards, and 25 per cent to take place after a transition period from 2022 onwards and upon receipt of necessary TACB support.

For developing country members, the rate of notified TFA implementation commitments currently stands at 71 per cent. In addition, approximately 8 per cent of total commitments are notified to be implemented after a transition period from 2022, and members have also notified that 19 per cent of commitments are to be implemented after a transition

period from 2022 and upon receipt of required TACB support.

Turning to LDCs, the rate of notified TFA implementation commitments currently stands at 37 per cent. In addition, approximately 15 per cent of total commitments are notified to be implemented after a transition period from 2022; and members have also notified that approximately 39 per cent of commitments are to be implemented after a transition period from 2022 and upon receipt of required TACB support.

While sharing their experiences with the CTF, some LLDCs noted that they had to strengthen their infrastructure and connectivity with the world in order to reduce logistics and transport costs and to achieve greater commercial and economic activity for the benefit of the most

↑ **Preparing tomatoes for transport, Armenia.**

vulnerable and affected sectors, such as women entrepreneurs, young people, MSMEs and farming areas. However, these sectors were often located far from the border customs points and facilitation and improvement at border points were not always sufficient. During the pandemic, solutions have been largely targeted towards facilitating bulk trade, but issues still persist for MSMEs and women traders.

Problems are still faced in transit cases where Article 11.2 is yet to be observed and challenges remain on the release of LDC goods in other markets. LLDCs, in a communication to the CTF (WTO document G/TFA/W/53), called “for the constructive cooperation of transit countries for the early and effective implementation of disciplines that will contribute to reducing transit time and costs, simplify procedures and introduce greater certainty in cross-border trade”.

Key TFA provisions for LLDCs

Having identified some of the trade bottlenecks that LLDCs are experiencing, it underlines the particular significance of the TFA in addressing the high trade costs of LLDCs and landlocked LDCs. Before its entry into force, full implementation of the TFA was estimated to reduce LLDC trade costs by an average of 15.4 per cent.

Looking at the TFA in a granular manner, the following articles can be considered to have a specific importance for LLDCs and easing trade bottlenecks:

- Article 7: Release and Clearance of Goods.
- Article 8: Border Agency Cooperation.

- Article 10: Formalities Connected with Importation, Exportation and Transit.
- Article 11: Freedom of Transit.
- Article 12: Customs Cooperation.

Article 7: Release and Clearance of Goods

Article 7 of the TFA requires WTO members:

- to begin the processing of goods prior to arrival at the importing country (Article 7.1);
- to allow for e-payments of duties, taxes, fees and charges (Article 7.2);
- to allow goods to be released from customs with minimum risk (Article 7.3);
- to focus controls on high-risk consignments (Article 7.4);
- to follow up with post-clearance audit (Article 7.5).

These measures ease trade bottlenecks at LLDC border crossings by freeing up customs resources and expediting the release of goods (with specific reference to air cargo shipments and perishable goods).

↓ Customs officer in the Lao People’s Democratic Republic clears goods for entry into Thailand.



Table 6: Article 7 notification data

	Category A current (%)	Category B current (%)	Category C current (%)	Category B future (%)	Category C future (%)
Article 7.1: pre-arrival processing					
Global	40	8	3	6	18
LDCs	29	3	6	6	49
Developing members	61	14	3	8	13
Transit countries	57	13	3	3	23
LLDCs	23	15	3	15	42
Article 7.4: risk management					
Global	31	3	2	1	36
LDCs	14	6	3	3	66
Developing members	51	4	3	1	39
Transit countries	43	10	10	–	37
LLDCs	30	4	–	–	66
Article 7.5: post-clearance audit					
Global	40	3	2	4	25
LDCs	37	3	–	3	49
Developing members	59	5	3	6	26
Transit countries	56	8	3	3	30
LLDCs	42	4	–	4	50

Source: WTO Secretariat.

However, the notification data show that the current rate of implementation commitments for three trade facilitating measures particularly significant for LLDCs – pre-arrival processing, risk management and post-clearance audits – are below 50 per cent (see Table 6). For two of the provisions, at least 50 per cent of the TFA implementation commitments will be implemented at a future date and upon receipt of the necessary TACB support.

Article 8: Border Agency Cooperation

The provisions on border agency cooperation are of significant importance to LLDCs to ease trade bottlenecks. Increased internal cooperation and coordination at the border between customs and other border agencies lead to a significant reduction in the delays and costs for

traders. Required external cooperation and coordination with border control authorities and agencies of neighbouring members with which it shares a common border will reduce red tape and duplication of documents required to complete border procedures and to clear goods.

LLDCs face multiple border crossings, complex administrative transit and border procedures, so the benefits of reducing trade bottlenecks are even greater. However, insufficient border agency cooperation has been a challenge during the COVID-19 pandemic. The notification data for rate of TFA implementation commitments by LLDCs around border agency cooperation show over 70 per cent of the measures to be implemented are placed in category C (see Table 7). LLDCs have thus a strong need for TACB support.

Table 7: Articles 8 and 11 notification data

	Category A current (%)	Category B current (%)	Category C current (%)	Category B future (%)	Category C future (%)
Article 8: Border Agency Cooperation					
Global	29.4	5.1	1.2	4.1	33.7
LDCs	0.5	5.7	5.7	3.3	76.2
Developing members	53.1	7.0	3.3	6.1	31.5
Transit countries	30.6	3.3	–	10.0	52.8
LLDCs	23.7	3.8	–	0.6	71.8
Article 11: Freedom of Transit					
Global	45.3	6.4	1.7	7.3	13.3
LDCs	30.7	3.5	2.9	21.5	32.8
Developing members	70.2	10.2	2.0	4.9	11.3
Transit countries	50.5	6.0	3.7	10.8	29.0
LLDCs	43.6	9.9	4.9	20.9	20.7

Source: WTO Secretariat.

Article 11: Freedom of Transit

Article 11 sets out provisions to facilitate the transit of goods through a country (see Table 8):

- transit fees, regulations and formalities (Articles 11.1-11.3);
- strengthening non-discrimination of traffic in transit (Article 11.4);
- transit, procedures and controls and transit infrastructure (Articles 11.5-11.10);
- guarantees (Articles 11.11-11.15).

WTO members are obliged to reduce or eliminate (if no longer required) regulations or formalities in connection with traffic in transit, to restrict fees or charges to transportation costs or to the cost of services rendered.

Trade bottlenecks can be eased through the implementation of Article 11 provisions, which:

- enhance border and customs controls coordination, cooperation and information sharing;

- minimize restrictions on transit;
- simplify and harmonize transit regulations and requirements;
- strengthen border and customs controls coordination, cooperation and information sharing – including through the use of ICT.

Article 11 encourages members to appoint a national transit coordinator to whom other members can make enquires and proposals, and currently two LLDCs have notified information regarding their transit coordinators.

The notification data from LLDCs indicate their rate of TFA implementation commitments for Article 11 currently stands at over 58 per cent (see Table 7). LLDC notifications indicate that an additional 21 per cent of Article 11 obligations will be implemented after a transition period and a further 21 per cent will be implemented after a transition period and the acquisition of capacity through technical assistance.

Transit country data indicates that their rate of TFA implementation commitments for Article 11 currently

Table 8: Deconstructing Article 11

Transit provisions	
<p>Transit formalities, fees and regulations</p> <p>The first three paragraphs of Article 11 set out the general rules for transit operations. They clarify that regulations and fees on transit shall be limited to that which is necessary to ensure its smooth procedures. In that sense, these provisions use language similar to that in Articles XX and VIII of GATT, which has been subject to ample elucidation in dispute settlement cases.</p> <p>Paragraph 3 is there to prevent the transit country insisting on another country to limit the flow of vehicles carrying transit goods.</p>	<p>Paragraph 1: Any regulations and formalities shall not be maintained if circumstances/objectives no longer exist or can be applied in a less trade-restrictive manner, constitute a disguised restriction on trade.</p> <p>Paragraph 2: Traffic in transit shall not be conditioned on collection of fees (except cost based, transport and administrative expenses).</p> <p>Paragraph 3: Prohibition on imposing voluntary restraints on traffic in transit.</p>
<p>Non-discrimination</p> <p>This is a very important provision which reinforces a principle already enunciated in Article V of GATT. Nevertheless, whether this provision is equivalent to national treatment is still open to interpretation.</p>	<p>Paragraph 4: Products in transit shall be treated no less favourably than products transported from their place of origin to their destination without going through the transit country.</p>
<p>Transit infrastructure, procedures and controls</p> <p>Paragraphs 5-10 contain further clarification and detail on the conduct of transit operations and their regulations. The general orientation of these rules is to facilitate transit operations and eliminate certain practices that increased uncertainty and costs.</p>	<p>Paragraph 5: Separate infrastructure for traffic in transit is encouraged.</p> <p>Paragraph 6: Formalities, documents, and controls shall not be more cumbersome than necessary to: identify goods; and ensure fulfilment of transit requirements.</p> <p>Paragraph 7: There shall be no charges, delays, or restrictions once goods cleared for transit.</p> <p>Paragraph 8: TBT measures shall not be applied to goods in transit.</p> <p>Paragraph 9: Authorities shall allow and provide the possibility of advance filing and processing of transit documentation.</p> <p>Paragraph 10: Authorities shall promptly terminate transit operation once exit point is reached.</p>
<p>Rules on guarantees</p> <p>In the conduct of transit operations, one of the main objectives of the customs authorities is to ensure that these do not circumvent the collection of duties that would be otherwise due. To fulfil this objective, a guarantee system is normally put in place. This ensures that the duties and taxes which are suspended during a transit operation will be paid if the goods do not exit the transit country and increases the likelihood that the goods in transit will not disappear on the way. The TFA agreement sets out rules so that these guarantees are not more cumbersome than necessary and do not unduly increase trade costs.</p>	<p>Paragraph 11: Guarantees shall be limited to ensuring transit requirements are fulfilled.</p> <p>Paragraph 12: Once the transit operation is over, they shall be discharged without delay.</p> <p>Paragraph 13: Guarantees may allow multiple transactions or renewals.</p> <p>Paragraph 14: Authorities shall publish the information used to set guarantees.</p> <p>Paragraph 15: Convoys or escorts shall be used only in high-riskcases and their rules shall be published.</p>
<p>Customs cooperation and transit coordinators</p> <p>Finally, Article 11 includes two best endeavours provisions aimed at increasing coordination between authorities on issues of transit that complement the more general provisions in Articles 8, 12 and 23.2.</p>	<p>Paragraph 16: Members will endeavour to cooperate to enhance transit and understandings on: charges; formalities and legal requirements; and the practical operation of transit regimes.</p> <p>Paragraph 17: Members will endeavour to appoint a national transit coordinator.</p>

Source: WTO Secretariat.

stands at over 60 per cent. It also appears that transit countries have a higher level of provisions in category C (29 per cent) which shows the importance of rollout of implementation of the TFA across all the membership to accrue greater benefits for all members.

Rate of TFA implementation commitments

Currently, the TFA articles with the highest rate of implementation commitments (above 70 per cent) among LLDCs are:

- pre-shipment inspection (which is a negative commitment not to use this type of system);
- movement of goods;
- detention;
- use of customs brokers (also a negative commitment);
- temporary admission of goods and inward and outward processing;
- rejected goods;
- common border procedures.

The articles with the lowest rate of TFA implementation commitments (below 40 per cent) include:

- single window;
- test procedures;
- authorized operators;
- border agency cooperation;
- risk management;
- enquiry points;
- expedited shipments;
- information available online;
- advance rulings average release times;
- use of international standards.

Figures 10 and 11 detail measures with the highest and lowest implementation commitment rates in LLDCs as of September 2021.

The measures with the lower rates of implementations commitments are often measures that require the most

investment and technical knowledge in order to implement them. Examples include the updating of customs methodologies and procedures to apply a risk management programme as well as providing preferential customs treatment for authorized operators determined to present low risk of non-compliance with legal requirements.

In addition to the built-in flexibilities which allow developing and least-developed countries to self-determine how they will implement the TFA in accordance with their specific roadmap, the TFA also provides for the adjustment of the roadmap as implementation progresses.

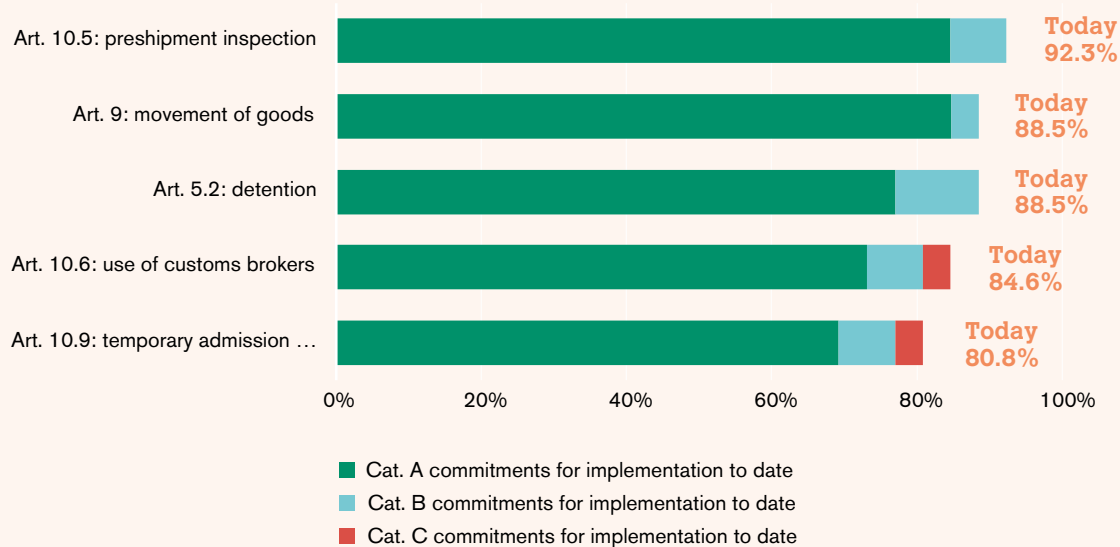
Members can also request technical assistance to implement certain articles that they had not originally considered necessary within the framework of provisions for the shifting of notified categories, which means LLDCs can request to shift provisions from category B to category C when the transitional period alone is found to be insufficient to implement the provision. The WTO provides TACB to implement these provisions. A number of members cited the impact of the COVID-19 pandemic as being a factor in their unanticipated need for TACB support. Requests involved a total of 13 provisions and included those measures with the lowest implementation commitment rate.

Technical assistance and capacity building support

In accordance with the TFA, when members designate provisions into category C, they are also required to identify the TACB support that they require in order to implement the provisions. Figure 12 provides a

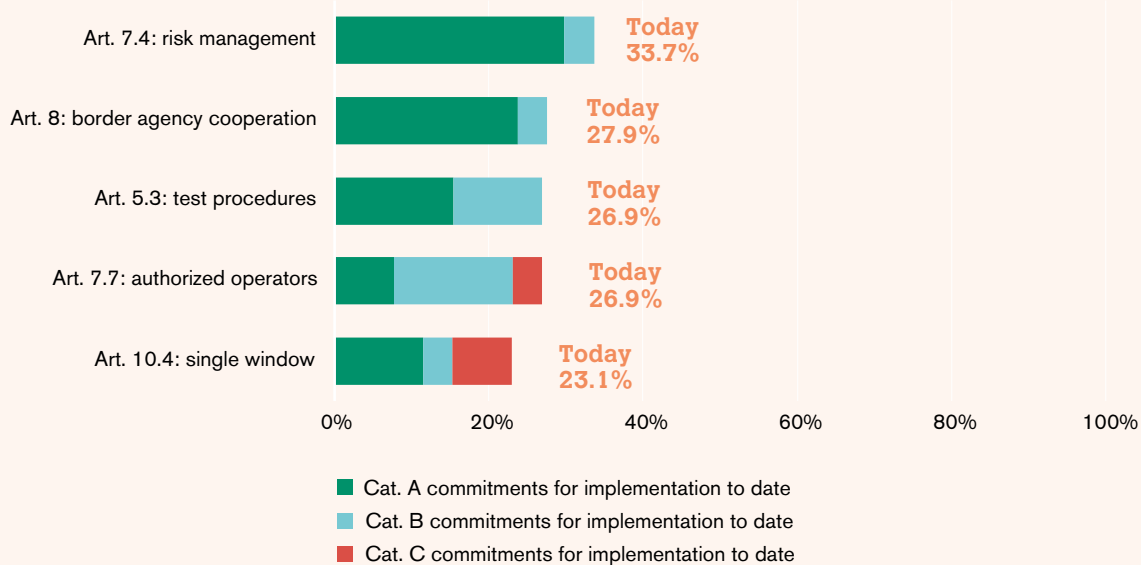
“As of October 2021, the rate of TFA implementation commitments across the WTO membership was at over 70 per cent.”

Figure 10: Top five measures with the highest rate of TFA implementation commitments by LLDCs

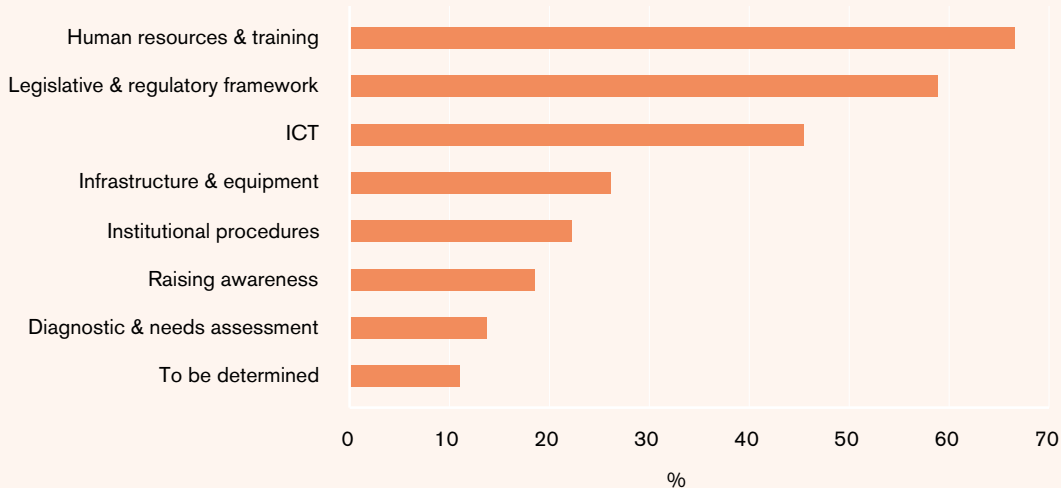


Source: TFAD.

Figure 11: Bottom five measures with lowest rate of TFA implementation commitments by LLDCs



Source: TFAD.

Figure 12: Type of technical assistance required

Source: TFAD.

breakdown of the TACB support requirements identified by LLDCs.

Challenges to notifying technical assistance needs

Some LLDCs and landlocked LDCs have indicated that they are having difficulties notifying their technical assistance requirements to implement the category C measures. This can result from a lack of capacity to do so, particularly in the efforts to transpose the identified needs into coherent and relevant projects according to the requirements of the TFA.

Such circumstances can lead to a delay in demand-driven technical assistance being made available to WTO members and this would indicate that LLDCs and landlocked LDCs need support to notify their requirements. This can be a significant trade bottleneck for them, as it places immediate obstacles in front of the first step towards securing TACB support to implement the TFA.

A second step in the TACB process is the requirement for all members requesting TACB support to notify the arrangements they have entered into with donors to receive assistance, plus a report on the progress being made under those arrangements. The purpose of their notification is to allow members to identify where progress is being made in securing technical assistance, but it is also a very useful tool to help the CTF to identify where gaps remain and to mobilize their appropriate mechanisms in attempt to address those gaps.

However, this notification on arrangements entered into and progress made has one of the lowest rates of return across members. In the same way that capacity constraints can delay members' notification of their specific assistance needs, those same capacity constraints can also delay the reporting mechanism.

Eight LLDCs have notified the CTF of the arrangements and progress that they have made in securing TACB of a total of 89 TFA measures. Among those eight members, their top five provisions measures requiring TACB were once again: risk management; average release times; border agency cooperation; use of international standards; and enquiry points. They reported varying levels of progress in securing all the assistance needed.

The wide-ranging implementation flexibilities contained in the TFA, the categorization of provisions that need a transition period to enable implementation, plus the categorization of provisions that additionally need technical assistance over time, put a progressively clearer focus on where members have the greatest challenges to implement the TFA, and ultimately highlight important gaps between what LLDCs have identified that they need and the extent of assistance that is being provided to them.

This process is helping to narrow in on the trade bottlenecks that LLDCs face in terms of trying to implement the TFA for their own benefit, and

trade bottlenecks being faced by other members, including transit countries – which are also of importance for LLDCs.

LLDCs depend on trade and the expedited free movements of goods, and trade bottlenecks deny them the economic stability and prosperity trade provides. The implementation of the TFA calls for the minimization of administrative and procedural barriers. It is critical to guarantee transparent and predictable trade with the LLDCs' main trading partners. The TFA plays a major role in ensuring security, stability and continuity of global supply chains, including facilitating and expediting the global supply of emergency relief goods and vaccines. Its role in easing trade bottlenecks will supporting business recovery and resilience across different goods sectors.

TFA provisions help LLDCs to withstand and recover from the severe impact of the COVID-19 pandemic and to continue to engage in the global supply chain. The significant challenges and bottlenecks to trade LLDCs continue to face can be reduced by fully implementing the TFA.

Endnotes

- 1 The contributions of COVID-19 responses from CTF members and observers can be found in WTO document G/TFA/W/40. It includes links to presentations made to the CTF by a number of Annex D+ partner organizations.
- 2 Section II of the TFA provides that Members benefiting from its flexibilities are to first notify indicative date for implementation and to notify definitive dates for implementation after a designated period.
- 3 The current and future rate of implementation figures are based on the implementation of the TFA upon entry into force by developed country members, the commitment by developing country members to implement their category A designations by 22 February 2017 and the commitment by LDCs to implement their category A designations by 22 February 2018. Categories B and C commitments of both developing countries and LDCs are taken into account when definitive dates have been notified, otherwise they are counted as implementation commitment date "unknown".

Trade Facilitation Agreement Facility

At the request of developing and least-developed country members, the WTO established the TFAF to ensure members receive the assistance they need to ease trade bottlenecks and to reap the full benefits of implementation of the TFA.

The TFAF assists members through a range of activities, such as workshops and national events, to identify their needs and to prepare their notifications. Members seeking technical assistance and donor organizations able to provide the required assistance are brought together by the TFAF. Where it is not possible to identify donor support, the TFAF also provides project preparation and implementation grants. Currently, Mongolia, an LLDC, has been awarded a project preparation grant for four TFA provisions, and Namibia, a transit country, has been awarded a grant for eleven TFA provisions.



Farmers in Bhutan grade potatoes by size and quality for export markets.



4

WTO's SPS Agreement: sanitary and phytosanitary measures

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The WTO SPS Agreement sets out the basic rules for food safety and animal and plant health standards. It aims to strike a balance between WTO members' rights to protect human, animal or plant life or health, and their obligation not to restrict trade more than necessary. Given the technical and costly nature of some of these measures, certain sanitary and phytosanitary (SPS) requirements imposed by importing members could be difficult to meet for LLDCs, for whom agricultural products might represent an important part of their exports.

The SPS Agreement requires members to take measures only to the extent necessary for health protection, with scientific evidence required to demonstrate this "necessity" (except for emergency situations, in which temporary actions may be taken). Under Article 3 of the SPS Agreement, the preferred way of meeting the scientific justification requirement is by using internationally developed food safety, animal and

plant health protection standards, guidelines or recommendations, such as those adopted by the Codex Alimentarius Commission (CAC), the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (OIE).

Alternatively, governments can justify other levels of protection if these are based on a risk assessment appropriate to the circumstances, but the measures imposed must be no more trade restrictive than required to achieve the desired level of health protection. Given the technical nature of SPS measures, LLDCs often encounter difficulties in undertaking their own risk assessments to determine an appropriate level of protection. Similarly, SPS measures are often costly to implement, and it is difficult for LLDCs to fulfil the requirements established by importing countries. These problems may be exacerbated if import requirements are not the same for different markets, including in transit countries.

↓ **Four of 30 female employees at a shea butter producer, Burkina Faso. All products are exported to Europe.**



Compliance with SPS measures and the procedures to check compliance, normally applied to domestically produced as well as imported products, can cause trade bottlenecks and inevitably result in higher costs. Especially in LLDCs, smaller producers and exporters find these costs prohibitive, limiting their ability to benefit from trade opportunities and increasing trade bottlenecks. The challenge is thus to ensure that effective SPS measures and controls are in place to protect human, animal or plant life or health, while minimizing unnecessary costs and restrictions on trade.

Acknowledging the technical complexities of the SPS Agreement and the costs associated to the implementation of SPS measures, the Agreement contains specific technical assistance and special and differential treatment provisions. Article 10 recognizes the importance of considering the special needs of developing countries, in particular LDCs. For instance, where the appropriate level of SPS protection allows scope for the phased introduction of new SPS measures, a longer time-frame for compliance should be accorded on products of interest to LLDCs, and time-limited exceptions from obligations established in the Agreement could be granted by the SPS Committee.

In 2009, the SPS Committee adopted a procedure to enhance transparency of special and differential treatment in favour of developing country members (WTO document G/SPS/33). It was agreed that when special and differential treatment was provided in response to a specific request, the importing member should inform the WTO in writing through an addendum to the original notification. No requests

have so far been made under this procedure to the SPS Committee.

Article 9 of the SPS Agreement covers the provision of technical assistance to other members, especially developing country members, to contribute to the compliance with SPS measures necessary to achieve the appropriate level of protection in their export markets. This technical assistance can take the form of technologies and infrastructure, economic support or technical expertise and equipment, among others. LLDCs facing difficulties to maintain and expand market access opportunities could request applying for technical assistance from importing members, who consider the request.

This assistance can be facilitated bilaterally or through the appropriate international organizations. The WTO Secretariat can also provide dedicated training on the SPS Agreement to LLDCs upon request. Since 1995, ten LLDCs have requested and received training at a national level on SPS issues. In addition, government officials from those countries have often participated in trainings at a regional level and in more general trainings organized by the WTO.

The Standards and Trade Development Facility (STDF) was created at the Doha Ministerial Conference, in 2001, with the purpose of improving capacity of developing countries to implement international SPS standards, guidelines and recommendations and hence, their ability to gain and maintain market access. Several LLDCs have benefited from this supported on in the SPS Committee.

“The SPS Agreement requires no unjustified costs in control, inspection and approval procedures to ensure that these do not function as barriers to trade and bottlenecks to LLDCs.

Case study: Standards and Trade Development Facility



STANDARDS *and* TRADE
DEVELOPMENT FACILITY


The WTO provides support to LLDCs through the STDF, which helps them to meet international SPS requirements. Since 2004, the STDF has supported 28 LLDCs to develop or implement SPS-related projects through its grant mechanism.

The STDF grew out of joint communiqué issued by the Food and Agriculture Organization of the United Nations (FAO), the OIE, the World Bank Group, the World Health Organization (WHO) and the WTO at the Doha Ministerial Conference in November 2001. Its aim is to increase and reinforce coordination of technical assistance provided by its five partner organizations in the area of SPS. A trust fund was set up with three years of start-up financing from the World Bank and the WTO.

Under the STDF, grant financing is available for private and public organizations in developing countries seeking to comply with international SPS standards and hence gain or maintain market access. WTO members may apply for such funding, and projects are typically between US\$ 250,000 and US\$ 1 million, with beneficiaries required to meet part of the cost. Decisions on project funding are made by the five coordinating organizations, and projects may be implemented by either them or by external organizations.


Zambia

For importers and exporters in Zambia, trade bottlenecks can arise from border processing of consignments of plants and plant products, which can be time consuming and are not conducive to the trade of perishable commodities. Access to the phytosanitary requirements of trading partners, especially members of the SADC, for plant health inspectors and traders needs to be improved. An ongoing STDF project aims to strengthen Zambia's institutional and operational phytosanitary capacity, and thus facilitate trade in plants and plant products. Project activities have contributed to market access negotiations with China and South Africa for products such as stevia, a sugar substitute, blueberries and avocado. In early 2021, Zambia began exporting blueberries to China, which will result in the creation of employment opportunities for around 2,000 people in this sector.

 <https://www.standardsfacility.org/PG-481>

Ethiopia

Ethiopia has a very high level of livestock, with the largest livestock concentration in Africa. However, importing countries have raised concerns about veterinary drug residues in meat and meat products coming from Ethiopia. The STDF project supported the revision and finalization of Ethiopia's legislation on animal health and welfare and veterinary public health. This legislation will enable official veterinary services to meet relevant international standards in order to maintain existing markets and to enter new ones. Promulgation of this legislation is expected to occur in late 2021. The project also supports the revision of standard operating procedures and guidelines for producers, processors, traders and transporters in order to participate in export trade.

 <https://www.standardsfacility.org/PG-477>



↑ A farmer in Zambia attending to the crop.



↑ Cattle at the Ghibe River, Ethiopia.

Azerbaijan

Government agencies in Azerbaijan faced numerous challenges to detect and diagnose plant quarantine pests and to promote plant health security of both imports and exports. An STDF project that ended in 2018 helped to simplify procedures for phytosanitary inspections at border points, with customs officials trained alongside plant health inspectors in how to carry out controls effectively. In parallel, the project strengthened pest diagnostic services and improved pre-border inspection and export certification. The project created the technical expertise needed for phytosanitary import and export controls and helped to build stronger inter-agency dialogue and cooperation. It also rolled out a computerized system for import permits to regulate the entry of plants and plant products, supporting the move towards electronic certificates.



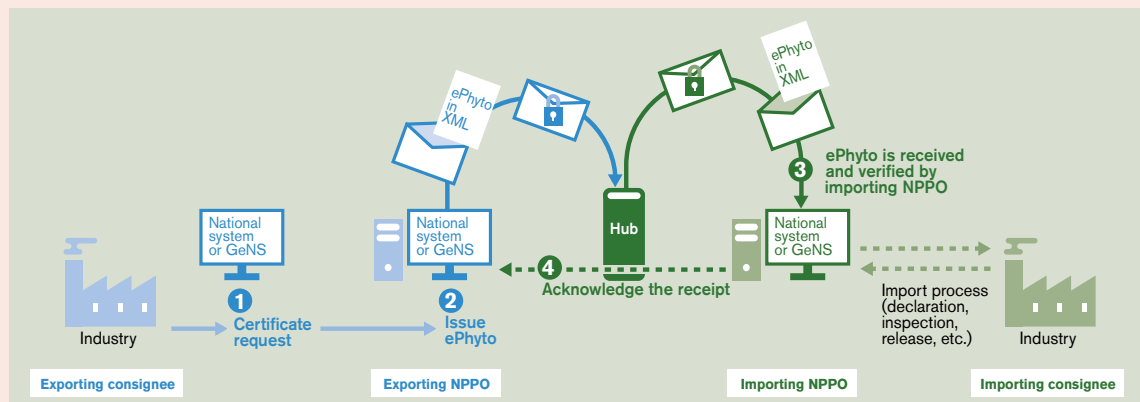
↑ A scientist conducts insect pest diagnostics.

<https://www.standardsfacility.org/PG-316>

Global Project – ePhyto Solution

Since the late 1970s, exporting countries have relied on paper phytosanitary certificates to provide assurances that the plant or plant product being exported meets the phytosanitary requirements of the importing country. An STDF project that ended in 2020 helped develop a central server (referred to as the “Hub”, see below) to facilitate the exchange of electronic phytosanitary certificates (ePhytos) between countries. The project also developed the Generic ePhyto National System (GeNS), which is a simple web application for the production, submission and receipt of ePhytos. GeNS provides a cost-effective system for countries with limited capacities. Around 60 countries currently exchange ePhytos through the hub, including LLDCs such as Nepal, Paraguay, Uganda and Uzbekistan. Uganda is also one of the 12 countries currently using the GeNS system. Early research shows how moving towards digital procedures can help to increase exports of agri-food products and ease trade bottlenecks.

<https://www.standardsfacility.org/PG-504>



Source: FAO (2019). Reproduced with permission.

SPS measures and goods in transit

One SPS related issue that is particular to trade of the LLDCs is the application of SPS measures to goods in transit. Although it is not explicitly mentioned in the SPS Agreement, it follows that SPS measures could be applied to goods in transit to the extent that measures are necessary to protect health and life. Clarity is found in Article 11.8 of the TFA which states: “Members shall not apply technical regulations and conformity assessment procedures within the meaning of the Agreement on Technical Barriers to Trade to goods in transit.” However, no mention in this respect is given for SPS measures.

In light of this, the OIE and the IPPC have developed standards and guidelines on handling goods in transit. They provide guidance on SPS measures that may be applied on goods in transit, which could present animal or plant health risks to the country of transit. These measures should be technically justified and necessary to prevent the introduction of animal diseases or plant pests. Based on these standards, veterinary authorities and plant protection organizations of the country of transit may decide which movements require intervention and are subject to the application of SPS measures, and if so, the type of SPS measure to be applied.

For example, according to the OIE standards (OIE, 2021):

“1. Any transit country may require railway wagons and road vehicles used for the transit of animals through its territory to be so constructed as to prevent the escape and dispersion of excrement.

2. The unloading of animals in transit shall be permitted in the territory of the transit country only for purposes of watering and feeding or for welfare or other essential reasons. This must be under the effective control of an Official Veterinarian of the transit country, who should ensure that the animals have no contact with any other animals.”

According to the IPPC standards (IPCC, 2016):

“Consignments in transit may pass through the country of transit remaining enclosed and sealed if necessary, without being split up or combined with other consignments, and without having their packaging changed. Under such conditions, the movement of consignments will, in many cases, not present a pest risk and will not require phytosanitary measures, especially if the consignments are transported in sealed containers However, even under such conditions, contingency plans may be required to address unexpected situations, such as an accident during transit.

“Consignments and their conveyances passing through a country may, however, also be transported or handled in such a manner that they do present a pest risk to that country. This may, for example, be the case when consignments are transported open rather than enclosed, or when they do not pass directly through the country but are held for a period of storage, or are split up, combined or repackaged, or if the means of transport changes (e.g. from ship to railway). In such cases, phytosanitary measures may be applied in the country of transit to prevent the introduction of pests into, and/or their spread within, that country.”

“It is essential for LLDCs to be informed of requirements established by transit and importing countries that may significantly affect international trade.”



LLDC notifications of SPS measures

In order to avoid disruptions and ease trade bottlenecks, it is essential for LLDCs to be informed of requirements established by transit and importing countries that may significantly affect international trade. Transparency obligations of SPS requirements are contained in Article 7 and Annex B of the SPS Agreement. WTO members are required to provide an advance notice of intention to introduce new or modified SPS measures, or to notify immediately when emergency measures are imposed. WTO members must take into consideration any comments submitted by trading partners, provide associated documents upon request (including risk assessments and the scientific evidence underpinning measures) and ensure that all measures are published promptly (WTO document G/SPS/7/Rev.4). As of 30 June 2021, WTO members had submitted nearly 29,000 SPS notifications, of which 541 had been submitted by 22 LLDCs.

Of the 541 notifications submitted by LLDCs, 51 per cent indicate a relevant international standard, compared to 27 per cent for notifications submitted by all WTO members. When focusing on emergency notifications, this difference is even more striking: 81 per cent of emergency notifications submitted by LLDCs refer to a relevant international standard, compared to 61 per cent of emergency notifications submitted by all WTO Members. In the case of LLDCs, 90 per cent of all notifications indicating a relevant international standard conform to it, and this is even higher (94 per cent) for emergency standards; these percentages represent 71 per cent and 88 per cent of the notifications, respectively for all WTO members. This may be because they have less extensive SPS regulatory systems and, consequently, they are more likely to have to introduce new regulations or change existing ones when facing emergency challenges.

↑ Processing and export of dried pineapple and pineapple juice in Benin for European markets.

Most of the measures that have been notified do not specifically apply only to products being exported by an LLDC. Therefore, in order to have a clearer picture of which measures have a greater incidence on trade of the LLDCs, it is pertinent to look at the notified measures that cover the five agricultural products of major interest to LLDCs: soja, tobacco, coffee, wheat and oilseed. For these five products, more than 3,000 notifications have been submitted since 1995, with more than 90 per cent of which relate to food safety (excluding tobacco). While most of these notifications affect all trading partners and are not specific regions or countries, LLDCs may encounter additional difficulties to comply with the requirements as they may need to not only fulfil those that have been set out by the importing but also the transit countries, which may differ.

Easing trade bottlenecks by reducing costs and streamlining LLDC exports is critical to increase harmonization of the importing market requirements. Since 2007, WTO notifications include the possibility for members to indicate whether there is a relevant international standard by the CAC, the IPPC and the OIE, and whether their notified SPS measure conforms to it. A closer look at all types of notification submitted by WTO members reveals that of the five products of major interest for LLDCs, an average of 25 per cent of them indicate a relevant international standard, guideline or regulation by the CAC, the IPPC and the OIE (mostly by the CAC on food safety). Up to 48 per cent of that total indicate that the notified measure conforms to the relevant international standard.

Using IT to ease trade bottlenecks: two WTO tools to track notifications


SPS & TBT notification system

 <https://www.epingalert.org>



A joint initiative of the WTO, the International Trade Centre and the United Nations, ePing is a global online tool that enables private and public stakeholders to access and discuss SPS notifications covering products and markets of interest in a timely manner.

SPS Information Management System

 <http://spsims.wto.org>

The comprehensive database allows users to search all notified SPS measures and specific trade concerns (STCs) raised in the SPS Committee.

COVID-19 and SPS measures

In reaction to the COVID-19 pandemic, members must act quickly to ensure health safety. As of 30 June 2021, 29 members had submitted a total of 101 COVID-related SPS notifications and communications, including measures implemented,

subsequent modifications introduced and statements delivered in the SPS Committee. However, the measures introduced may have had a limited negative impact on export opportunities of LLDCs. Initially, COVID-19 SPS measures mainly related to restrictions on animal imports and/or transit from affected areas and increased

certification requirements. None of these measures specifically targeted LLDCs, and most restrictions have since been lifted. Only one LLDC submitted a COVID-19 SPS emergency notification restricting import and transit, which has already been lifted.

From April 2020, most notifications and communications from members were aimed at facilitating trade by temporarily easing product certification requirements while ensuring product safety (e.g. accepting veterinary and phytosanitary e-certificates, and scanned copies instead of original documents). Similarly, these measures affected all trading partners and, as such, LLDCs also benefited from the easing of requirements that did not compromise safety.

Agricultural producers, particularly the smallest, and MSMEs in LLDCs are significantly more impacted by the implementation of certain SPS measures that create additional restrictions or burdens on international trade in animals, plants or plant products (or new SPS measures and more restrictive requirements for exports). The LLDCs Mali, Niger and Paraguay have submitted, together with 37 other WTO members (including 11 transit countries), a request for the suspension of the processes of entry into force of reductions of maximum residue limits (MRLs) for plant protection products in light of the COVID-19 pandemic (WTO document G/SPS/GEN/1778/Rev.5).

↓ A bustling market on the banks of a lake in Rwanda.



Participation in the SPS Committee

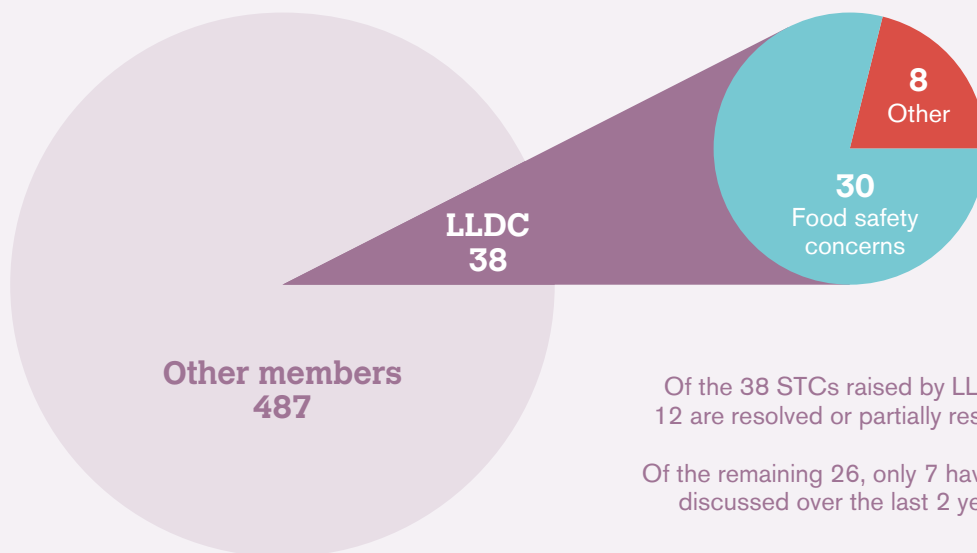
In the SPS Committee, all WTO members can raise their concerns about other members' regulations. At SPS Committee meetings, which usually take place three times per year, LLDCs have the opportunity to raise STCs on measures maintained by trading partners. Members can also support STCs raised by other members to indicate their interest in the topic or a similar concern.

In recent years, developing country members have increasingly participated in the SPS Committee – both to share information with other members and also to discuss concerns on measures implemented by their trading partners. Overall, LLDCs are not particularly active in

the SPS Committee, although some of them frequently take advantage of this mechanism to voice their concerns.

Of the 525 STCs discussed in the SPS Committee up to 30 June 2021, 38 were raised or supported by an LLDC (see Figure 13). Paraguay has participated as a raising or supporting member in 26 of them – in some together with other LLDCs. Of these 38, the vast majority (80 per cent) relate to food safety concerns; the remaining relate to plant or animal health matters and other types of concern (i.e. control, inspection and approval procedures). Twelve out of the 38 STCs are considered to be resolved or partially resolved. Of the remaining 26, only 7 have been discussed over the last 2 years.

Figure 13: STCs discussed at the SPS Committee



Of the 38 STCs raised by LLDCs: 12 are resolved or partially resolved.
Of the remaining 26, only 7 have been discussed over the last 2 years.

Source: WTO Secretariat.

Among the five agricultural products of interest to the LLDCs cited above, twelve STCs on measures affecting soya, all mostly related to food safety, have been discussed in the SPS Committee. Six of these STCs refer to MRLs of certain pesticides in a number of agricultural products. Some LLDCs, such as Paraguay, the Plurinational State of Bolivia, Burkina Faso, Burundi and Zambia, have raised or supported these STCs.

LLDCs and transit countries have also joined other members in raising STCs relating to measures covering

endocrine disruptors (pesticides), cadmium in chocolate and veterinary medicinal products (antimicrobial resistance). Yet another area of frequent concern for developing countries and LLDCs relates to control, inspection and approval procedures, including sampling, testing and certification. STCs in this area make up approximately 20 per cent of all STCs raised in the SPS Committee, and frequently attest to undue delays or unjustified documentation requirements when undertaking and completing control, inspection and approval procedures.

Maximum residue limits of pesticides

The issue of pesticide MRLs in food is frequently discussed in the SPS Committee. Over 20 members, including LLDCs and transit countries, have taken the floor to either raise or support concerns. These concerns mostly relate to pesticide regulation measures and their impact on exports of bananas, grapes, mangoes, oilseeds and rice.

In particular, many STCs are raised in relation to the different MRLs that apply in various export markets, something that presents a particular problem for LLDCs, as they may have to comply with different MRLs for both the import and transit country.



← Stock receiving attendant moves crates of tomatoes out of the storage facilities for transportation, Eswatini.

SPS-related private standards

In addition to SPS measures adopted by governments, LLDCs, like all WTO members, face the increased use of 'private standards', which cover a wide range of quality, ethical, social, environmental and food safety issues. This section concerns only the latter. SPS-related private standards are a response to various factors, including food safety concerns, legal requirements to demonstrate 'due diligence' in the prevention of food safety risks and the increased consolidation in food retailing.

Where a small number of food retailers account for a high proportion of food sales, the options for suppliers who do not participate in either an individual or collective retailer standard scheme can be considerably reduced. Furthermore, the retailer scheme may be de facto applied as the industry norm by all actors in the supply chain. Thus, the choice of whether or not to comply with a voluntary standard becomes a choice between compliance or exit from the market. In this way, the distinction between private voluntary standards and mandatory 'official' or 'public' requirements can blur. This situation particularly affects exporters in LLDCs, as they are very small and have very little leverage with the private retailers in shaping their private standards. Moreover, small producers in LLDCs severely lack the capacity to comply with these private standards, which thus become an important bottleneck for LLDC trade.

Private standards impact on trade at all levels, including at the international level. In particular, LLDCs have raised concerns that

private standards act as a barrier to trade. This is reflected in discussions in the SPS Committee, as well as in a number of other multilateral bodies, including the Organisation for Economic Co-operation and Development (OECD), UNCTAD and the World Bank, which have led research on their impact.

Under the SPS Agreement, the preferred way of meeting the scientific justification requirement is by using international standards. The SPS Agreement also requires that there be no unjustified costs in control, inspection and approval procedures to ensure that these do not function as barriers to trade and bottlenecks to LLDCs.

Increased use of international standards relating to the treatment of agricultural goods, including in transit, could reduce the trade transaction costs and facilitate trade. LLDCs should participate actively in the standard-setting processes under the CAC, the IPPC and the OIE to ensure that the standards developed meet their needs, and that they are applied to goods in transit only in cases where the transiting goods present a risk for the transit country. They should also consider opportunities to make more use of specific standards of relevance to trade facilitation.

Importantly, the SPS Agreement contains provisions to ensure the transparency of SPS requirements. While the majority of SPS measures notified to WTO affect all trading partners, LLDCs may face increased challenges, in view of the infrastructure, expertise and resources required for their implementation. The fulfilment of the obligations established in the SPS Agreement, as well as the technical



↑ **Banana consignment from Uganda crosses into the Democratic Republic of the Congo.**

assistance available and the support offered by the STDF can contribute to increasing capacity in those countries to comply with importing members' requirements and, as a result, to gain and maintain market access for the agricultural products of major interest to them.

Finally, the SPS Committee provides a forum where members can discuss the implementation of the SPS Agreement and raise their concerns relative to other members' regulations. LLDCs could use

the STC mechanism of the SPS committee to question and clarify the necessity of applying certain SPS measures to products in transiting which will not be consumed or commercialized in the transit country. In this way, the SPS Committee plays a vital role in addressing some of the bottlenecks in LLDC trade.

“Small producers in LLDCs severely lack the capacity to comply with these private standards, which thus become an important bottleneck for LLDC trade.

↓ A trader's market in Nepal opens for business.





Gatuna Border Post is the main border crossing between Rwanda and Uganda.

5

WTO's TBT Agreement: technical barriers to trade

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The WTO's TBT Agreement entered into force with the establishment of the WTO on 1 January 1995. It aims to ensure that product requirements in regulations and standards (on safety, quality, health and the environment) as well as procedures for assessing product compliance with such requirements (certification, testing, inspection, accreditation) are not unjustifiably discriminatory and do not create unnecessary obstacles to trade.¹ The TBT Agreement also emphasizes the importance of transparency and contains disciplines that strongly encourage the use of international standards as a basis for harmonizing regulations across WTO members.

COVID-19 and TBT measures

The COVID-19 pandemic has led to the introduction of a spate of temporary and emergency measures, especially to facilitate access to essential COVID-19 medical goods. Some of these measures are trade restrictive, others trade facilitating. In the area of TBT, most COVID-related regulations that have been notified are trade facilitating.

As of 6 October 2016, TBT measures (technical regulations, conformity assessment procedures) make up a large share (174, 41 per cent) of all 420 COVID-related measures notified to the WTO since

↓ The Jwaneng diamond mine, Botswana.



the start of the pandemic, in March 2020. However, it is unlikely that these many TBT measures have had any negative impact on export opportunities of LLDCs for two reasons:

- (1) The top ten products exported by LLDCs concern mostly copper products, oils, metals, petroleum gases, coal, diamonds and electrical energy – sectors which were not the most directly affected by COVID-related measures.
- (2) A significant majority of these notified TBT measures are trade facilitating: they intend to make trade flow more easily, for example by making certification procedures quicker, using digital technology or giving more time for members to comply.

The top ten export markets for LLDCs cover 81 per cent of their exports. These countries issued 84 COVID-related notifications in 2020, of which 59 were issued by one trading partner – Brazil, which is responsible for only 3 per cent of

LLDC exports. In addition, of these 59 TBT measures, the vast majority (50, 85 per cent) deal with medical and sanitary devices and equipment, which is a very specific sector and less relevant for exports from LLDCs. Thus again, it is not likely that the notified TBT measures have had a significant impact on export opportunities of LLDCs.

Participation in the TBT Committee

With the exception of Rwanda and Uganda, LLDCs are not active in the TBT Committee. Very few engage by either submitting notifications or participating in discussions about standards and regulations. Overall, the total number of notifications submitted by LLDCs is low, and even fewer STCs have been raised by LLDCs against other members' regulations or against LLDC regulations at the TBT Committee. Limited capacity to engage in the work of the WTO in general, and in the TBT Committee specifically, may be at the root of limited participation of some LLDCs.

“The top ten products exported by LLDCs concern mostly copper products, oils, metals, petroleum gases, coal, diamonds and electrical energy – sectors which were not the most directly affected by COVID-related measures.”

TBT notifications

From 1995 to October 2021 ...

... over 42,500 TBT notifications have been submitted to the TBT Committee, BUT:

- over half of LLDCs have never notified
- only 6 LLDCs have notified more than 10 measures

... over 700 STCs have been raised and discussed in the TBT Committee, BUT only:

- 10 LLDCs have raised or supported an STC
- 12 LLDCs Members have had their TBT measures challenged in the TBT Committee

Capacity constraints in TBT

Another source of information on the regulatory bottlenecks for LLDCs is technical assistance. The TBT Agreement has special provisions (mostly in Article 11) for the right of a member – LDCs in particular – to request, and the obligation for other members to provide, technical assistance in the area of technical regulations, conformity assessment and setting standards. Indeed, as early as 1997, it was agreed that members requiring technical assistance should inform the TBT Committee and specify their needs. A questionnaire was developed in 2002 to which 53 members have so far responded. The questionnaire highlights infrastructure and in relation to conformity assessment and standardization bodies as one of the top unmet technical assistance needs of responding members (WTO document G/TBT/W/19). In 2005, the TBT Committee found that: “The lack of such infrastructure (or inadequacy of existing ones) would appear to be a core constraint facing many developing country Members in the TBT area” (WTO document JOB(05)/20).

Quality infrastructure

Quality infrastructure has been identified as a key challenge inhibiting LDCs and developing country members from diversifying their trade to new markets.²

The World Bank has pointed to the existence of a link between development of quality infrastructure and trade competitiveness: low competitiveness generally correlates with weak quality infrastructure development (Kellermann, 2019); conversely, good quality infrastructure contributes to competitiveness.

The trade issue here is that conformity assessment procedures (such as testing and certification), and the domestic quality infrastructure systems that generate them, are not always recognized by trade partners. This lack of internationally recognized conformity assessment may lead to additional costs (e.g. duplicative testing) and to possible rejection at the border. Meeting product regulations and standards of trading partners is important; more important still is being able to demonstrate to the export market that the products

“Particularly in Africa, standards alignment and an effective quality infrastructure ecosystem with cross border cooperation and recognition will facilitate intra-regional trade.

Quality infrastructure

Quality infrastructure is public and private organizations together with the policies, legal and regulatory framework, and practices needed for the quality, safety and environmental soundness of goods and services. It has the following characteristics:

- required for effective operation of domestic markets;
- international recognition is important to access foreign markets;
- critical element in promoting and sustaining economic development and environmental and social well-being.

For further information, see <https://www.inetqi.net>.

actually conform with their regulations. These are therefore some of the biggest hurdles to expansion and diversification of LLDC and LDC exporters. Business surveys of agricultural and manufacturing exporters in 37 countries, of which 10 were LLDCs, found that conformity assessment procedures are perceived as the most burdensome type of non tariff measure, and that certification and testing are the two types of conformity assessment procedure most often cited as problematic.³ The discussion of STCs among all members in the TBT Committee confirm that conformity assessment is an area of particular trade friction (WTO document JOB/TBT/224).

There is a research gap on the specific challenges faced by LLDCs in standards, regulations and quality infrastructure. Nevertheless, gaps in quality infrastructure are likely to be significant for LLDCs. In very practical terms, this may be about the absence of the institutions themselves (or poor governance when such institutions do exist). This, in turn, can lead to uncertainty about product compliance. This may be particularly for LLDCs where goods may be transiting more frequently than in other places. Gaps in quality infrastructure can translate into fewer opportunities to link into value chains. This uncertainty may undermine international trade, economic growth and development.

At recent discussions at the WTO, a number of developing country members illustrated these gaps (WTO document G/TBT/GEN/278). While these experiences were not reported by LLDCs, they will face similar challenges and constraints in the area of quality infrastructure.

Shifts in the trading environment will also evolve towards more diverse exports (value-added, processed goods) in LLDCs; and at the same time, consumers will become more demanding with regard to quality and standards. A low quality infrastructure development in the region will represented a missed opportunity to facilitate exports. In order to improve this situation and enhance international competitiveness, the promotion of a culture of quality through infrastructure systems needs to be deemed a priority.

It is notable that there has been a stronger response to technical assistance for SPS. The STDF has enabled a coordinated response to technical assistance in the areas of food safety, plant and animal health – including with respect to the upgrading of laboratories and standards and certification bodies. However, a similar, targeted technical assistance in the TBT area is still lacking. Particularly in Africa, standards alignment and an effective quality infrastructure ecosystem with cross border cooperation and recognition will facilitate intra-regional trade. Regional integration on TBT matters, such as in the African Continental Free Trade Area could help to address some of the challenges facing LLDCs in Africa.⁴ It may also be worthwhile considering other forms of technical assistance or Aid for Trade funding windows, such as the EIF for landlocked LDCs.

Endnotes

- 1 See WTO (2021a) for a new handbook on the TBT Agreement.
- 2 The Aid for Trade Global Review 2019 had six sessions devoted to matters relating to quality infrastructure.
- 3 See https://www.wto.org/english/tratop_e/tbt_e/th_sess_280317_e/itc.pdf.
- 4 See <https://www.un.org/ohrls/news/statement-event-leveraging-afcta-promote-smooth-functioning-corridors-sustainable>.



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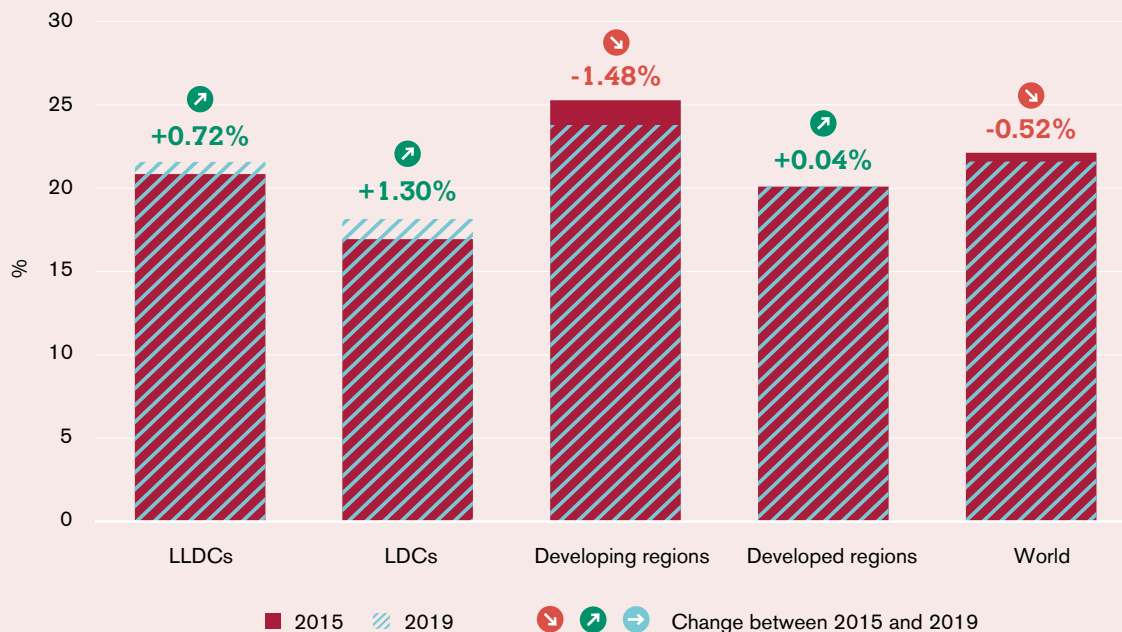
Trade plays a critical role in achieving the development objectives of LLDCs and is key to realizing the Sustainable Development Goals (SDGs), in particular target 17.11: significantly increase the exports of developing countries.

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.

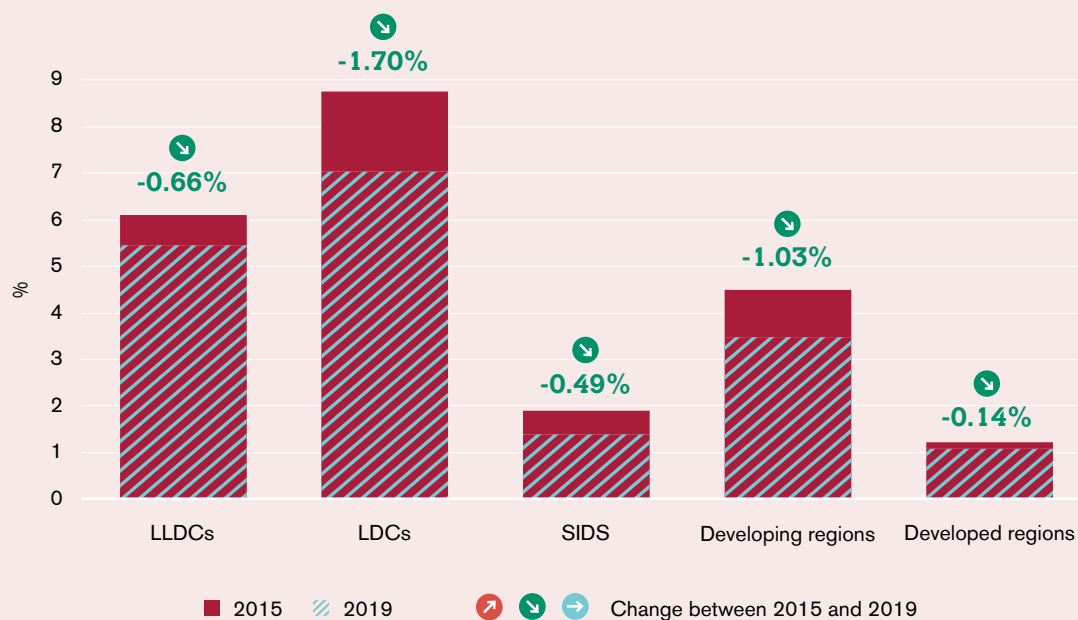
With applied tariff levels trending downwards from 6.1 per cent in 2015 to 5.5 per cent in 2019, LLDCs can be seen as fairly open economies (see Figure 15). They employ slightly higher tariff rates than the recorded average across all developing countries (3.5 per cent in 2019), with protection mechanisms 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.

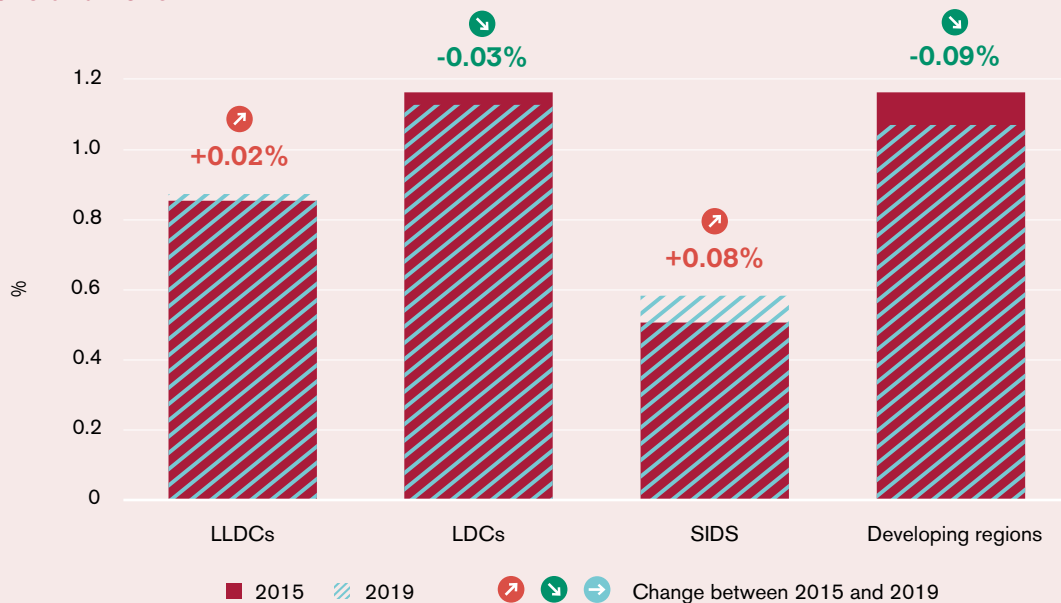
exports concentrated on a few key sectors. The three main factors for limited diversification in LLDCs are (OECD/WTO, 2019):

- 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



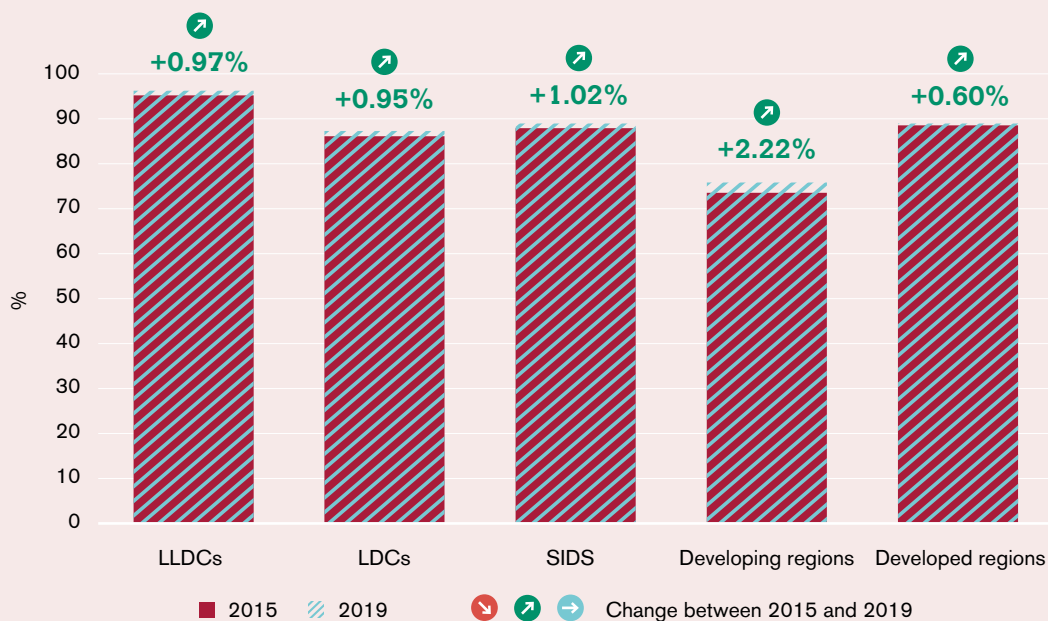
Source: SDG Trade Monitor.

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.

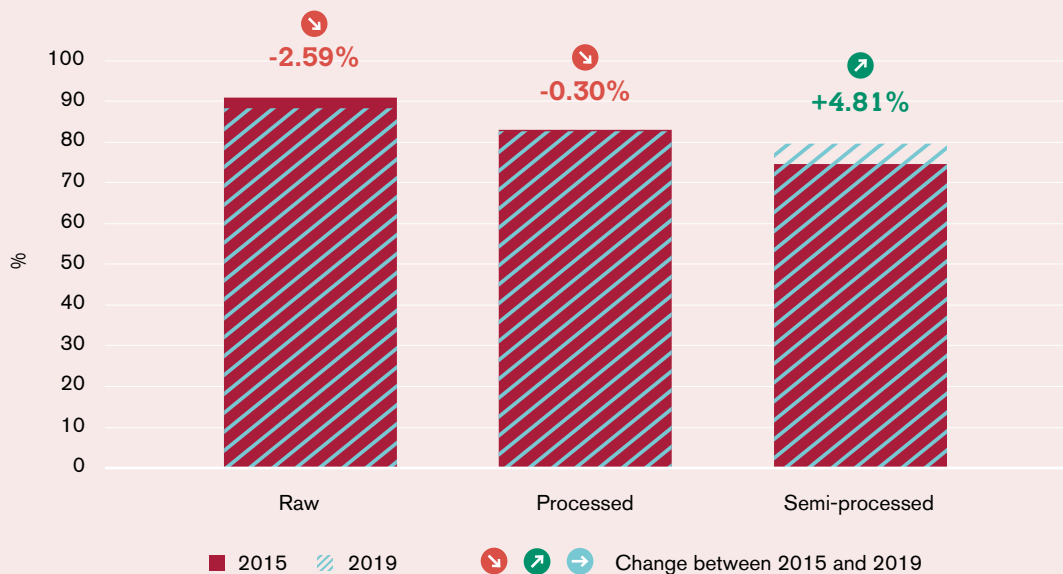
In general, the analysis suggests that tariff lines may not be a significant impedance to LLDC exports to developed regions, with 95 per cent of LLDC goods benefiting from zero-tariff ratings and with other goods exports incurring comparatively low tariffs at an average of 0.85 per cent. Negative trends 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

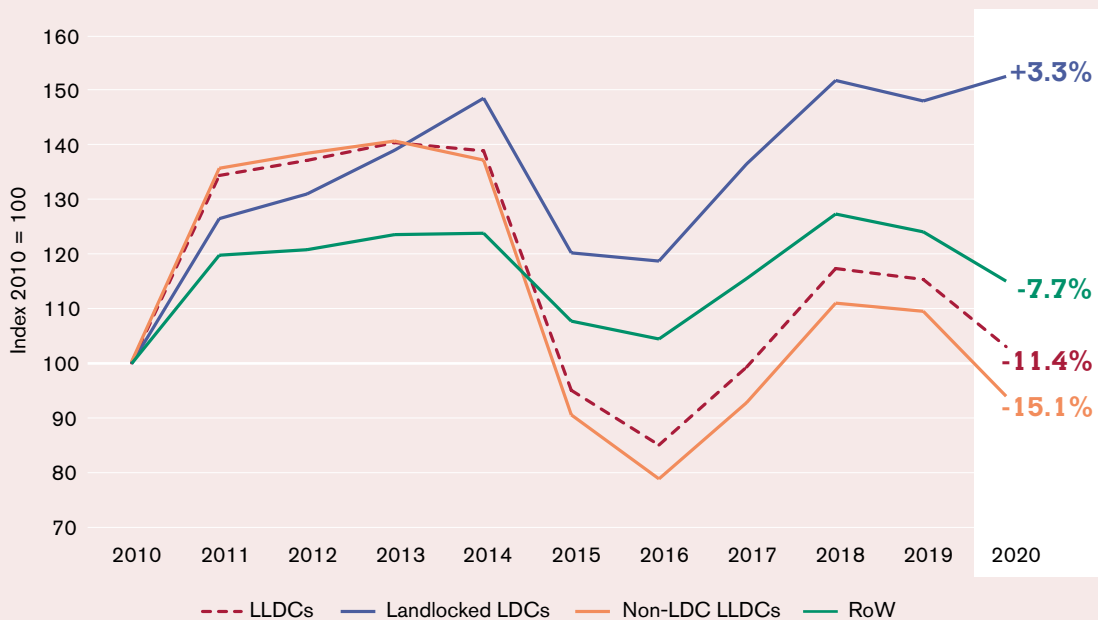
In 2020, LLDC merchandise exports declined by 11.4 per cent year-on-year (see Figure 19), from US\$ 190 billion in 2019 to US\$ 168 billion in 2020, compared with a fall of 7.7 per cent for the rest of the world. The economies of LLDCs that are not least developed suffered an annual decrease of 15.1 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-OHRLLS¹ 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

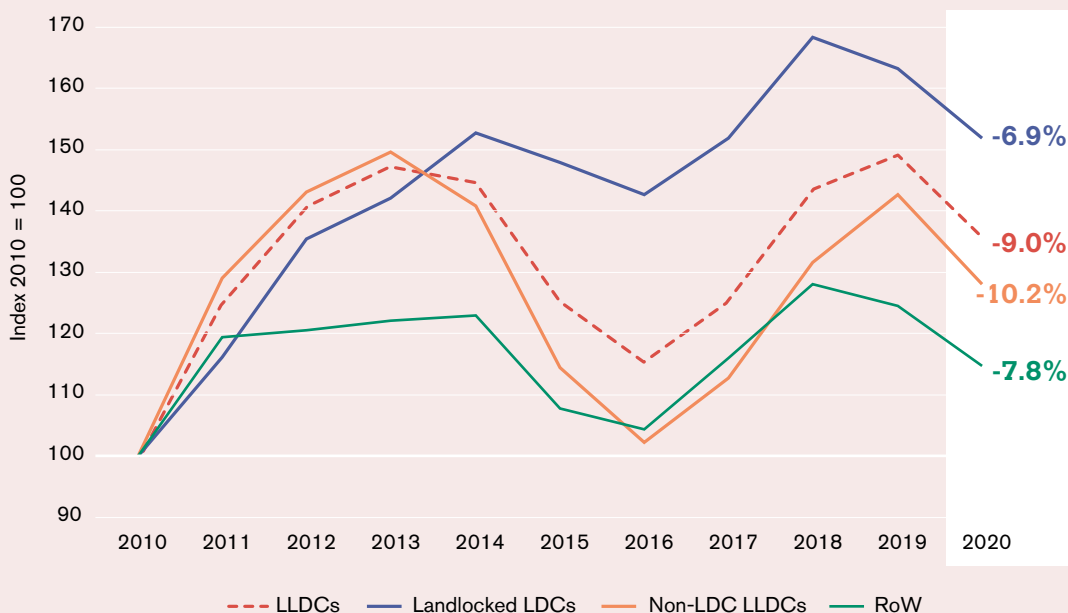
(Index of US\$ values, 2010 = 100)



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.

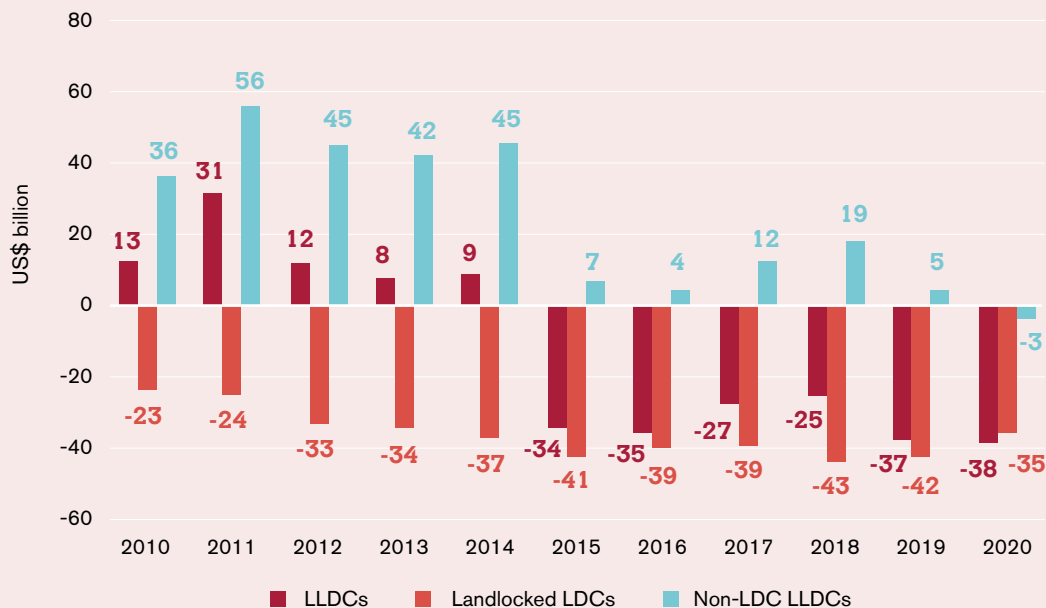
Merchandise imports of the LLDCs decreased by 9.0 per cent in 2020 (see Figure 20), from US\$ 227 billion in 2019 to US\$ 206 billion in

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.

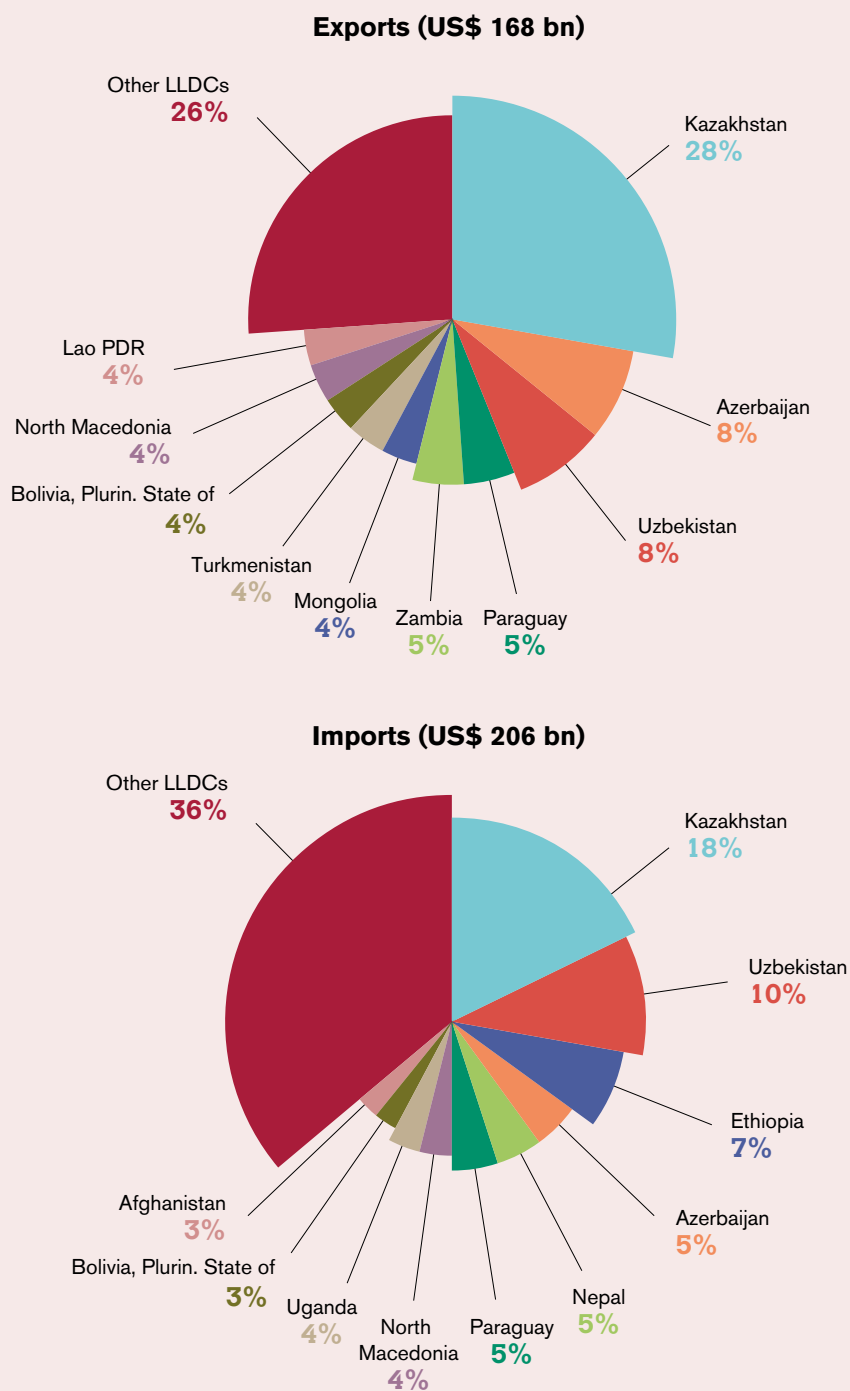
Table 11: Top 10 products imported by LLDCs in 2020

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)



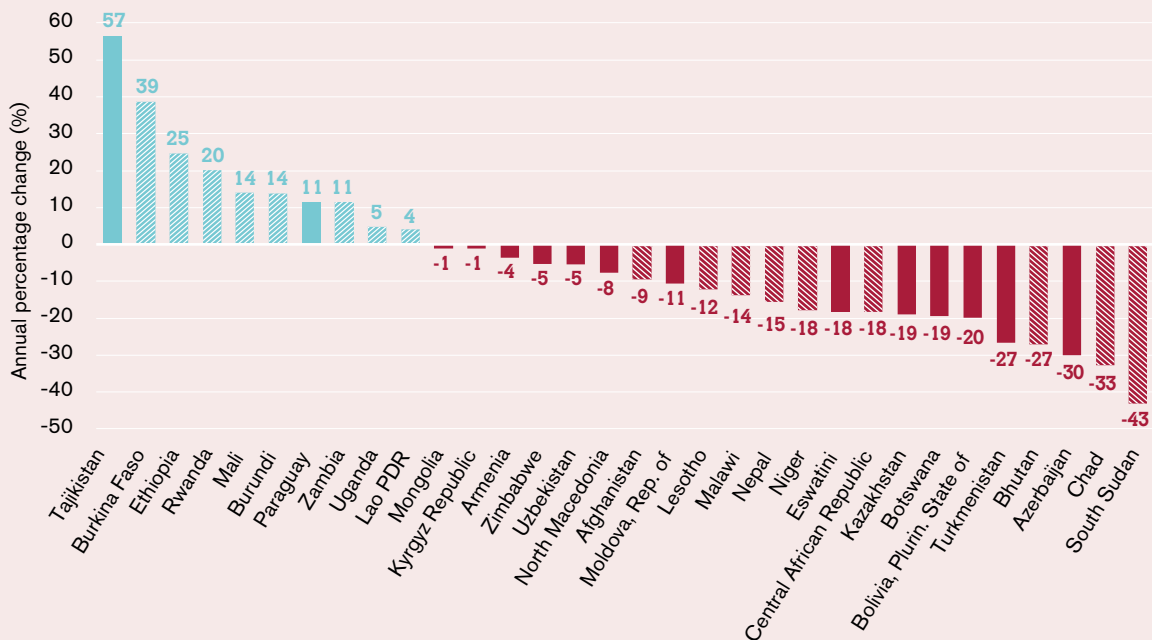
Source: WTO Secretariat.

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

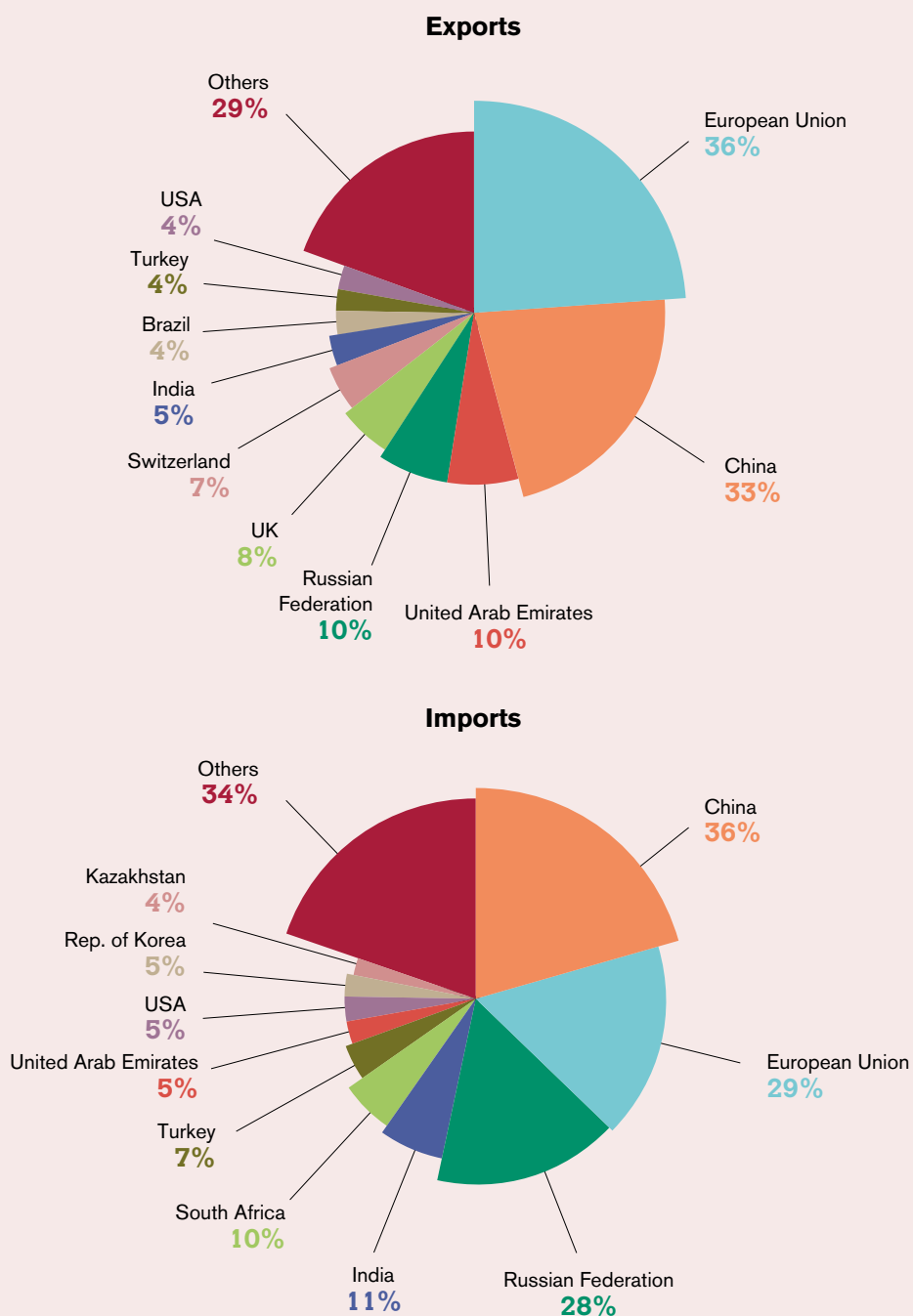
(Annual percentage change, LDCs in shading)



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.

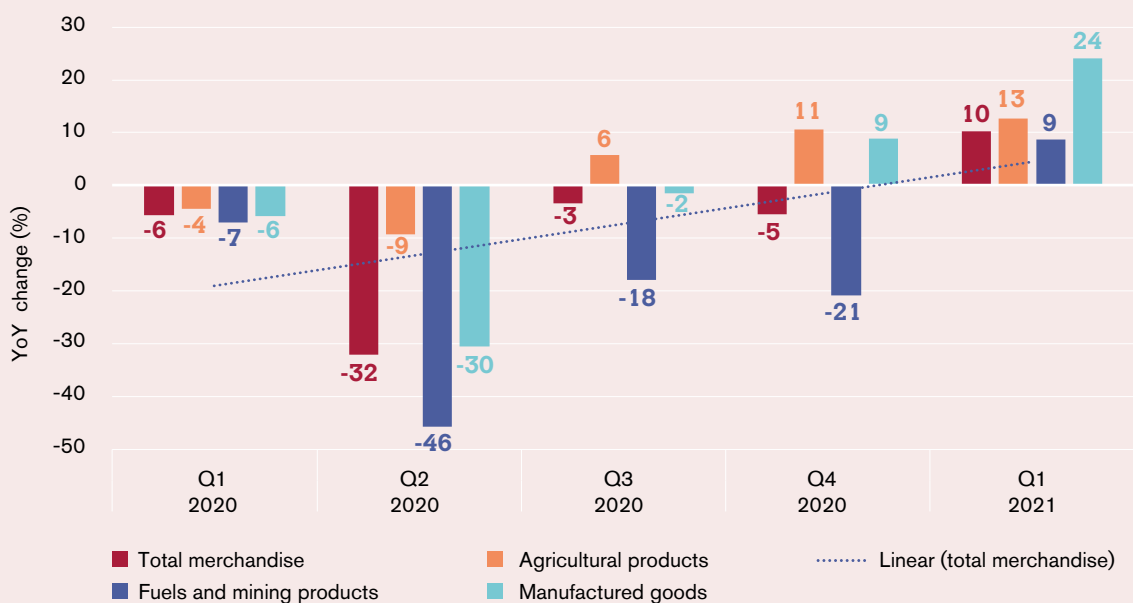
Trade in services and LLDC connectivity

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.

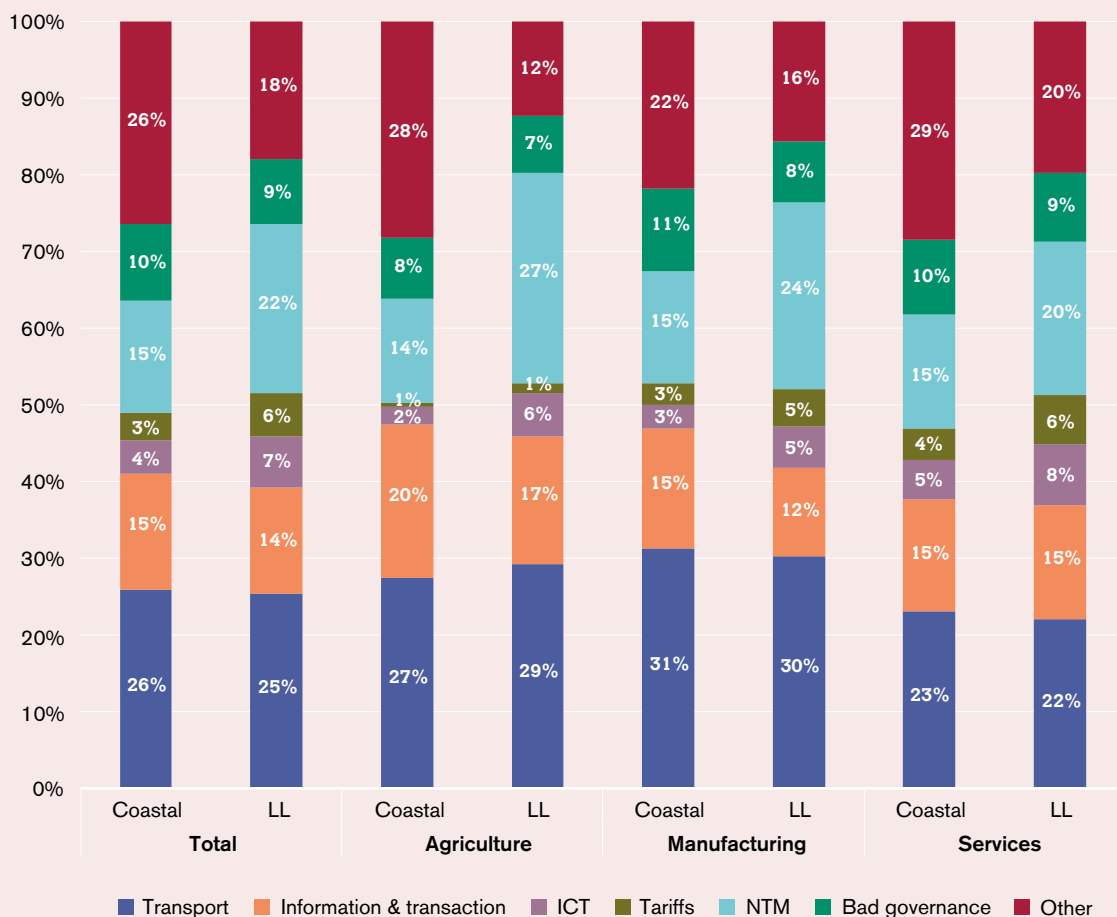
Note: Landlocked indicates that at least one trade partner is a landlocked economy.

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 Rubinova 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.

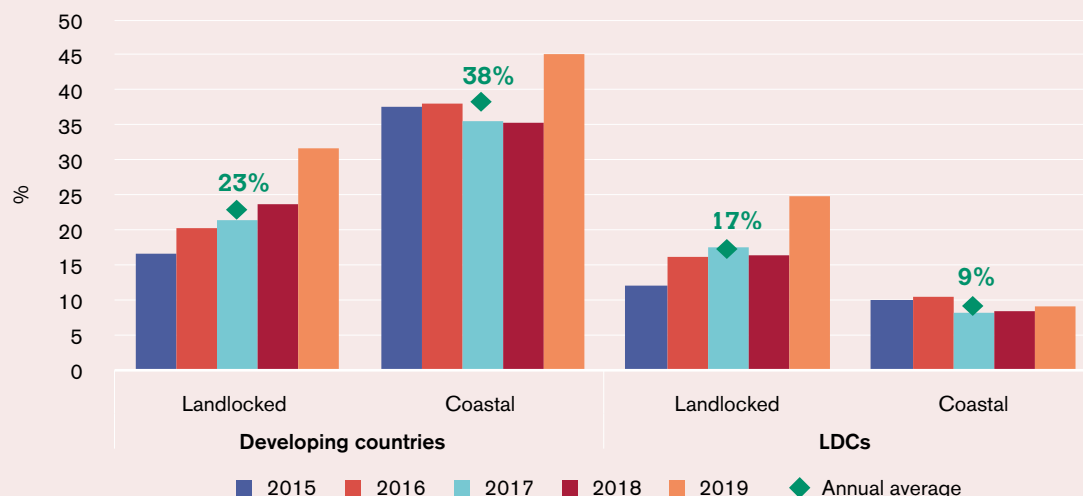
Data notified to the WTO¹¹ do not allow to differentiate imports which are consigned directly from those that are consigned indirectly. Hence, it is not possible to directly verify the hypothesis that businesses in landlocked countries face higher challenges in meeting direct consignment obligations.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

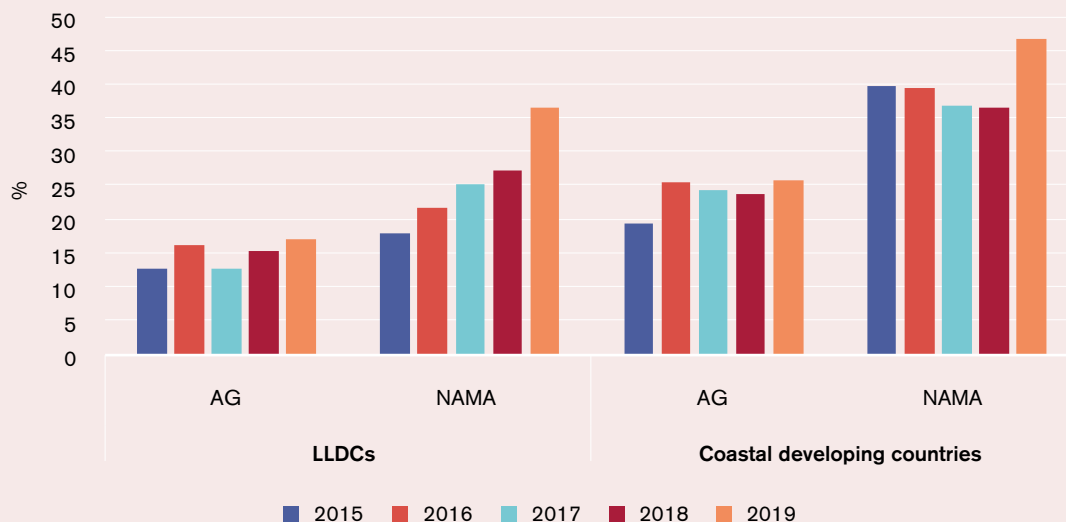
However, the opposite observation can be made when all preference beneficiary developing countries

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.



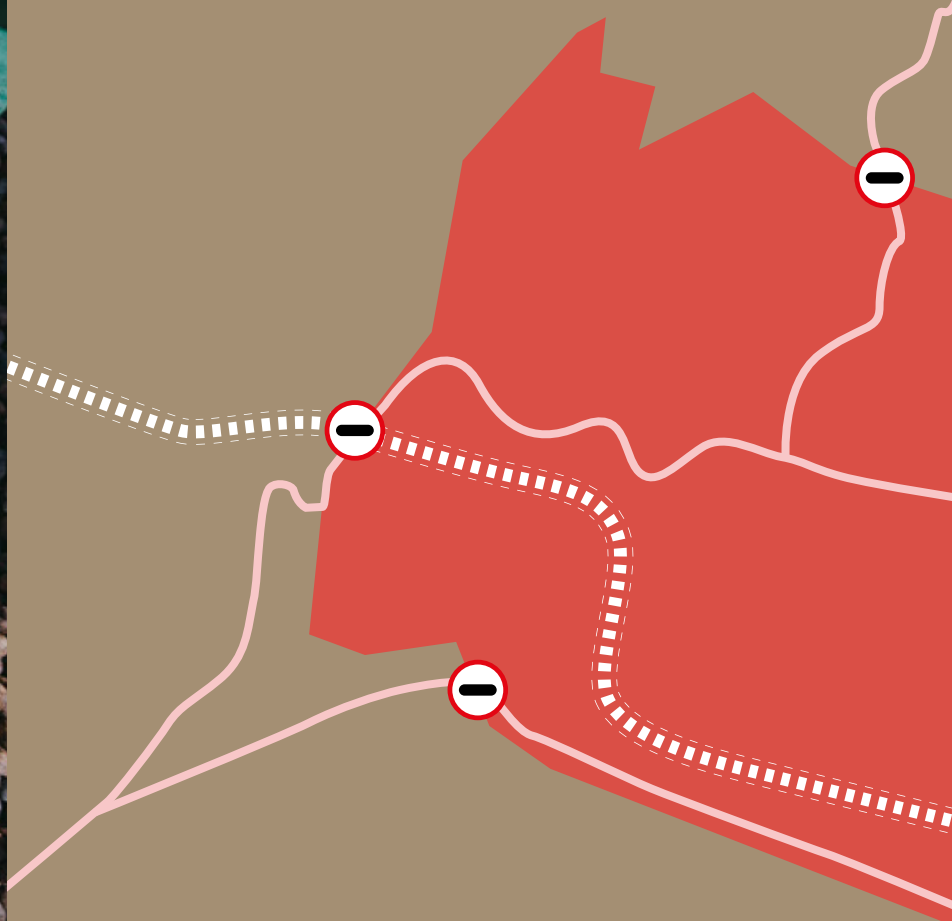


Farmers in Burkina Faso check shea butter for quality before sending to markets.

7

Building trade capacity in landlocked developing countries

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Aid for Trade

Aid for Trade is about helping developing countries and LDCs in particular to build the trade capacity and infrastructure they need to benefit from opening up to trade. Grants and concessional loans are targeted at a broad range of trade-related programmes and projects, including: technical assistance; infrastructure; increasing productive capacity; and adjustment assistance (see Figure 31). The WTO-led Aid for Trade initiative is enshrined as a priority in the Vienna Programme of Action (VPoA). Aid for Trade helps LLDCs to build the infrastructure necessary to complement efforts made on trade facilitation. Building supply-side capacity and trade-related infrastructure is particularly important for LLDCs and is necessary to support trade expansion and market

opening. Together, these elements constitute a tried-and-tested recipe for increased growth, economic opportunities, development, poverty reduction and job creation.

With an emphasis on showing results, activities under the Aid for Trade initiative are conducted under a biennial work programme to promote deeper coherence among the partners and an on-going focus on Aid for Trade among the trade and development community. The Programme for 2020-2022 seeks to understand and operationalize on the opportunities that digital connectivity and sustainability offer for economic and export diversification under the theme “Empowering Connected, Sustainable Trade”. The work programme has been extended by WTO members to cover 2022 and to include an assessment of the trade and economic impacts of COVID-19.

Figure 31: Aid for Trade to LLDCs

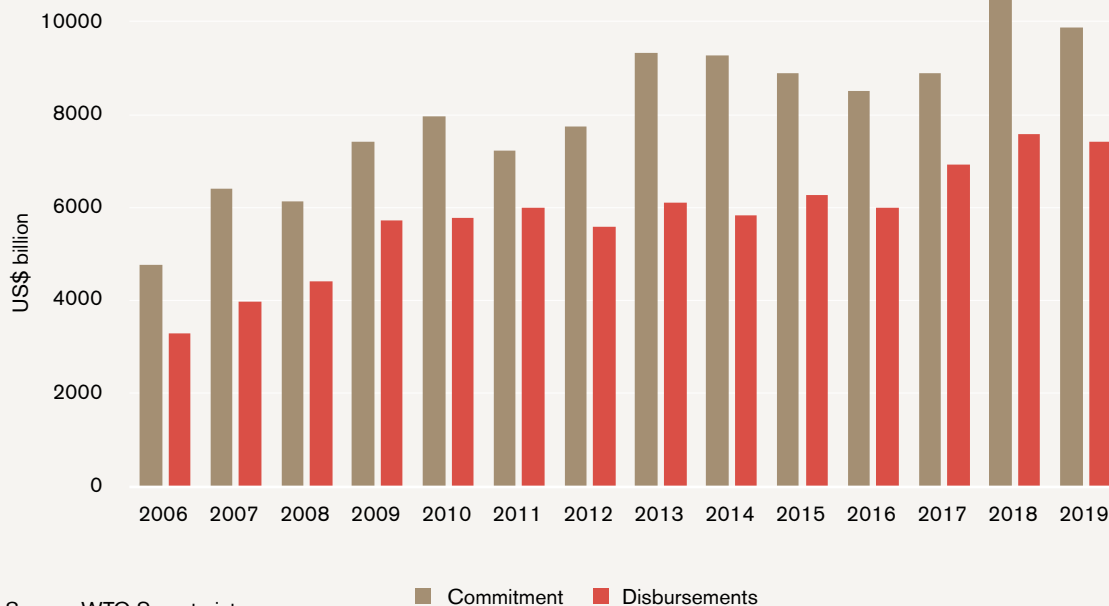
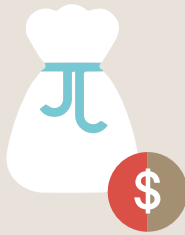


Figure 32. Aid for Trade disbursements

US\$ 81 billion



Since 2006, LLDCs have received US\$ 85 billion in Aid for Trade disbursements

2019
US\$ 7.6 billion



LLDCs received US\$ 7.7 billion in 2019,



225%
increase since 2006



17%



Share of Aid for Trade going to LLDCs = 17% of global disbursements and has been stable since 2017.

Aid for Trade flows for LLDCs in 2019:



30.8%
to energy infrastructure



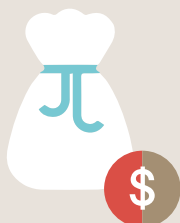
27.6%
to agriculture



20.1%
to transport and storage infrastructure



21.5%
to remaining categories



In trade policy, trade facilitation is the most important, accounting for

US\$ 80 million
of overall Aid for Trade flows to LLDCs

The COVID-19 pandemic has been a powerful reminder of the importance for trade to flow. More than ever before, the world relies on the effective production and distribution of vaccines, medical equipment and other essential goods. The pandemic continues to exact a severe toll on the health and wealth of countries. Although major Aid for Trade donors have stepped up their response, they too have seen their budgets become more stretched than ever. Hence, it is ever more important to make sure that available funds are put to the most effective use.

Vienna Programme of Action

The United Nations has coordinated the development and implementation of programmes of action to address the unique challenges LLDCs face and in turn to contribute to the eradication of poverty in LLDCs. Of the six priority areas of the VPoA¹ (2014-2024), Priority 3 is international trade and trade facilitation. The VPoA flows from the Almaty Programme of Action (2003-2013), which aimed to develop partnerships to overcome specific problems LLDCs face

Aid for Trade Stocktaking Event 2021



In March, the WTO held the Aid for Trade Stocktaking Event 2021, at which the trade and development community surveyed the trade impacts of the COVID-19 pandemic and made the case for the mobilization of Aid for Trade financing to support recovery and to foster resilience. The event included sessions organized by WTO members, international

financial organizations, including multilateral development banks, regional economic communities and other trade support facilities, and international organizations (non-governmental and many of them under the United Nations umbrella).

Session 7, *Impact of COVID-19 on Landlocked Developing Countries and Implications for Resilient Recovery*, was co-organized by Kazakhstan and UN-OHRLLS. Speakers from across the WTO, UNCTAD and the OECD, among others, discussed the impact of the COVID-19 pandemic on LLDCs and identified the challenges LLDCs had been facing in 2020-2021.

Cross-border restrictions enacted by transit countries and ineffective trade facilitation had resulted in pronounced challenges for LLDCs, such as trade bottlenecks. Recommendations towards resilient recovery for LLDCs included enhancing connectivity through digitization of border management measures, enhanced implementation of the TFA, and targeted Aid for Trade support for LLDCs.

resulting from their remoteness and isolation from world markets. There has been much progress in the implementation of the VPoA since its adoption – until the COVID-19 pandemic hit in 2020, halting and even reversing progress in all six priority areas. According to the United Nations Secretary General's report² on the implementation of the VPoA, real GDP growth declined from 4.3 per cent in 2019 to -2.4 per cent in 2020 in LLDCs; and foreign direct investment shrunk by a whopping 31 per cent to US\$ 15 billion in 2020 in LLDCs – the lowest level since 2007. Tourism is a significant export for LLDCs and represents more than 10 per cent of total exports for 13 LLDCs – but it came to a grinding halt during the pandemic. COVID-19 has devastated economies: the number of people in LLDCs living below the poverty line is expected to increase, with as many as 124 million people being pushed into poverty in 2020.

Prior to the pandemic, UN-OHRLLS, ESCAP and UNECE conducted a mid-term review of the implementation of the VPoA across regions.³ In Asia and Europe, LLDCs reported significant progress in enhancing transport connectivity and building resilient transport infrastructure, even as challenges remain. LLDCs adopted several facilitation mechanisms, such as cross-border paperless trade facilitation and single window systems, to promote cross border rail and road connectivity. Major investments were made in developing road, rail, in-land waterways, dry ports and aviation infrastructure. However, constraints remain in the areas of operational and regulatory requirements that adversely impact the efficiency of the corridors. The review highlighted



↑ A gold prospector uses a sluice box to filter the gold, Burkina Faso.

slow progress in expanding participation in international trade and achieving trade diversification for LLDCs in Asia and Europe while also mentioning that intra-LLDC trade has continued to be limited; with the exception of the Kyrgyz Republic, which relies on border trade for meeting most of its export and import requirements.

For LLDCs in Africa, the narrative from the mid-term is not significantly different from Asia and Europe, with the region equally struggling to attract investment to develop bankable, trade-enhancing infrastructure projects that will boost connectivity. The VPoA has an objective to reduce trade time along transit corridors, with the aim of moving transit cargo 300-400 km every 24 hours. Roads dominate transport on the continent, responsible for 80-90 per cent of passenger and freight traffic. The Trans-African Highway is at the very centre of regional connectivity; 54,120 km and distributed along 9 transit corridors, it is characterized

by missing links and inadequate maintenance in some key segments. With the slow pace of infrastructural deployment at the national and regional levels, many countries, including LLDCs in Africa, have turned to domestic sources to fund this much-needed, trade-enhancing infrastructure. It is important to mention that there is growing support through Aid for Trade to develop both hard and soft transport infrastructure. In implementing the TFA, LLDCs in Africa have introduced one-stop border post control measures, implemented harmonized road charges and initiated the smart corridor concept (EDF, 2016). While more needs to be done to effectively implement the TFA in the region, progress was evident at the time of the review.

The Plurinational State of Bolivia and Paraguay are the only LLDCs in South America. One of the objectives of the VPoA is to align the priorities with national development plans of LLDCs. The mid-term review observed that this was true of the social and economic development plans of both countries. They have also taken critical steps to improve connectivity, making a significant investment in transport infrastructure to reduce travel times and the associated costs. In particular, the Bi-Oceanic Railway Corridor is vital for both countries, as it will enable connection between the mainland and ports on the Atlantic and Pacific coasts. Discussions are underway with partners to ensure financing is available for the multi-country connectivity project. The review observed that more needed to be done to boost regional cooperation that will facilitate trade on the continent. The support of the international community through financing and technical expertise

cannot be overemphasized in improving the institutional capacity that will usher in a productivity transformation.

With only three years left in the implementation period of the VPoA, the regression the COVID-19 pandemic has caused is a major setback. Consequently, efforts from all stakeholders must be intensified to recover and achieve meaningful progress by 2024. A report⁴ by the International Think Tank for Landlocked Developing Countries on the impact of COVID-19 and responses in LLDCs noted that the pandemic's impact on the health sector varies across countries and largely depends on pre-pandemic health care capacity. The report noted that the inadequate supply of medical supplies was exacerbated by delays in trade and cross-border transit. On international trade, movement of goods and services have been impacted by the pandemic-induced restrictions, which has adversely affected the trade potential of LLDCs. LLDCs mostly export primary commodities; with reduced demand, any drop in prices negatively affects the fiscal positions of LLDC governments, constraining their ability to respond to the crisis.

Restoring LLDCs' capacity to trade means development partners need to support them to develop their productive capacities, diversify their economies, increase value-addition to their exports and further integrate into global and regional value chains. In this fragile time for the global economy, it is also important that transit countries reiterate their commitment to multilateralism and exercise restraint in export restrictions and other measures that could potentially disrupt the

“In this fragile time for the global economy, it is also important that transit countries reiterate their commitment to multilateralism and exercise restraint in export restrictions and other measures that could potentially disrupt the free flow of goods and services.

free flow of goods and services. The pandemic has fortunately accelerated the adoption of digital technology across various sectors of the global economy and also in LLDCs. Enhanced digital connectivity would assist in facilitating the development of necessary ICT infrastructure thereby making significant progress on Priority 2 of the VPoA, on infrastructure development and maintenance.

In implementing the VPoA, the WTO⁵ has a clear and important role to play – especially with regard to Priority 3, on international trade and trade facilitation. The VPoA outlines precise actions that the LLDC themselves, transit countries and development partners must take to support the economic development of LLDCs. The continuous and full implementation of the TFA is

central to ensuring LLDCs can fully participate in the multilateral trading system, and Aid for Trade is a key pillar of the TFA and is equally critical to LLDCs, especially in the wake of the COVID-19 pandemic.

Impacts of climate change

The impacts of climate change such as extreme temperatures and more frequent flooding and droughts will directly affect roads, railways and other trade infrastructure critical for LLDCs to access international ports and global markets. Any progress made in easing trade bottlenecks could be eroded, increasing trade costs and reducing the competitiveness of domestic producers in LLDCs. International trade will become increasingly important for LLDCs to limit the impacts of extreme weather events on afflicted populations. Imports can

Trade bottlenecks caused by extreme drought in Paraguay

Paraguay's river transport increased from 36 per cent of total volume traded in 1995 to 66 per cent in 2020. In terms of value, river trade was worth nearly US\$ 9 billion to Paraguay in 2020. However, extreme droughts since 2019 have resulted in historically low water levels in navigable rivers, squeezing its main thoroughfare access to international markets.

The record low water levels generate delays and cost overruns as vessels must sail at lower loading capacity. River transport has filled 50 per cent of storage capacity in both Paraguayan and shared waters, as well as at the downriver overseas ports in Argentina and Uruguay. As a result, the freight cost for a 40-foot container from China to Asunción has increased from around US\$ 3,000 before the droughts to up to US\$ 14,000 – affecting the entire logistics chain and the costs of the final products.



↑ Record low water levels have hampered trade transported by river, Paraguay.

cushion shortfalls caused by a shock in the supply of food, for example, while exports can provide an important source of demand during a crisis (Pauwelyn, 2020). Trade can therefore help to sustain economic activities and to reduce the negative impacts of a shock on jobs and incomes.

For future spending on maintaining and expanding trade infrastructure in LLDCs to deliver the best possible return, it is critical that investment plans consider the consequences of climate change (EIB/Bruegel, 2012). Strengthening financial, technical and institutional capacity is especially important for the most vulnerable countries.

Aid for Trade mobilizes investments for building climate resilient infrastructure. Since 2005, 55 per cent of Aid for Trade disbursements were to build energy, transport and telecommunications infrastructures, amounting to US\$ 25 billion up to 2019.

Enhanced Integrated Framework

Housed at the WTO, the EIF is a partnership of 51 countries, 24 donors and 8 partner agencies that works closely with governments, development organizations, the private sector and civil society to assist LDCs to use trade as an engine for development and poverty reduction. Seventeen LLDCs are categorized as least developed and face severe structural impediments to sustainable development, including high vulnerability to economic and environmental shocks.

To date, the EIF has invested more than US\$ 95 million in trade support to landlocked LDCs, which has included support for analytical

studies, the improvement of the trade institutional environment and productive capacity support to targeted sectors. Beyond country-specific support, landlocked LDCs are also the beneficiaries of several regional and cross-regional projects – which are particularly important to unlocking constraints to trade facilitation.

A cornerstone of EIF support is the Diagnostic Trade Integration Study (DTIS). This in-depth analytical work assesses the trade environment in LDC with which the EIF works and establishes a set of national priorities for stronger trade integration. These studies provide a wealth of information and enable analysis across this unique group. When considering the standard Aid for Trade categories, trade facilitation features among the most frequently cited priority areas, together with trade policy, administrative management and agriculture.

Given the disproportionate importance of trade facilitation, the EIF supports LDCs in improving trade facilitation and implementing the TFA through project investments and strengthening institutions. Currently, 13 landlocked LDCs have ratified the TFA. Most DTISs include sections on trade facilitation needs, and many of the training sessions funded by the EIF also cover trade facilitation.

The EIF has supported 29 actions in support of trade facilitation for landlocked LDCs. Recently, this has included support for the establishment of a one stop information centre for trade facilitation in Bhutan, providing increased transparency with respect to procedures and facilitating public-private dialogue around

trade facilitation in the Lao People's Democratic Republic.

In Rwanda, the EIF has worked with the government and other partners to establish a comprehensive cross-border trade-support infrastructure, including the construction of dedicated cross-border markets with the neighbouring Democratic Republic of the Congo and Uganda. This support has a disproportionate effect on women, who often comprise more than three quarters of these traders.

In Zambia, the EIF is working to facilitate the implementation of the TFA through interventions such as support in monitoring the status of implementation, as well as support in implementing advance rulings and notifications. The EIF facilitates consultative meetings with stakeholders together with other partners around the development and enactment of the Boarder Management Act and is supporting

the development of a one-stop border post in Kipushi. A preparatory meeting was facilitated to facilitate discussions around a public-private partnership concessional agreement.

The EIF works to ameliorate the challenges small economies face through facilitating capacity of landlocked LDCs to increase their exports and access to international markets. Through EIF support, landlocked LDCs have concluded over 120 new international market transactions, such as: honey exports from Burundi to the United Arab Emirates; gum Arabic from Chad to Switzerland; and shea butter from Mali to the United States of America. Project interventions help to overcome bottlenecks to trade in LLDCs, such as supporting conformity with environmental protection standards through a leather project in Niger.

A selection of EIF projects in LLDCs

Burkina Faso

The EIF has supported over US\$ 3.2 million worth of shea exports to global markets, such as France, Niger and the United States of America. Project activities focus on the training of women in particular, in the processing of shea butter and the valorisation of consumable products.

Lao People's Democratic Republic

Drawing on both stronger dialogue between the private sector and the government, EIF support is helping to unlock business constraints and to unleash export potential. Initial trials show increases in the productivity of key agricultural export crops, such as rice and maize, of up to 80 per cent.



↑ Shea butter machine, Burkina Faso.

Malawi

Over 6,000 smallholder farmers have been trained to apply good agricultural practices through innovative techniques. Farmers have seen yields increase by 140 per cent for soya beans and 160 per cent for groundnuts. Farmers’ incomes are up by 240 per cent for soya farmers, reducing incidents of poverty. The EIF has facilitated over US\$ 2 million in exports.



↑ A successful harvest in Malawi.

Mali

With EIF support, Mali has achieved remarkable success in increasing its volume of shea exports to markets such as Burkina Faso, Côte d'Ivoire, France, Gabon, Germany, Senegal, Tunisia and the United States of America – exporting 311 tonnes of shea in 2020, up 17 per cent year-on-year. The EIF has supported the training of women in cooperative management, shea processing and further value addition.



↑ Harvest time in Nepal.

Nepal

Working with more than 4,700 small producers, the EIF has helped to grow the export potential of medicinal and aromatic plants in Nepal. The project invested in improved production and storage techniques, as well as facilitated expanded international market linkages, improved branding and trademark security. Beneficiaries’ incomes are estimated to have increased by more than 20 per cent.

Zambia

With support from the SNV Netherlands Development Organisation, the EIF and the government have worked to increase the quality and quantity of Zambian honey exported to international markets. Linking better equipped beekeeping groups with leading private sector firms has increased honey exports: over 6,000 beekeepers have been trained; and more than 200 tonnes of honey have been exported through the facilitated connections. Small farmers have substantially increased both the quality and the volume produced, with one community increasing yields from 30 kg to 216 kg and another from 100 kg to over 700 kg.



↑ A beekeeper in Zambia inspects a hive.

Endnotes

- 1 See <https://www.un.org/ohrls/content/vienna-programme-action>.
- 2 See UN document *A/76/267*.
- 3 See https://www.un.org/ohrls/sites/www.un.org.ohrls/files/vpoa_midtermreview_finalreport_transportconnectivity-24-oct.pdf.
- 4 See <http://land-locked.org/wp-content/uploads/2013/09/REVISED-COVID-19-Impacts-LLDCs-15-April-2021-1.pdf>.
- 5 See the WTO's input for the UN Secretary-General's report on the VPoA, available at https://www.wto.org/english/news_e/news21_e/devel_26apr21_e.pdf.

↓ Trucks queue at the Kabanga border-crossing station between Burundi and Tanzania.





Open road on the Second Thai-Lao Friendship Bridge over the Mekong River.



8

Recommendations

LLDCs are a very special group of countries, which face very atypical constraints. To address these challenges will require special measures to more fully integrate LLDCs into the multilateral trading system. This report has identified some of the areas and issues where targeted steps need to be taken to ease trade bottlenecks – not only by the LLDCs themselves but also transit countries and organizations involved. The paucity of up-to-date data and the difficulties to collect it from some of the remotest areas of the world make it hard to capture all the factors comprehensively and accurately.



↑ The COVID-19 testing laboratory at the Mpilo Hospital, Bulawayo, Zimbabwe.

1 LLDCs should lead the discourse on transparency, through timely and detailed notifications, and even counter-notifications if required.

Nothing can substitute for accurate and timely information as far as trade bottlenecks are concerned. This should also include increased efforts by transit countries to provide timely information through notifications on measures which may affect the transport of goods through their territory. The importance of notification and provision of information to exporters was brought to the fore by the COVID-19 pandemic. During which, information is vital for exporters and transporters to help to maintain trade flows.

2 A more coordinated response to future pandemics is needed so that no country is left behind.

The COVID-19 pandemic hit LLDCs particularly hard, while the response to the pandemic revealed an increasing awareness of the role of transit countries in LLDC access to global economies. It is clear that a more coordinated response to future pandemics is needed. This response from a trade point of view should focus on keeping supply lines into LLDCs open, as well as minimizing the impact of movement restrictions on people and LLDC exports. The response to this and any future pandemics should also include an increase in productive capacity of vaccines and treatments in the developing world, including LLDCs, so that no country is left behind.

3 For resilient economic recovery, LLDCs need enhanced connectivity by digitalizing border processes, enhanced implementation of the TFA and targeted Aid for Trade support.

LLDCs have made strides to identify the courses of action that can address the additional difficulties they face, especially since the COVID-19 pandemic. In an Aid for Trade 2021 session held virtually and co-organized by Kazakhstan and UN-OHRLLS, speakers identified enhancing connectivity through the digitalization of border management measures, enhanced implementation of the TFA and targeted Aid for Trade support for LLDCs as being key for resilient economic recovery. It also highlighted the significant impact that the pandemic has had on small traders, particularly women, who are in a weaker position.

4 Implementation of the TFA is critical to guarantee transparent and predictable trade and will play a major role in supporting recovery and resilience in LLDC economies.

LLDCs depend on trade and the expedited free movement of goods for economic stability and prosperity. The implementation of the TFA, which calls for the minimization of administrative and procedural barriers, is critical as a guarantee of transparent and predictable trade with the main trading partners of LLDCs and will play a major role in supporting recovery and resilience across these economies. The LLDCs have made a strong pitch for a review of the implementation of the TFA, and they have rightly focused on strengthening the rules in

Article 11 on the freedom of transit. These provisions, while a significant step forward in building on the rules in Article V of GATT, still need further clarification and reinforcement. LLDCs in particular continue to face discriminatory practices in their trade when compared to the conditions applied to domestic goods being transported in the transit countries.

5 The development of transit corridors has produced tangible results for LLDCs, particularly in Africa, and should be encouraged and further supported by bilateral donors and regional development banks.

An example of this is the Northern Corridor, in Africa, linking Burundi, Rwanda, Uganda and the eastern regions of the Democratic Republic of the Congo with the port of Mombasa, in Kenya. Since its launch in 2014, the Northern Corridor had achieved a reduction in transit times for a truck to go from the port of Mombasa to Busia on the border with Uganda from 284 hours in January 2015 to 90 hours in January 2019. Donors should continue to provide support to these initiatives for a performance bounce-back post-pandemic. LLDCs should embrace the notion of being landlinked as they can also be transit countries and realize the development potential of transit for their economies.

6 It is important for LLDCs and transit countries to adopt digital interconnected and interoperable systems to expedite the flow of goods at the border and during transportation.

LLDCs can experience a lack of cooperation between customs and other border agencies and traders, in addition to a lack of standardization and harmonization. It is therefore important for LLDCs and transit countries to accelerate adoption of the tools that have been developed by international organizations to expedite the flow of goods at the border and during transportation such as the ASYCUDA computerized customs management system developed by UNCTAD and the eTIR international system administered by UNECE. What would take these systems one step beyond in their ability to facilitate trade flows and transit to and from LLDCs and across borders is to make them interconnected and interoperable so that they can cover the whole transit operation.

7 LLDCs need support to tackle the challenges of a lack of human and financial resources, such as insufficient capacity or shortages of skilled and professional staff, to promote better understanding of the TFA and to increase its implementation.

In response to a TFAF survey on cross-border trade restrictions resulting from COVID-19, LLDC respondents identified import/export documentary requirements and border agency co-operation as the areas where implementation of trade facilitation measures could have the most impact. These responses provide priority action areas for national interventions, priority areas for TFA implementation as well as possible direction for Aid for Trade funded projects.

8 Improving trade-related infrastructure should be a priority for Aid for Trade projects.

Some of the LLDCs have also identified the challenges they face because of insufficient trade-related infrastructure, including technology, both at and behind the border. Examples include: a lack of coordination in the development and maintenance of transit transport infrastructure; a lack of border coordination and harmonization; a lack of equipment and infrastructure (ICT and digital equipment for the implementation of the TFA); a large number of documentary requirements; and manual processing of documentation.



↑ A customs official for the Lesotho Revenue Authority uses ASYCUDA.

9 Trade Policy Reviews of LLDCs and transit countries should have increased focus on transit and transport infrastructure policies.

It is clear from the dependence of LLDCs on transit countries that they will not be able to thrive until their neighbours can also accelerate their development and improve their infrastructure. To improve, for example, the export growth opportunities in Zimbabwe, the economic policies and infrastructure in Mozambique and South Africa also need to be improved. Transit countries also benefit from transit trade as it increases the volume of merchandise in their ports creating jobs and making them more attractive for shipping lines helping to drive down freight costs.



↑ Early morning in Durban Harbour, South Africa.

10 To avoid disruptions in the export of products, it is essential for LLDCs to be informed of requirements established by transit countries that affect international trade.

Importantly, the WTO's SPS Agreement contains provisions to ensure the transparency of SPS requirements. While the majority of SPS measures notified to the WTO affect all trading partners, LLDCs may face increased challenges in view of the infrastructure, expertise and resources required for their implementation. These issues of transparency and notification go beyond SPS issues.

11 LLDCs should actively participate in the standard-setting processes under the Codex, the OIE and the IPPC to ensure that the SPS standards developed meet their needs and that they are applied to goods in transit only where the goods present a risk.

Some interventions may also be needed in the area of SPS measures. The WTO's SPS Agreement requires that there be no unjustified costs in control, inspection and approval procedures to ensure that these do not function as barriers to trade, in addition to meeting a scientific justification for measures through internationally accepted measures. Increased use of international standards relating to the treatment of agricultural goods, including in transit, could reduce the trade transaction costs and thus facilitate trade. LLDCs should also consider opportunities to make more use of specific standards relevant to trade facilitation.

12 The establishment of a facility modelled on the STDF could help LLDCs to develop the quality infrastructure necessary to meet international standards.

In the area of TBT, there is the specific recommendation to examine the quality infrastructure – which is the system that supports and enhances the quality, safety and environmental soundness of goods, services and processes, and which comprises the organizations, policies, practices and the legal and regulatory framework needed. Quality infrastructure has been identified as a key challenge inhibiting LDCs and developing country members from diversifying their trade to new markets. Considering the paucity of data, however, further study and research needs to take place on the extent that the absence of quality infrastructure hampers LLDC competitiveness, and what can be done to remedy this.

13 To encourage businesses in LLDCs to increase the use of preferences granted in bilateral and multilateral agreements and arrangements, direct transportation rules need to be more flexible and better reflect the connectivity challenges LLDCs face.

A regulatory issue that may need further attention from the international community is the interplay between rules of origin and trade by the LLDCs. Currently in most cases, for exports to meet origin requirements and to benefit from tariff preferences, they should be consigned directly from the LLDC to the importing country, which may not always be possible for certain shipments from LLDCs.

14 LLDCs should prioritize investment in industries and services that are less affected by a lack of access to the sea and a long distance to markets.

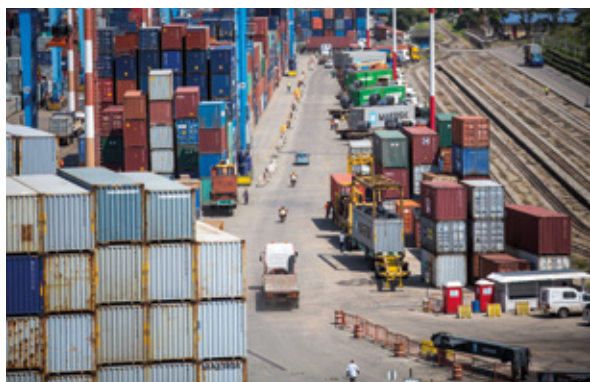
Several LLDCs in Africa share time zones with Europe and also the languages English and French. This makes them ideal locations for the development of call centres and data-processing hubs if they can enhance their ICT connectivity. Creating a favourable business environment is also essential if LLDCs want to encourage the kind of investments that will give them access to technology and know-how. LLDCs could also adopt diaspora engagement policies to attract investment and know-how from their many nationals living in richer countries.

15 LLDCs must place connectivity and digital technology at the forefront of their policy priorities.

It is essential that governments reform legislation, policies and frameworks to increase internet speed, affordability and accessibility to create a conducive digital environment for business. LLDCs should work towards developing the necessary digital infrastructure, paying particular attention to rural areas.

16 It is vital for LLDCs to continue to engage in current discussions at the WTO in the area of e-commerce to close the digital divide.

The COVID-19 pandemic has accelerated the growth of e-commerce worldwide. Due to their lack of ICT infrastructure, LLDCs risk being left behind in the fourth industrial revolution. However, the international community also has an important role to play in recognizing the constraints of LLDCs and offering solutions that help them.



17 Greater coordination and information gathering from international logistic organizations and federations, in cooperation with multilateral organizations, are needed to keep trade accessible for LLDCs.

Containers and shipping rates have greatly increased during the COVID-19 pandemic, and even more so for LLDCs because containers and ships have been moved to serve the highly profitable routes between East Asia and North America, decreasing capacity for all other routes, especially the lower volume ones that serve the LLDCs. Interventions at the international level should include setting mechanisms for tracking and tracing of containers, monitoring of port calls, liner schedules, dry port utilization, and the movement of trains and trucks movements – all of which can be assisted by using improved digital technology. It is also important to look into the existence of discriminatory and anti-competitive practices affecting freight forwarding in LLDCs.

18 LLDCs can benefit from the close cooperation with – and the support offered by – non-governmental organizations and international agencies and organizations, which in turn benefit from greater inter-agency cooperation.

One very positive development for LLDCs was the establishment of the International Think Tank for LLDCs in 2009 in Ulaanbaatar, Mongolia. The think tank aims to provide quality analysis of the challenges facing LLDCs in implementing the VPoA and attaining the SDGs, and it is in a better position to carry out research – especially on those issues where access to data on LLDCs is very limited, for example in trade finance. Another example is UN-OHRLLS, which has succeeded in monitoring implementation of the VPoA, coordinating the positions of the LLDCs, and performing or commissioning research into the developmental challenges of LLDCs and actions needed to alleviate them. The WTO works in close coordination with UN-OHRLLS, and this partnership needs to grow more in the future.



Mombasa Port, in Kenya, an important transit country.

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Abbreviations

AfDB	African Development Bank	OECD	Organisation for Economic Co-operation and Development
ASYCUDA	Automated System for Customs Data	OIE	World Organisation for Animal Health
CAC	Codex Alimentarius Commission	PTA	preferential trade agreement
CIS	Commonwealth of Independent States	SADC	Southern African Development Community
COMESA	Common Market for Eastern and Southern Africa	SDG	Sustainable Development Goal
CTF	Committee on Trade Facilitation	SIDS	small island developing States
DTIS	Diagnostic Trade Integration Study	SPS	sanitary and phytosanitary
EAC	East African Community	STC	specific trade concern
ECOWAS	Economic Community of West African States	STDF	Standards and Trade Development Facility
EIF	Enhanced Integrated Framework	TACB	technical assistance and capacity building
ESCAP	Economic and Social Commission for Asia and the Pacific	TBT	technical barriers to trade
FAO	Food and Agriculture Organization of the United Nations	TEU	twenty-foot equivalent unit
GATS	General Agreement on Trade in Services	TFA	Trade Facilitation Agreement
GATT	General Agreement on Tariffs and Trade	TFAD	Trade Facilitation Agreement Database
GDP	gross domestic product	TFAF	Trade Facilitation Agreement Facility
HS	Harmonized System	TRIPS	trade-related aspects of intellectual property rights
ICAO	International Civil Aviation Organization	UNCTAD	United Nations Conference on Trade and Development
ICT	information communications technology	UNECA	United Nations Economic Commission for Africa
IPPC	International Plant Protection Convention	UNECE	United Nations Economic Commission for Europe
IRU	International Road Transport Union	UN-OHRLS	United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
ITA	Information Technology Agreement	UNWTO	World Tourism Organization
ITU	International Telecommunication Union	VPoA	Vienna Programme of Action
LDC	least-developed country	WCO	World Customs Organization
LLDC	landlocked developing country	WHO	World Health Organization
MFN	most-favoured-nation		
MRL	maximum residue limit		
MSME	micro, small and medium-sized enterprise		
n.e.c.	not elsewhere classified		
NTM	non-tariff measure		

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Without direct access to a sea or ocean and isolated from the world's largest markets, landlocked developing countries (LLDCs) face many challenges to integrate into global supply chains. This report identifies specific trade bottlenecks in LLDCs, which have increased trading costs, lengthened the time to process goods at the border and restricted the movement of goods across borders.

Compounded by the devastating effect of the COVID-19 pandemic, LLDCs have seen trade decline more sharply and for longer than the rest of the world. The report demonstrates the vital role the WTO Trade Facilitation Agreement (TFA) can play in boosting output and facilitating world trade by simplifying, modernizing and harmonizing the movement, release and clearance of goods. Participation in the TFA can broaden the opportunities for developing countries – and LLDCs in particular – to participate more fully in global value chains.

The report concludes with recommendations on the steps that LLDCs, neighbouring transit countries and international organizations can undertake to ease trade bottlenecks to keep trade flowing smoothly and to make trade more inclusive.

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