



Manufacturing facility in Viet Nam.

Chapter 3

Changing trade landscape, transforming development partnerships

Introduction

The trade landscape is undergoing a profound transformation. Trade is increasingly shaped by three interrelated factors: i) rapid digitalization, ii) evolving trade patterns and a greater focus on supply chain resilience, and iii) growing attention to environmental considerations across a wide variety of economies (OECD, 2025a). Together, these dynamics are also redefining what it means to support trade capacity in developing economies. They are shifting the focus of Aid for Trade beyond traditional border and infrastructure constraints towards more complex ecosystems involving conformity with standards, regulatory cooperation and cross-border co-ordination among a wider set of parties.

Digitalization is expanding the scope and speed of trade, while also raising new challenges for connectivity and interoperability. From electronic documentation and “single window” systems for cross-border trade to e-commerce platforms and data governance frameworks, the ability to participate in and benefit from digital trade depends on investments that combine support for hard and soft infrastructure with institutional capacity building (IMF, OECD, UNCTAD, World Bank, WTO, 2023).

At the same time, efforts to respond to evolving trade patterns – partly driven by recent global disruptions and geopolitical tensions – are placing greater emphasis on diversification, transparency and risk management (OECD, 2025a). This includes improving visibility across supply chains, reinforcing logistics performance, and supporting firms’ capacities to adapt to supply chain disruptions, all of which have implications for how Aid for Trade programmes are designed and delivered.

Environmental considerations in several economies add a further layer of complexity. As many economies implement policies related to non-product-related process and production methods, a more circular economy or long-term resource use, new forms of information, verification and compliance are becoming integral to trade-related processes (OECD, 2025b). In this context, traceability systems for traded goods and related standards together with environment-related requirements are increasingly embedded in cross-border transactions, with implications for producers, traders and border agencies alike (OECD, 2026a). Supporting developing economies to meet these requirements while ensuring that they remain integrated in global markets appears increasingly linked to more targeted forms of assistance and capacity building.

These transformations are increasingly interconnected. Digital tools underpin traceability, can support more efficient risk management and can enable timely data flows that strengthen supply chain resilience, while environmental considerations often depend on the capacity to monitor and verify production processes across borders. Aid for Trade is therefore being called upon to operate in a more integrated and strategic manner, aligning investments in digital infrastructure, trade facilitation, productive capacity and regulatory frameworks, while strengthening co-ordination among governments, development partners, private sector actors, standard-setting bodies, technology providers and specialized regulatory agencies to ensure coherence and maximize impact.

Digital connectivity and e-commerce continue to be a transformative force

Digital trade – encompassing digitally enabled and digitally ordered cross-border transactions in both goods and services – has been reshaping not only how trade is conducted, but who can participate and under which conditions (López-González, Sorescu and Kaynak, 2023; IMF, OECD, UNCTAD, World Bank and WTO, 2023).

By lowering trade costs across sectors, digitalization has been expanding opportunities in everything from agri-food and manufacturing to services. It has also been opening new pathways for micro, small and medium-sized enterprises (MSMEs) and individuals to engage in international markets through cross-border parcel trade. Underpinning these shifts is the progressive digitalization of trade processes themselves, including the use of electronic documentation, e-signatures, e-contracts and digital systems that can streamline border procedures and reduce administrative burdens (López-González and Sorescu, 2021; López-González, Sorescu and Kaynak, 2023; OECD, 2025b).

The nature of what is traded is evolving simultaneously. Digitally delivered services are growing rapidly, alongside increasingly “bundled” products that integrate goods and services through digital technologies such as the Internet of Things, the network of devices that use sensors to collect and transmit data. Central to all of this are cross-border data flows, which have become the backbone of modern trade, but also introduce new policy and regulatory challenges related to privacy, security, intellectual property and data governance (IMF, OECD, UNCTAD, World Bank, WTO, 2023).

Strengthening digital connectivity remains critical. Not only can it facilitate participation in digital trade but also deliver measurable reductions in trade costs – both domestically and internationally – creating a “double dividend” that has grown significantly over time (López-González, Sorescu and Kaynak, 2023). For Aid for Trade, this underscores the importance of supporting investments that go beyond infrastructure to include regulatory frameworks, digital skills and institutional capacities needed to harness the full potential of digital trade.

Digital trade is advancing rapidly but participation remains uneven

Total digitally ordered trade is estimated to have grown by approximately 5.5 per cent per year since 2010. While this is smaller than the overall growth of digitally delivered services, which averages 7 per cent

annually, the annual growth in digitally ordered trade is higher than other services exports (around 5 per cent per year) or “traditional” goods exports (almost 4 per cent per year) (OECD, 2025c).

While digital trade has expanded rapidly at the global level, developing economies remain at an early and uneven stage of integration into digital trade. Many developing economies, and particularly least-developed countries (LDCs), account for only a limited share of digitally delivered services exports and have yet to establish a significant presence in digitally enabled value chains (IMF, OECD, UNCTAD, World Bank and WTO, 2023; UNCTAD, 2026).

Regions such as Africa, Latin America and the Caribbean have a relatively limited market presence in digitally delivered services, with 1 per cent and 2 per cent of global exports reported, respectively, in 2024. The participation of LDCs is particularly restrained, accounting for only 0.2 per cent of global exports of digitally delivered services in 2024 (WTO, 2026). These shares of global trade in digitally delivered services also lag those of other regions, with Europe, Asia and North America accounting for 53 per cent, 23 per cent and 18 per cent of global exports of digitally delivered services, respectively, in 2024. This suggests that, despite the global shift towards digitalization, a large part of the developing world has yet to fully benefit from this transformation (IMF, OECD, UNCTAD, World Bank and WTO, 2023; IDB, WTO and World Bank, 2026).

Where participation in digital trade is observed, it tends to be concentrated in a relatively small group of developing economies and in specific activities. For instance, in Southeast Asia, economies such as the Philippines have established strong positions in business process outsourcing and digitally delivered services, while Malaysia and Viet Nam have expanded exports of information and communications technology (ICT) services and integrated into related supply chains. In Central America, economies such as Guatemala have begun to develop a niche market in digitally delivered services, including information technology-enabled services, shared services centres and back-office operations (World Bank, 2021; OECD, 2024; Giordano et al., 2024).

For many other developing economies, engagement remains more limited in scale and scope. Across parts of Southeast Asia and Latin America, digital tools are often used primarily to support traditional trade – facilitating payments, logistics or market access – rather than enabling a structural shift towards higher value added, digitally delivered exports. Even where e-commerce is expanding domestically or regionally, integration into global digital trade remains constrained by gaps in connectivity, skills and regulatory readiness (IMF, OECD, UNCTAD, World Bank and WTO, 2023).

Important opportunities still to be unlocked for developing economies

The digitalization of trade procedures represents a major, and still underexploited, opportunity for developing economies to deepen their participation in both “traditional” and digital trade (see [Box 3.1](#)). Moving from paper-based to digital processes –

through electronic documentation, single window systems, and the legal recognition of e-signatures and e-contracts – could significantly reduce administrative burdens, speed up clearance times, and improve predictability and efficiency for traders.

Box 3.1:

Public-private partnerships to unlock faster and safer trade through digitalization

In Ukraine, support for trade in plants and plant products has been supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) development agency together with the Global Alliance for Trade Facilitation (GATF) – a

public-private partnership – through implementation of the ePhyto certificate. An ePhyto certificate is a digital version of a phytosanitary certificate that electronically verifies that exported plants and plant products meet the health and safety requirements of the importing country, enabling secure and paperless cross-border exchange.

Ukraine's ePhyto reform exemplifies how digitalization of trade documents can transform export processes in times of crisis. By replacing paper-based phytosanitary certificates with electronic ones, Ukraine has significantly reduced delays, administrative burden and safety risks linked to physical paperwork, helping ensure that critical grain supplies continue to reach vulnerable economies. Since going live, the new system has enabled Ukraine to exchange more than 100,000 electronic certificates, demonstrating rapid uptake and tangible efficiency gains.

Across projects in Africa, Asia and Latin America, the GATF has promoted the transition from manual, paper-heavy systems to fully digital processes. This includes the introduction of electronic certification, automated approvals and digital platforms linking customs, inspection agencies and laboratories. By enabling real-time data sharing as relevant and reducing the need for physical document handling, these reforms have helped address key bottlenecks that previously slowed trade and increased costs for businesses.

These digitalization efforts are grounded in a public-private partnership approach, ensuring that reforms respond to practical business needs while strengthening institutional systems. Such efforts span more than 40 economies, with GATF-supported initiatives estimated to have helped generate over US\$ 273 million in savings for businesses.

The specific experience in Ukraine highlights a broader lesson emerging from these efforts: digitalizing trade documentation is not only about efficiency gains, but also about resilience. By enabling continuity of trade under difficult conditions, such reforms can support food security, protect livelihoods and ensure reliable access to essential goods in an increasingly uncertain global environment.

Source: Aid for Trade impact story, submitted by GIZ and GATF; GATF Annual Report 2025: 10 Years of Impact.

These gains are particularly important for MSMEs, for whom procedural complexity

and uncertainty often constitute binding constraints to internationalization. Digitalized

procedures can also help address some of the challenges related to growing volumes of e-commerce shipments, support more effective risk management by border agencies, and enable better integration into data-driven supply chains.

If implementation challenges can be effectively addressed and digitalization efforts are accompanied by streamlined documentation and stronger cooperation among border agencies, a 10 per cent improvement in automating border procedures (as measured by the Organisation for Economic Co-operation and Development (OECD) Trade Facilitation Indicators) is estimated to potentially boost global goods exports by up to 18 per cent (OECD, 2025b).

Realizing these benefits, however, requires that digital tools be embedded within a supportive policy ecosystem that combines legal certainty, system connectivity, cross-border cooperation and institutional capacity, so that firms can use digital processes efficiently across markets rather than face new layers of fragmented digitalized requirements. For economies at different levels of development, this policy landscape is particularly broad.

First, it includes legal and regulatory frameworks that give practical effect to electronic transactions, including the recognition of e-signatures, e-contracts, e-invoices, e-payments and electronic transferable records.

Second, it requires border agencies to be able to securely process, share and reuse

data digitally through pre-arrival processing, automated risk management, electronic payment of duties and charges, and single window systems; these systems are connected not only to customs, but also to other relevant agencies involved in licensing, certification, standards, sanitary and phytosanitary controls and other regulatory requirements.

Third, it depends on aligned data standards, secure digital identity systems, cybersecurity safeguards, frameworks that protect confidential business information and commercially sensitive data, and rules that enable trusted cross-border data transmissions (OECD, 2025b).

These broader enabling conditions are also increasingly being addressed in digital trade discussions across multilateral, plurilateral, regional and bilateral forums (OECD, 2025b).

Digital trade chapters in trade agreements, dedicated digital economy agreements and entire digital trade agreements (see [Box 3.2](#)), as well as ongoing discussions in forums such as the WTO, all reflect growing efforts to reduce regulatory fragmentation and build more compatible frameworks for digital trade. These initiatives cover many of the policy areas that matter for developing economies, including electronic transaction frameworks, e-authentication and e-signatures, e-contracts, e-invoicing, e-payments, paperless trading, digitalized border processes, online consumer protection, cybersecurity, personal data protection, digital inclusion and, in some agreements, cross-border data flows and data localization.

Box 3.2: The state of digital trade

Digital trade commitments in trade agreements are growing rapidly. According to an analysis by Digital Policy Alert, which provides an independent repository of measures affecting the digital economy, 163 jurisdictions have entered into digital trade commitments to date. Commitments in plurilateral agreements, especially the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, and the emergence of stand-alone digital economy agreements have largely contributed to this number.

Governments in Asia participate in the most agreements, followed by the Americas (covering North America, Central America and South America), Europe and Africa. In terms of individual economies, Singapore participates in the most agreements (26), followed by the United Arab Emirates (21), the European Union member states (20), the Republic of Korea (18), Australia (16), the United Kingdom (16) and Chile (15).

The Agreement on Electronic Commerce (ECA), which involves over 60 WTO members, focuses on e-commerce enablement,¹ openness² and trust³. It further contains commitments on transparency, cooperation, telecommunications and development. The development provision includes the possibility for governments to self-designate a five- to seven-year implementation period for each provision and support for needs assessments. The ECA, which is yet to enter into force, does not cover certain digital trade topics, such as source code and data flows, as well as some novel topics, like artificial intelligence and online safety.

The ECA's topical and geographical breadth presents an opportunity for international alignment to counter digital fragmentation. Since January 2020, [Digital Policy Alert](#) has documented over 22,000 domestic regulatory and enforcement developments affecting the digital economy. This regulatory activity has caused two forms of diversity. From a regulatory perspective, some jurisdictions have established frameworks, while others have not. In terms of regulatory approach, the rules that are in place differ between jurisdictions. Regulatory diversity presents a significant compliance challenge for companies, especially small ones. It can result in them exiting markets or refraining from market entry, leading to digital fragmentation.

The ECA addresses both forms of regulatory diversity differently, recognizing governments' right to regulate. Binding commitments aim to ensure that basic rules, for instance to protect e-commerce consumers, are in place. Only select provisions touch on the regulatory approach and, if so, in non-binding language. The key issue, however, lies in the domestic implementation of these commitments.

Governments need to bridge knowledge and communication gaps between negotiators and regulators, which include various ministries, cybersecurity entities, consumer and data protection

authorities, border and tax agencies, and central banks. These gaps are widened by capacity constraints in developing economies. The ECA's development provision acknowledges this reality and includes language on implementation periods, needs assessment and technical assistance.

To further support governments, Digital Policy Alert has developed an ECA needs assessment tool. It supports traditional needs assessments, which manually compare domestic rules to international commitments, but are time consuming and not future proof. With this tool, negotiators and regulators can upload any national rule through a secure portal. Once submitted, the tool processes the rule through a suite of legal scripts, based on each ECA commitment, and provides a free and instantaneous legal review. Digital Policy Alert is currently piloting the tool with developing WTO members and aims to launch it publicly in Autumn 2026.

Source: Contributed by Tommaso Giardini, Digital Policy Alert.

One of the key contributions by the WTO in digital trade cooperation has been the moratorium on the imposition of customs duties on electronic transmissions. Introduced in 1998, this moratorium allowed members to achieve growth of the digital economy and provided regulatory predictability. It also contributed to the reduction of trade costs for firms of all sizes participating in digital trade (Andrenelli and López-González, 2019).

Members also exchanged information and shared experiences on broader digital trade issues of relevance to international trade under the WTO Work Programme on Electronic Commerce, also established in 1998.

At the 14th Ministerial Conference (MC14) in Cameroon in March 2026, members were unable to reach consensus on the extension of the moratorium and the Work Programme, which lapsed at the end of March 2026. However, a considerable number of members continue to underscore the value of the moratorium for further boosting digital trade growth and for continuing to examine trade-related aspects of e-commerce at the WTO. Discussions on the moratorium and

the work programme are continuing among WTO members in Geneva.

The Agreement on Electronic Commerce (ECA), developed by a group of WTO members under the Joint Statement Initiative on E-commerce of 2017, also includes a provision to not impose duties on electronic transmissions. At MC14, 67 members adopted interim arrangements to bring this Agreement into force. It will do so once 45 participating members have deposited their instrument of acceptance. Meanwhile, ECA participants continue to request its incorporation into the WTO rulebook.

Recent modelling suggests that implementation of the ECA by 71 economies participating in the negotiations at the time of the analysis⁴ could raise their gross domestic product by 0.43 per cent and trade by 0.97 per cent, while increasing global trade by 0.58 per cent. The potential development gains are estimated to be larger with broader participation. If the Agreement were to be extended to all WTO members, global trade could rise by 2.3 per cent, with the largest relative gains accruing to low- and lower-middle

income economies, particularly through stronger participation in digitally deliverable services (Bekkers, López-González and So, 2025).

Reducing barriers to digitally enabled services can create a particularly important opportunity for developing economies to diversify exports, reach foreign customers remotely and participate in value chains even where physical distance, the small size of a firm, or limited logistics capacity have traditionally constrained market access. A 0.1-point reduction in barriers affecting digital services (as measured by the OECD Digital Services Trade Restrictiveness

Index) is associated with a 145 per cent increase in overall exports, with the largest effect estimated for digitally deliverable services, at 277 per cent.

The estimated gains are also sizeable for other services, agriculture and food, ICT services and manufacturing, at around 207 per cent, 176 per cent, 158 per cent and 118 per cent, respectively. This reduction in digital trade restrictiveness is equivalent to lowering trade costs by approximately 19.3 per cent for all trade and 32.1 per cent for digitally deliverable trade (López-González, Sorescu and Kaynak, 2023).

Support for ICT is falling behind while the need for new partnerships increases

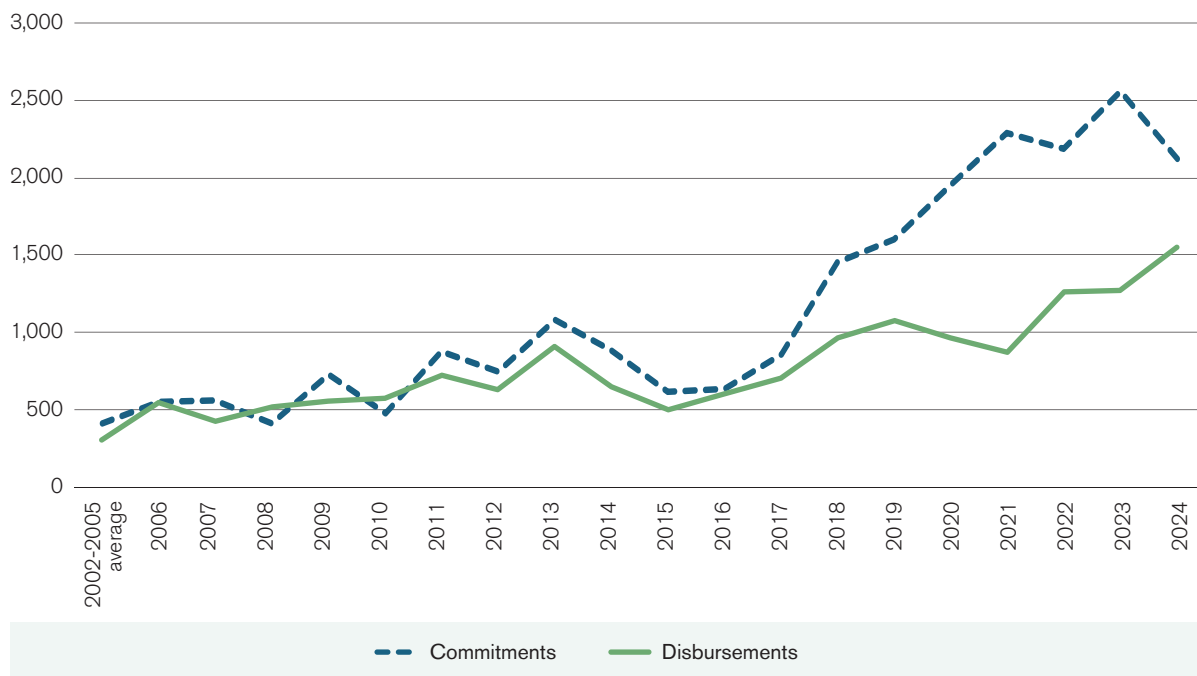
Disbursements in support of ICT increased 60.3 per cent in the past five years and by 22 per cent in 2023–2024 specifically, cementing the role of Aid for Trade as a key support mechanism for digitalization. Commitments declined, however, by 17.2 per cent in 2024, pointing to the need to sustain momentum and enhance new partnerships to translate growing commitments into effective support (see [Figure 3.1](#)). This is particularly important as governments and development partners pursue two complementary objectives: focusing on trade needs to accelerate digitalization, including through digital payments and other systems that enable cross-border transactions, and using digital technologies to make trade more accessible and efficient, including by connecting businesses and individuals to new market opportunities.

Bridging the digital divide through support to ICT is important as uneven readiness limits participation in digital trade. As highlighted above, digital trade-related regulations are multidimensional. Therefore, a range of policies are needed to promote greater participation and wider benefits, including new approaches to market openness. In developing economies, it includes operational trade processes, measures affecting infrastructure and connectivity, or frameworks for electronic transactions and payments (López-González, Sorescu and Kaynak, 2023).

Digital tools for trade facilitation constitute a critical first step for developing economies to participate effectively in digitally ordered trade while improving the overall efficiency and predictability of cross-border transactions. The OECD Trade Facilitation Indicators (TFIs)

Figure 3.1:
Evolution of Aid for Trade for information and communications technologies, 2002-2024

US\$ million, constant 2024 US\$



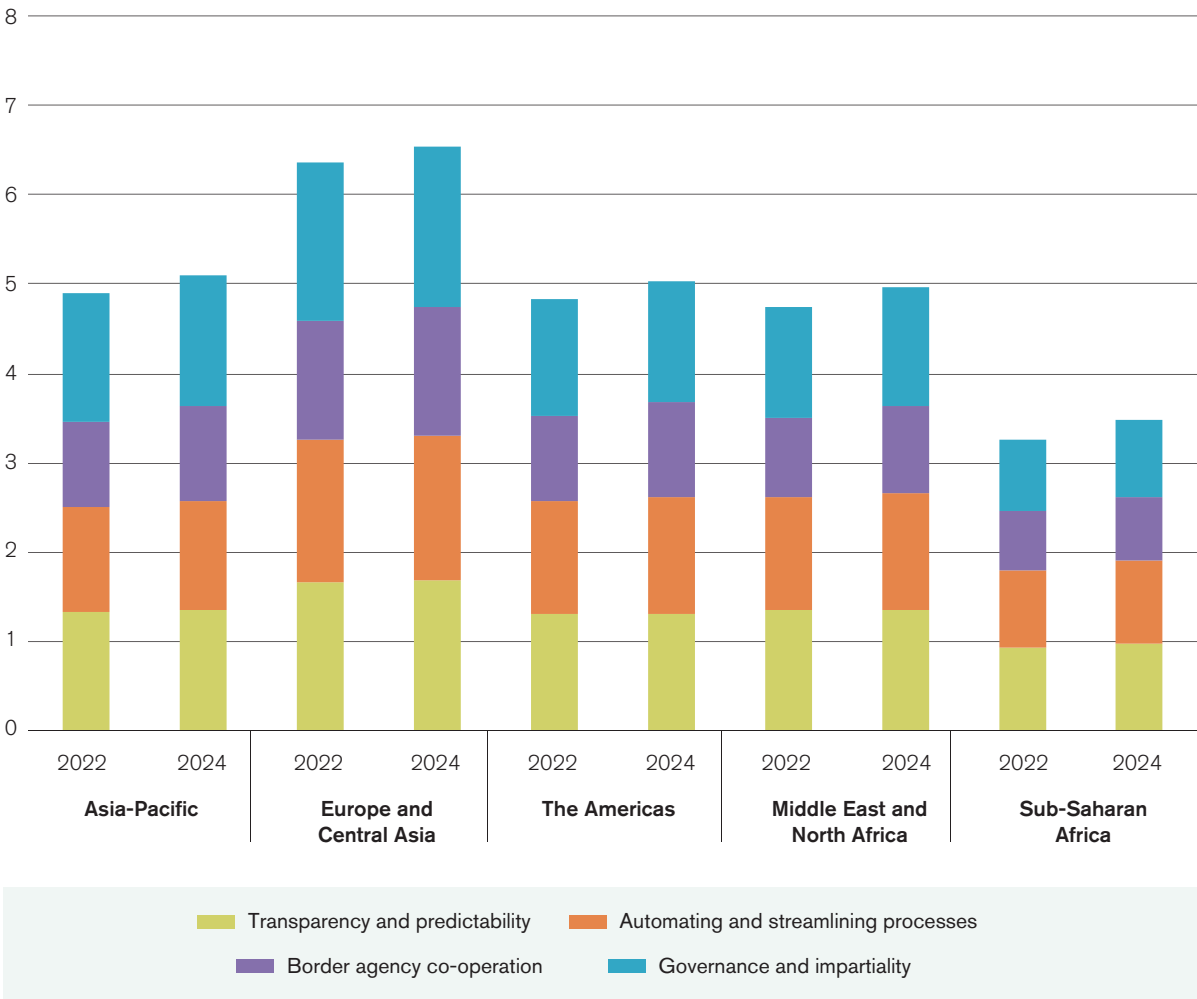
Source: OECD Creditor Reporting System.

highlight that the automation of border procedures improved globally by 16 per cent between 2020 and 2022 and by 4 per cent between 2022 and 2024. Aid for trade facilitation has played a key role in this context, supporting developing economies to invest in the reforms necessary to advance border digitalization. TFI evidence also suggests, however, that progress in areas related to automation and procedural streamlining has slowed in many regions relative to other dimensions of trade facilitation such as transparency and predictability, and border agency cooperation (see [Figure 3.2](#)) (OECD, 2025d). This emerging gap highlights the need for enhanced focus on the digitalization of trade processes, ensuring that improvements

in institutional co-ordination are matched by advances in the systems and technologies that underpin efficient and scalable trade operations.

Second, disparities regarding regulatory openness for digital trade persist and are particularly significant between regions (see [Figure 3.3](#)). The average OECD Digital Services Trade Restrictiveness Index (DSTRI) score for Africa, for example, is almost three times the value of the OECD average, meaning that, on average, the regulations in African economies are three times tighter than in OECD economies. While Africa's overall trade restrictiveness has strongly decreased in the last decade, it is still higher than in other regions (OECD, 2025e).

Figure 3.2:
Overall progress on trade facilitation is occurring in all regions, but automation is stalling
2 = maximum performance that can be achieved by area



Source: OECD Trade Facilitation Indicators, 2025.

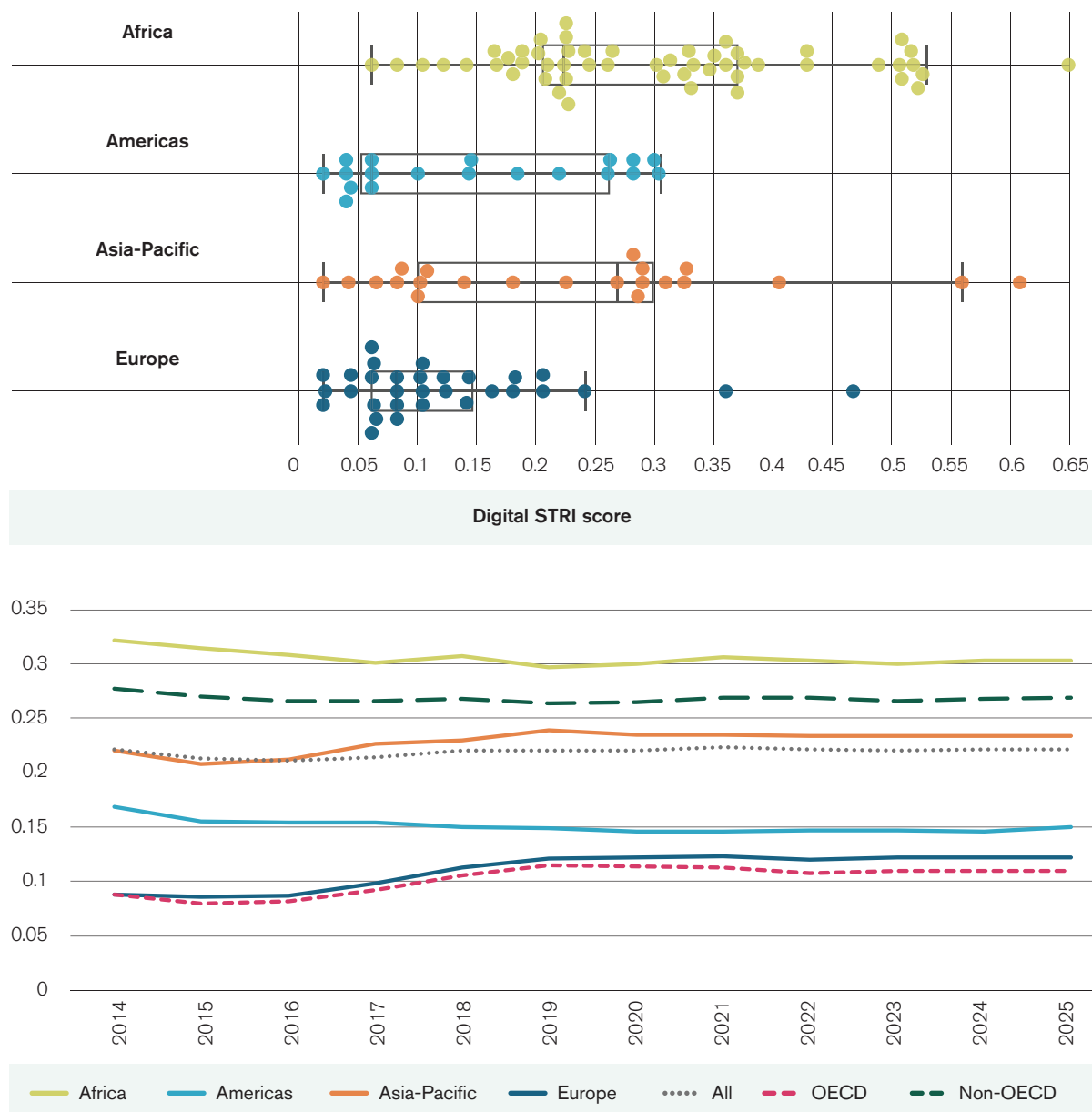
Notes: Transparency and predictability is the average of TFIs A, B, C, D, E (see the [OECD Trade Facilitation Indicators Simulator](#) for TFI categories).⁵ Automating and streamlining processes is the average of TFIs F, G and H. Border agency cooperation is the average of TFIs I and J. The Americas region includes economies in North America, Central America and South America. Regional groups based on World Bank regional classifications.

Alongside efforts to facilitate digital trade, complementary policies, including mechanisms that support consumer confidence and regulatory cooperation, have the potential to help create conditions for more effective participation of economies (OECD, 2021).

In developing economies, the benefits of a more enabling digital trade environment may be reinforced by regulatory frameworks that are coherent and responsive to domestic circumstances (Box 3.3 considers several of these issues in LDCs).

Figure 3.3:
How digital trade regulations differ across and within regions, 2014-2025

Average Digital Services Trade Restrictiveness Index scores across regions



Source: OECD DSTRI, 2026.

Notes: The OECD DSTRI takes values between 0 and 1, 1 being the most restrictive. The DSTRI database records measures on a most-favoured-nation basis towards third countries. The DSTRI database records measures on a most-favoured-nation basis towards third countries. The Americas region includes economies in North America, Central America and South America. In the left-hand figure: each dot represents the Digital STRI score of an economy. The box shows the middle 50 per cent of values (from the 1st to 3rd quartile); the line inside the box marks the median, the "whiskers" extend to the minimum and maximum values that are not considered outliers, while points outside the whiskers represent outliers.

Box 3.3:**Digital trade integration: regulatory trends in developing economies****The opportunities offered by the expansion of digital trade are increasingly recognized.**

These range from lowering costs and barriers to cross-border trade, especially for small and medium-sized enterprises, to diversifying into services and offering new avenues for growth, development and economic resilience (Hoekman, 2022; UNCTAD, 2021, 2022).

However, digital trade and its benefits remain unevenly distributed among economies (Ismail, 2026; Hoekman, 2022; UNCTAD, 2022). For many developing economies and least-developed countries (LDCs), benefiting from digital trade depends on bridging a multidimensional digital divide encompassing not only information and communications technology (ICT) infrastructure, but also affordable and reliable connectivity and data, digital literacy and skills, institutional capacities, whether related to governments or businesses, and an enabling, up-to-date regulatory environment (Ismail, 2026; IMF, OECD, UNCTAD, World Bank, WTO, 2023; Vásquez Callo-Müller and Kugler, 2023; Guglya and Maciel, 2020).

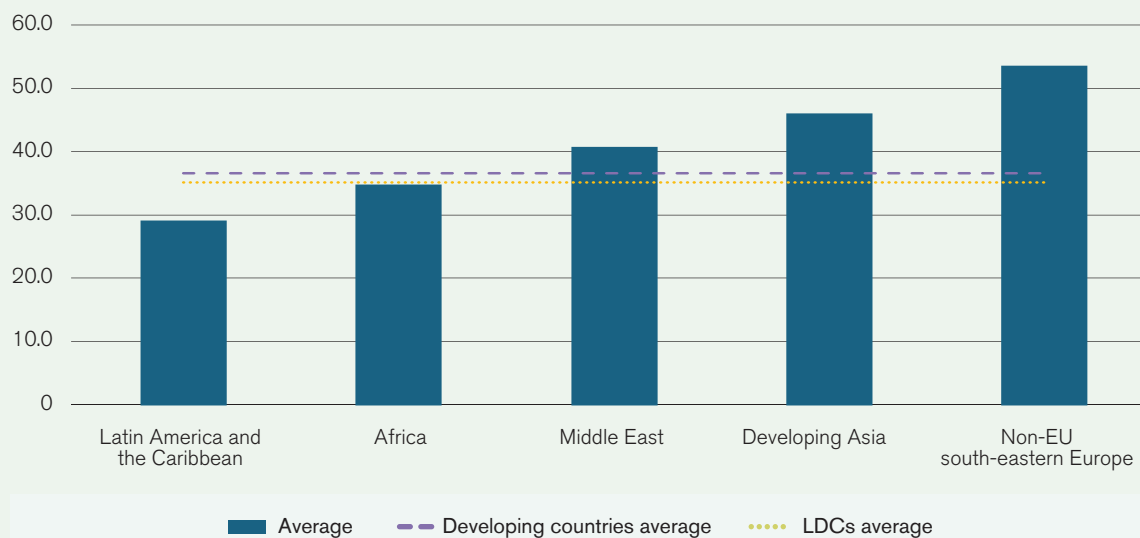
The Digital Trade Integration (DTI) database, an open-access repository of digital trade policies, contains regulatory information on digital trade policies across 163 jurisdictions, including 122 developing economies (Ferracane, González Ugarte and Rogaler, 2026a, 2026b). The DTI database maps over 5,400 policies applied by developing economies across 65 different indicators, divided into two macro categories: restrictive policies and enabling policies for digital trade.

On average, developing economies imposed 36 restrictive policies in 2025 across different components of digital trade, namely ICT goods, digital services, data, and investment in relevant sectors, with significant regulatory heterogeneity between and within regions (see [Figure 3.4](#)). The Latin America and Caribbean (LAC) region has the lowest average number of restrictive policies (29 measures), followed by Africa (35), the Middle East (40), Developing Asia (46) and non-European Union (EU) south-eastern Europe (53).

The 40 LDCs listed in the DTI database imposed, on average, 35 restrictive policies in 2025, just below the developing economies' average. This aggregate conceals substantial heterogeneity: restrictions range from 21 measures in Comoros to 62 in Bangladesh. LDCs disproportionately also adopt high barriers in specific policy areas. For example, tariffs on ICT goods average 9.3 per cent, far above the global average of 0.3 per cent. Divergent approaches to data governance, online content regulation and telecom rules in LDCs create a fragmented landscape that raises compliance costs and reduces the potential for digital market integration.

Enabling policies for digital trade include data protection and consumer protection rules, participation in relevant trade agreements, such as the WTO's Information Technology Agreements (ITA I and ITA II), and adoption of rules in line with the United Nations Commission on International

Figure 3.4:
Average number of restrictive policies per region, 2025



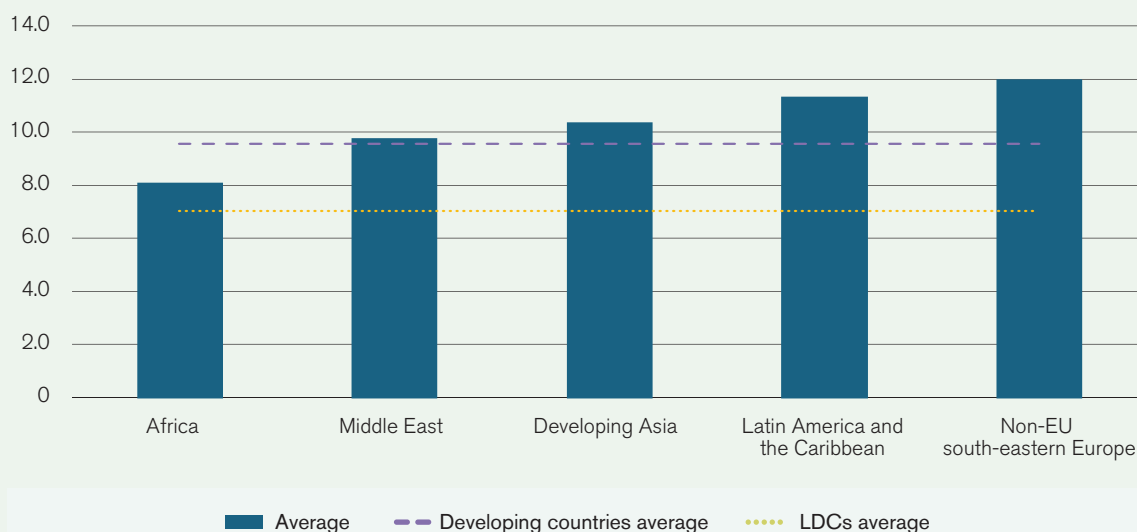
Source: DTI database, data accessed in September 2026.

Trade Law Model Laws on electronic signatures and electronic commerce. The non-EU south-eastern Europe and the LAC regions implement the highest number of enabling policies on average (12 and 11, respectively), followed by Developing Asia and the Middle East (10 policies) and Africa (8 policies) (see [Figure 3.5](#)).

LDCs implemented only 7 enabling policies on average in 2025, compared to a global average of 11 for the same year. This gap limits trust, interoperability and firms' ability to scale up across borders. Yet, as in the case of restrictive policies, there is substantial heterogeneity across economies: while economies such as Myanmar and South Sudan have only two enabling measures, and Eritrea has none, Uganda stands out with 14 enabling policies.

Empirical research on the effects of domestic regulations related to digital trade is scarce, especially in developing economies. The limited empirical evidence indicates that restrictive policies negatively affect digital trade, with higher costs associated with regulatory heterogeneity (UNECA, 2023). Recent research also shows that certain enabling policies, which would be expected to support digital trade by raising trust and reducing regulatory heterogeneity, can in fact hamper trade among low-income economies by increasing compliance costs (Ferracane, González Ugarte and van der Marel, 2025). This can be the case when regulatory models developed in high-income economies are adopted by developing economies without adaptation to local needs and realities.

Figure 3.5:
Average number of enabling policies per region, 2025



Source: DTI database, data accessed in September 2026.

Taken together, these findings highlight that the regulatory environment plays an important role in shaping a country's ability to integrate digital trade and benefit from it. While in recent years more developing economies and LDCs have become increasingly active in regulating digital trade, the uneven adoption of enabling policies, regulatory heterogeneity, and transposition of rules from advanced economies without contextualization continue to hinder their digital trade inclusiveness.

Strengthening institutional capacities, improving regulatory coherence and tailoring enabling frameworks to domestic development needs remain essential for ensuring that digital trade contributes meaningfully to developing economies' trade integration, growth and development.

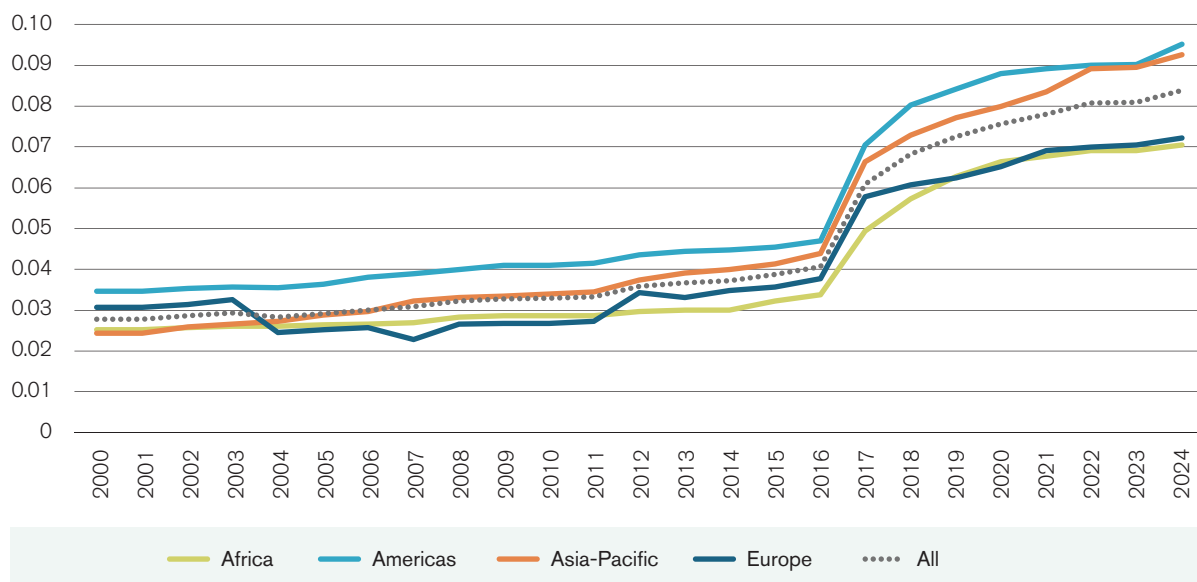
Source: Contributed by Martina F. Ferracane (LUMSA and European University Institute) and Yasmin Ismail (independent expert on digital trade).

In addition, the need to support wider participation in digital trade is underscored by the OECD Index of Digital Trade Integration and Openness (INDIGO), which shows that the world economy is only 8.5 per cent of the way towards what could be considered full global digital trade

integration and openness (see Figure 3.6). This low level of integration is particularly relevant for many developing economies, where gaps in regulatory capacity can constrain the ability of firms and consumers to benefit from digital trade opportunities.

Figure 3.6:
International integration and openness vary across regions

Average INDIGO by region, 2000-2024



Source: OECD INDIGO, 2025.

Notes: INDIGO=OECD Index of Digital Trade Integration and Openness. The INDIGO takes values between 0 and 1, with 1 highlighting the highest level of integration. The Americas include the regions of North America, Central America and South America.

Current levels of digital trade integration are supported primarily by multilateral frameworks, including WTO agreements and instruments such as the WTO Telecommunications Reference Paper (regulatory principles adopted in 1997), the ITAs or the WTO's Trade Facilitation Agreement.⁶ These frameworks provide important foundations for connectivity, the movement of technology-related goods and more efficient border processes (OECD, 2025f).

In turn, existing commitments under regional trade agreements (RTAs) account for only around 10 per cent of current digital trade integration and openness. Although RTAs often cover a wider range of digital trade issues, their contribution remains more limited at the global level because they involve narrower groups of economies

(OECD, 2025f). This underscores the importance of strengthening digital trade cooperation across both multilateral and regional settings, whilst also ensuring that commitments in RTA contexts are supported by the enabling policies, technical assistance and partnerships needed to build trust for more effective implementation.

Digital trade integration today is constrained less by the absence of international commitments than by the gap between emerging global frameworks and their heterogeneous domestic implementation. Deepening digital trade integration will therefore depend not only on expanding and consolidating international discussions, but also on supporting regulatory coherence, capacity building and implementation pathways, particularly for developing economies.

There are both opportunities and challenges linked to changing trade patterns

While digitalization is reshaping how firms connect, transact and transmit information across borders, it is also interacting with broader structural shifts in production networks. These

include changes in sourcing strategies, increased attention to resilience and the emergence of new regulatory requirements (OECD, 2025a).

The evolving patterns of global supply chains

Global supply chains remain a central feature of the international trading system, while their configuration continues to evolve in increasingly complex ways. Recent supply chain disruptions, logistics bottlenecks and geopolitical tensions have heightened attention to vulnerabilities in internationally fragmented production networks, and prompted firms and governments to reassess how risks are managed across borders. Recent data from the OECD Trade in Value Added database highlights that sectors have responded differently to changes in global trade and trade policy, with some increasing and others reducing their reliance on imported inputs between 2011 and 2024. Trade via global value chains (GVCs) remained particularly high in manufacturing and transport-related industries. The manufacture of coke and refined petroleum products was the sector relying most on trade via GVCs at both the beginning and end of this period of analysis. The motor vehicles industry reduced its reliance on imported inputs between 2011 and 2024, while the pharmaceutical industry became

more globally integrated over the same period (OECD, 2026b).

In response to the risks of exposure to disruptions, firms have been reassessing sourcing, production and risk management strategies. These can include diversifying suppliers, maintaining inventories and building flexibility into production and sourcing decisions. However, no single approach necessarily enhances resilience in all circumstances: greater redundancy or diversification can entail additional costs and complexity, while flexibility and greater visibility across supply chains can help firms adjust more effectively to different types of disruption (WTO, 2023; OECD, 2025a).

Evolving patterns of production, sourcing and trade are placing greater emphasis on the ability of supply chains to adjust to changing conditions. Rather than seeking to eliminate exposure to risk or reduce international integration as such, resilience increasingly concerns the capacity of

supply chains to absorb shocks, adapt to changing circumstances and reconfigure when needed. This depends in part on access to alternative sourcing and production options, efficient logistics, and the information and visibility needed to identify risks and respond to disruptions. In this sense,

an enabling environment for trade, diversification and adjustment across internationally connected production networks continues to be a key component of resilient trade systems (IMF, 2023; OECD, 2025a; OECD, 2026b).

Opportunities for developing economies

Developing economies continue to have opportunities to integrate into and benefit from global supply chains. In some respects, ongoing adjustments in sourcing patterns may even expand these opportunities, particularly where firms seek to diversify their supplier base and reduce exposure to concentrated risks (IMF, 2023; OECD, 2025a).

First, the search for alternative production locations can create new entry points for developing economies. Economies that can offer stable business environments, predictable regulatory frameworks and efficient border processes may attract investment and integrate into existing value chains. This is particularly relevant in sectors where firms are actively seeking to broaden their network of suppliers to enhance resilience (WTO, 2023).

Second, the interaction between digitalization and supply chains opens additional avenues for participation. As highlighted in the previous sections, improvements in digital connectivity and the expansion of e-commerce can reduce barriers to entry, especially for smaller firms. When combined with efficient trade facilitation systems, these tools enable firms in developing economies to connect more effectively with

global buyers, participate in fragmented production processes, and respond to demand in a timely manner.

Third, the increasing importance of labour, environmental and traceability aspects in supply chains is creating new areas of comparative advantage. Demand for products compliant with specific environmental practices, transparent sourcing or verifiable production processes, is rising across a range of sectors, including agri-food, manufacturing and critical minerals. Developing economies that can meet these requirements – through appropriate standards, conformity assessment and wider certification systems, and data capabilities – may benefit from new market opportunities and deeper integration into higher-value segments of global trade (OECD, 2025a).

At a broader level, integration into diversified trade networks can also contribute to resilience. By participating in multiple markets and supply chains, developing economies can reduce their exposure to international crises affecting any single partner or sector. This diversification can support more stable export performance and provide greater flexibility in responding to changing global conditions (IMF, 2023; OECD, 2025a).

Potential considerations to address risks

While the opportunities associated with evolving supply chains remain significant, they are accompanied by a range of risks that require balanced responses. Addressing these risks involves strengthening the conditions under which participation in global trade can promote specific labour or environmental performance criteria and resilience (OECD, 2025a).

A first consideration is to enhance trade facilitation and the efficiency of border procedures. Complex and costly processes can limit the ability of firms to participate in time-sensitive supply chains and reduce the attractiveness of an economy as a sourcing location.

A second area of consideration concerns diversification. Encouraging firms to access a broader range of markets and suppliers

can reduce exposure to concentrated risks and enhance adaptability. This may involve strengthening regional trade integration and facilitating access to information on alternative sourcing and market opportunities.

A third consideration is to support capacity building and compliance with evolving supply chain requirements. As regulatory expectations related to social and environmental performance, wider traceability and product standards become more demanding, firms in developing economies may face increasing challenges in meeting these requirements. Investments in infrastructure, digital systems and institutional capacity – combined with targeted technical assistance – can help firms generate, manage and transmit the information needed to demonstrate compliance as relevant.

Environmental considerations increasingly impact global supply chains

Development cooperation, including through Aid for Trade, has also been increasingly supporting developing economies in integrating environmental considerations into supply chains. Support has included capacity building and assistance in meeting trade-related requirements linked to environmental aspects, including technical

regulations and certification systems (WTO and OECD, 2024). Development cooperation has also been helping finance policy dialogue and international cooperation on trade and biodiversity, while supporting partner economies in implementing and enforcing relevant agreements, such as the Convention on International Trade in Endangered Species

of Wild Fauna and Flora (CITES), to address the illegal wildlife trade (OECD, 2023). More broadly, international cooperation has contributed to the management of natural resources, reflecting priorities identified by developing economies that emphasize availability of information, consultations and international collaboration in the design and implementation of environmental-related measures (Kettunen, 2023).

Such support is increasingly important as exporters face a growing number of environmental-related requirements in international markets. Requirements related to eco-labelling, certification, traceability and environmental performance can lead to specific compliance costs for firms participating in global supply chains. Diverging approaches across importing economies may require exporters to adapt production processes, maintain multiple product specifications, and

invest in monitoring and understanding evolving regulatory requirements. These adjustments can increase costs and create uncertainty, particularly where market access depends on compliance with specific environmental criteria.

These challenges are often more pronounced in developing economies. They are especially relevant for MSMEs, cooperatives and local companies, which frequently face obstacles in meeting certification or regulatory requirements more broadly, and scaling up operations. Limited awareness of market requirements, together with shortages of technical expertise and financial resources, can pressure their ability to comply with evolving environmental requirements and benefit from new market opportunities (OECD, 2025f; FAO, 2022). Development cooperation can play an important role in addressing these implementation constraints, including in the context of related provisions in trade agreements (see [Box 3.4](#)).

Box 3.4: **Non-trade provisions in preferential trade agreements**

Non-trade provisions (NTPs) in preferential trade agreements (PTAs) are increasingly used, with the aim of advancing specific sustainability objectives, such as environmental protection or labour standards. Aside from their formal legal commitments, NTPs may act as focal points for policy dialogue and cooperation between signatories to achieve shared non-trade goals. In practice, such cooperation is likely to include development assistance programmes and projects. This is particularly the case where NTPs are not enforceable, i.e., not subject to binding dispute settlement mechanisms.

The voluntary, best endeavour nature of such NTPs implies that the goals they set out are aspirational. Development aid is an important instrument that can be used to help developing economy signatories achieve the aspiration, especially if such aid directly targets activities that will assist in implementation of NTPs. More generally, NTPs, whether enforceable or non-enforceable, may be more effective if they are complemented by technical and financial assistance.

Francois et al. (2025) analyse whether the inclusion of NTPs in PTAs between developed and developing economies leads to an increase in official development assistance (ODA) and technical support for developing economy signatories in the areas covered. The analysis distinguishes between sector-specific aid – assistance that is earmarked for environmental, labour, or civil rights objectives – and total ODA flows to a signatory of a PTA that includes NTPs. The central question is whether commitments in PTAs are accompanied by additional support to facilitate implementation, or whether such provisions substitute for development assistance.

While a complementary relationship might be expected, alternative dynamics may be at play. Acceptance of enforceable NTPs could signal that signatories have the institutional capacity to implement associated requirements, as otherwise an economy would presumably not accept the underlying commitment. In such cases, enforceable commitments could be regarded by donor economies as substitutes for ODA. As implementation is presumed, there may be less of a perceived need for technical and financial assistance or, given budget constraints, aid for such projects may be seen to be less of a priority.

Conversely, developing economy governments may prioritize other policy areas and use NTPs to secure additional development assistance to support these objectives. Such issue linkage strategies may be reflected in higher overall ODA allocations rather than increases in sector-specific support tied directly to NTPs. Many PTAs include language on technical assistance and cooperation that is not provision-specific but may be allocated to any sector, including projects that address matters pertinent to NTPs.

Francois et al. consider two scenarios. The first examines PTAs with non-enforceable NTPs, comparing signatories with economies that have concluded PTAs without such provisions. The second focuses on enforceable NTPs, using the same control group. This approach allows for an assessment of how enforceability shapes the relationship between trade commitments and development assistance.

The results point to a differentiated pattern. In the case of non-enforceable provisions, signatory economies receive more ODA, although the effect is statistically significant only in the case of environmental NTPs, particularly in European Union (EU) PTAs. The magnitudes are considerable. The estimates indicate a 370 per cent increase in total ODA received compared to the sample mean. This finding is consistent with development assistance as a complementary instrument, supporting implementation where commitments are not legally binding. However, there is no evidence that NTPs (whether enforceable or not) lead to higher levels of sector-specific ODA (i.e., to more ODA that is specifically earmarked for projects related to the domain of the provision of interest).

For enforceable provisions, the relationship with development assistance differs. Rather than leading to higher aid flows, enforceable NTPs are often linked to reduced ODA. Signing PTAs with enforceable labour provisions is associated with lower EU aid allocations, while civil rights provisions in non-EU agreements are similarly correlated with reduced assistance. Overall, the results reveal a negative association between acceptance of enforceable NTPs and ODA. The only instance where the expected positive relationship between acceptance of NTPs and ODA is found for non-enforceable environmental provisions is in the case of EU PTAs. The evidence underscores the importance of ensuring coherence between trade policy and development cooperation. If NTPs are to contribute effectively to sustainability objectives, they may need to be systematically complemented by targeted financial assistance and related support that addresses implementation constraints in partner economies.

Source: Contributed by Bernard Hoekman, Joseph F. Francois, Filippo Santi and Miriam Manchin.

Implications of evolving environmental considerations for developing economies

The integration of environmental considerations into supply chains creates a range of opportunities for developing economies, particularly in the context of evolving global demand and production patterns. As consumers and regulators place greater emphasis on environmental performance, demand is increasing for goods that can prove compliance with relevant requirements. Developing economies that are able to meet these requirements may benefit from improved market access, participation in higher-value segments of the value chain and more stable trading relationships (UNIDO, 2026a). Realizing these benefits, however, increasingly requires the capacity to comply with environmental requirements and to engage effectively in the development of emerging standards and regulatory approaches.

An additional opportunity relates to integration into emerging supply chains linked to specific

environmental criteria. The transition towards energy-efficient production and specific objectives for more environmentally performing supply chains is overall generating demand for specific goods and inputs, including critical minerals and components for energy-efficient technologies. Developing economies with relevant endowments or capabilities can position themselves within these value chains, provided they can meet associated standards and information requirements (UNIDO, 2026b). This highlights the importance not only of supporting adaptation to existing requirements, but also of strengthening developing economies' ability to identify their trade and development opportunities and contribute to relevant discussions on environmental measures that affect their participation in international trade (Olarreaga, 2021; van der Ven, 2024).

Challenges and constraints in adapting to evolving environmental considerations in global supply chains

Despite the opportunities outlined above, the growing importance of environment-related requirements also presents significant challenges for developing economies. A central issue is the complexity and scope of compliance. Environment-related requirements often extend across multiple stages of production and involve a combination of public regulations and private standards. Firms may be required to provide detailed information on production processes, inputs and environmental impacts, which can be difficult to generate and verify, particularly for MSMEs (OECD and ITC, 2024). Addressing these challenges requires investments in technical and institutional capacity, including data systems, traceability infrastructure and certification mechanisms, as well as targeted technical assistance to support compliance and participation in international markets.

Compliance is also associated with significant cost implications. Investments may be needed in new technologies, monitoring systems, certification processes and data management infrastructure. While these investments can yield long-term benefits, they may represent substantial barriers to market entry, especially where access to finance

is limited. Institutional capacity constraints further complicate the picture. For border processes in particular, environmental requirements necessitate closer cooperation between customs, environmental agencies and standards bodies, as well as the ability to handle complex and data-intensive procedures. Integrating environment-related requirements into existing trade facilitation tools, such as single windows, other relevant digital platforms and risk management systems, can help streamline procedures, reduce duplication and support more efficient compliance processes (OECD 2026a forthcoming).

Finally, regulatory and technical challenges can create additional burdens. Differences in regulatory approaches, certification schemes and documentary requirements across markets can increase compliance costs and create uncertainty for exporters. These can be compounded by technical challenges linked to the systems supporting relevant sharing of information and the verification of compliance at borders (OECD, 2025b). International cooperation, through greater consultation and technical collaboration, can play an important role in addressing these challenges.

Development cooperation partnerships in practice

New development partnerships are emerging to support the integration of environmental considerations – such as those relating to

biodiversity – into trade processes and relevant supply chains, including through cooperation with the private sector, financial institutions,

MSMEs, artisans, cooperatives and local communities. These partnerships illustrate how development cooperation can support partner economies respond to biodiversity-related market and regulatory requirements, while also supporting export opportunities, local livelihoods and conservation objectives. In this context, development cooperation can play a bridging role: helping firms and producers adapt to evolving environmental, quality and marketing requirements; supporting the development of biodiversity-relevant value chains; and mobilizing finance, technology and knowledge for more sustainable production and trade (WTO and OECD, 2024; UNCTAD, 2025).

A first set of partnerships concern regulatory cooperation, compliance with trade-related requirements and continued market access. Development cooperation can support partner economies in responding to evolving trade-related requirements by facilitating awareness of relevant environmental regulations and supporting alignment and compliance with these regulations.

For example, the European Union (EU) provides support to the EU-Brazil Green Finance Center in São Paulo, which provides research and training on projects financing aspects related to the energy transition and circular economy approaches. The initiative engages with the public and private sector in Brazil to raise awareness of upcoming environment-related regulations with potential impacts on supply chains, and prepares for their implementation. The initiative also addresses competitiveness issues arising from differences in classification systems for nature or carbon credits used to finance environmental projects, while promoting economic growth and the protection of natural resources such as the Amazon rainforest (European Commission, 2026).

Similarly, Spain has supported partnerships for certified sustainable wood from Guatemala, including through collaboration with the home improvement and gardening retailer Leroy Merlin. Spain has also collaborated with the environmental organization COPADE, which helps to connect producers in Guatemala with Spanish companies and European market demand, while supporting fair trade and compliance with certification requirements of the Forest Stewardship Council, a non-profit organization that promotes responsible management of the world's forests (Fundación COPADE, 2023).

A second group of partnerships supports productive capacity in developing economies and integration into environmentally performing supply chains. These initiatives aim to help producers improve quality, productivity and environmental performance, while strengthening their ability to access higher-value markets. For example, the Korea International Cooperation Agency's (KOICA's) Kenya office funded a project in Embu in central Kenya, implemented by the non-governmental organizations Kenya Good Neighbors and Global Impact Foundation, and the Korean specialty coffee brand Coffee Changgo, to increase coffee farmers' incomes by strengthening cooperative operations, expanding market access and promoting environmentally sustainable farming practices through capacity building and training (KOICA Kenya Office, 2025).

Italy has also helped strengthen African coffee supply chains, including through partnerships involving Italian coffee companies such as Lavazza and Illy, to upscale production, promote and sell local products, and improve the quality and competitiveness of coffee in partner economies (Italian Agency for Development Cooperation, 2024). In Ethiopia, the Italian government, the UN Industrial Development Organization, the

Italian coffee company illycaffè, the Ernesto Illy Foundation (a non-profit organization) and the Commercial Bank of Ethiopia have supported a multi-stakeholder partnership and blended finance facility to help cooperatives, producers and exporters improve quality, productivity and environmental performance, including through production models that protect natural resources.

Development cooperation can also play a role in the area of trade procedures, logistics and value chain integration. Czechia provides business-to-business grants to strengthen environmentally sustainable sheep's wool supply chains for exports from the Kyrgyz Republic to the European Union, improving logistics and value chain integration (Czech Aid, 2024). Other initiatives focus on the technological and productive capacities that underpin environmentally sustainable resource governance.

A third set of partnerships seeks to address the financing gap for biodiversity-related investments. Beyond the compliance challenge, there is often a mismatch between demand for biodiversity-related investments and environmentally sustainable products in donor economies, and the supply of investment opportunities and bankable projects in partner economies (Zabel, Nanthavong and Epprecht, 2025). Development cooperation can help bridge this gap by stimulating both supply and demand, including through partnerships and matchmaking platforms that link local project developers, producers and enterprises with investors and buyers (WWF and AXA Group, 2019).

The Land Degradation Neutrality Fund, supported by Canada, the European Investment Bank, France, the Global Economic Forum, the Green Climate Fund, Luxembourg, the Netherlands and the United Kingdom, provides an example of a multi-donor

blended finance approach that mobilizes private capital into environmentally sustainable land management, regenerative agriculture and environmentally sustainable forestry across Africa, Asia and Latin America (Government of Canada, 2025). Luxembourg's support to the Finance for Nature Platform of the Global Landscapes Forum, a multi-stakeholder initiative that promotes sustainability, similarly aims to channel investment into sustainable land use and value chains (Global Landscapes Forum, 2025).

Other partnerships in this category are developing new investment pipelines and revenue models for activities that halt or reverse the loss of nature. The Global Fund for Coral Reefs, supported by several donors, UN agencies, philanthropic foundations and the private sector, mobilizes private investment to protect and restore coral reef ecosystems by supporting "reef-positive" enterprises, including environmentally performing aquaculture and fisheries, long-term financing for marine protected areas and risk financing for coral restoration (Global Fund for Coral Reefs, 2026).

The Amazon Bioeconomy and Forest Management Fund, supported by the Swiss State Secretariat for Economic Affairs, the governments of Germany and the Netherlands, and the Inter-American Development Bank (IDB), provides another example of efforts to empower small- and medium-scale land users, particularly indigenous peoples and local communities in the Amazon region (IDB, 2023).

A fourth group of partnerships focuses on innovation, entrepreneurship and market development. The Cumbre de Innovación e Inversión para la Biodiversidad y Economías del Futuro (Innovation and Investment Summit on Biodiversity and the Economies of the Future),

supported by the IDB, Sweden, France and the United Kingdom, seeks to scale up innovation and investment for biodiversity by fostering collaboration among bioentrepreneurs, start-ups, businesses and incubation networks (groups of businesses that link together to share resources) (CEIBA, 2025).

Germany, Sweden and the UNDP have also supported the Biodiversity Credit Alliance, a voluntary international initiative which seeks to develop credible and scalable biodiversity credit markets in developing economies and facilitate partnerships with indigenous peoples and local communities (Biodiversity Credit Alliance, 2025).

Digital tools and traceability are also becoming important elements of biodiversity-related partnerships. Denmark's Danida Green Business Partnerships bring together local commercial and non-commercial parties in developing economies to promote environmentally performing supply chains, including by supporting traceable regenerative agricultural practices in partnership with farmer producer organizations, agri-SMEs and private companies (Ministry of Foreign Affairs of Denmark, 2024).

Italy's partnership with the Italian technology and digital traceability company Apio in Côte d'Ivoire provides another example of cooperation, where support for the environmental performance and transparency of the cocoa value chain through digital traceability tools has helped to improve information flows and environmental and social outcomes, including premium prices for fully traceable cocoa. Such initiatives illustrate how digitalization can help producers demonstrate

compliance with regulations, strengthen buyer confidence and capture more value from biodiversity-relevant products (Trusty, 2026).

In addition, several partnerships focus on knowledge exchange, capacity support and responsible business practices. Team Sweden Sustainability is a collaborative network that brings together government authorities and Swedish businesses to promote responsible business models in Swedish export and value chains in partner economies (Team Sweden, 2025).

Latvia's Consultative Council for Development Cooperation Policy provides a platform for exchange of information among ministries, academia, civil society organizations and the private sector to promote private sector participation in development cooperation policy (Government of Latvia, 2024). Through its Intercoconnecta programme, Spain supports regional cooperation and technical exchange in Latin America and the Caribbean on sustainable natural resource use and circular bioeconomy approaches, with a focus on strengthening innovation and economic opportunities for rural MSMEs (AECID, 2025).

These examples show that development cooperation in areas linked to biodiversity is increasingly moving beyond traditional technical assistance. Partnerships are being used to strengthen productive capacity, facilitate compliance with regulations and market access, mobilize finance, support innovation, improve traceability and build knowledge networks. This can help partner economies ensure that trade opportunities contribute to conservation, environmentally and economically sustainable livelihoods, and more resilient local economies (see [Box 3.5](#)).

Box 3.5:

Trade and biodiversity: exploring opportunities for private sector engagement for development cooperation

Private sector engagement is essential to translate biodiversity ambitions into changes in business models, supply chains, and investment and financial decisions.

While private sector engagement in biodiversity is increasing, alignment between the public and private sectors remains limited, reflecting persistent capacity and technical gaps among participants in the sector, lack of awareness of regulations, data and technological constraints, and uncertainty around business case needs. Indeed, support to overcome these issues, strengthen strategic partnerships and reduce risks when investing and working in developing economies, is key to transitioning to sustainable pathways. Trade offers a key avenue to achieve biodiversity outcomes, as environment-related requirements increasingly shape market access and supply chain practices across borders.

In this context, development cooperation can help align trade and biodiversity objectives by partnering with the private sector in either donor or partner economies through multiple direct partnerships, intermediaries, multistakeholder platforms, and incountry networks, such as embassies and offices, each suited to different sectors, locations and partner types.

In particular, a local presence in partner economies can strengthen tailored and timely engagement by facilitating dialogue, sharing relevant geopolitical information, helping identify partners and opportunities, and supporting project structuring and implementation.

Across this spectrum, development cooperation can promote private sector engagement in biodiversity across key areas relevant for trade: trade facilitation and market access; building productive capacity; environmentally and socially performing supply chains (including responsible business conduct standards and environmental impact assessments); innovation and entrepreneurship; traceability; data and technology for informed decision making; and knowledge exchange and policy dialogue.

Source: OECD (2026c).

Bibliography

AECID (2025), INTERCOONECTA: Knowledge Management for Sustainable Development in Latin America and the Caribbean.

Andrenelli, A. and López-González, J. (2019), "Electronic transmissions and international trade - shedding new light on the moratorium debate", OECD Trade Policy Papers, No. 233, OECD Publishing, Paris, <http://dx.doi.org/10.1787/57b50a4b-en>.

Bekkers, E., López-González, J. and So, R. (2025), "Great Expectations: Quantifying the Potential Economic Impact of the WTO Agreement on E-commerce", Staff Working Paper, World Trade Organization, https://www.wto.org/english/res_e/reser_e/ersd202506_e.pdf.

Biodiversity Credit Alliance (2025), Strategic Plan for the Biodiversity Credit Alliance 2025–2026, Biodiversity Credit Alliance.

CEIBA (2025), Cumbre de Innovación e Inversión para la Biodiversidad y las Economías del Futuro (CEIBA), Semana de la Biodiversidad Cali 2025.

Czech Aid (2024), "The KYRINO project, supported by the Czech Development Agency, focused on promoting local merino wool on the global market, is continuing successfully in Kyrgyzstan", <https://czechaid.gov.cz/aktivita/aktuality/v-kyrgyzstanu-uspesne-pokracuje-projekt-kyrino-podporeny-cra-a-zamereny-na-prosazeni-mistni-merino-vlny-na-globalnim-trhu> (accessed on 9 February 2026) (in Czech).

European Commission (2026), "EU-Brazil Green Finance Center", <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43353764/101175453>.

FAO (2022), "The State of Agricultural Commodity Markets 2022. The geography of food and agricultural trade: Policy approaches for sustainable development", Rome: Food and Agriculture Organization (FAO), <https://doi.org/10.4060/cc0471en> (accessed on 24 November 2025).

Ferracane, M.F., González Ugarte, S., and Rogaler, T. (2025a). "Global Trends in Digital Trade Policies and Practices: Evidence from the Digital Trade Integration Database." World Trade Review, doi:10.1017/S1474745625100955.

Ferracane, M. F., González Ugarte, S., and Rogaler, T. (Eds.). (2026a). Digital Trade Integration Database. European University Institute et al., accessed at <https://dti.eui.eu/database/>.

Ferracane, M. F., González Ugarte, S., and Rogaler, T. (2026b). Global trends in digital trade policies and practices: Evidence from the Digital Trade Integration Database. World Trade Review, 25(1), 127-151.

Ferracane, M. F., González Ugarte, S., and van der Marel, E. (2025). The Brussels effect in Africa: is it beneficial for intra-regional trade in digital services?. *Journal of International Economic Law*, 28(1), 1-22.

Francois, J. et al. (2025), “Deep Trade Agreements, Development Assistance and Sustainability Goals”, CEPR Discussion Paper 19917, <https://cepr.org/publications/dp19917>.

Fundación COPADE (2023). COPADE y LEROY MERLIN, más de 10 años promoviendo el desarrollo sostenible de Guatemala. Fundación COPADE / Madera Sostenible, <https://www.madera-sostenible.com/forestal/copade-y-leroy-merlin-mas-de-10-anos-promoviendo-el-desarrollo-sostenible-de-guatemala/>.

GATF (2025), “Annual Report 2025: 10 Years of Impact”, Global Alliance for Trade Facilitation, <https://www.tradefacilitation.org/wp-content/uploads/2026/04/global-alliance-for-trade-facilitation-annual-report-2025.pdf>.

Giordano, P. et al. (2024), Trade and Integration Monitor 2024: Bucking the Trend: The Potential of Knowledge-Based Services, Inter-American Development Bank, Washington, DC, IDB Monograph 1239, doi:10.18235/0013235.

Global Fund for Coral Reefs (2026), About the Global Fund for Coral Reefs, Global Fund for Coral Reefs, <https://globalfundcoralreefs.org/>.

Global Landscapes Forum (2025), The Luxembourg–GLF Finance for Nature Platform, Global Landscapes Forum, <https://www.globallandscapesforum.org/luxembourg-glf-platform/>.

Government of Canada (2025), “Grants and Contributions: Sustainable Land Fund (SLF 2)”, [Government of Canada](#).

Government of Latvia (2024), By-laws of the Consultative Council for Development Cooperation Policy.

Guglya, L. and Maciel, M. (2020). Addressing the Digital Divide in the Joint Statement Initiative on E-Commerce: From Enabling Issues to Data and Source Code Provisions. IISD and CUTS International, <https://www.iisd.org/system/files/2021-01/digital-divide-e-commerce-en.pdf>.

Hoekman, B. (2022). Digital trade: Opportunities and challenges. Geneva, Switzerland: World Trade Organization. Retrieved from https://www.wto.org/english/tratop_e/devel_e/digital_trade2022_e.pdf.

IDB (2023), Amazon Bioeconomy and Forests Management Multi-Donor Trust Fund (AMDTF), Inter-American Development Bank, Washington, DC, <https://doi.org/10.18235/0005202>.

IDB, WTO and World Bank (2026), “Digital Trade in Latin America and the Caribbean: Connecting Markets, Powering Growth”, [Digital trade in Latin America and the Caribbean: Connecting markets, powering growth](#).

IMF (2023), Geoeconomic Fragmentation and the Future of Multilateralism, <https://www.imf.org/en/publications/staff-discussion-notes/issues/2023/01/11/geo-economic-fragmentation-and-the-future-of-multilateralism-527266>.

IMF, OECD, UNCTAD, World Bank, WTO (2023), Digital Trade for Development, Geneva: World Trade Organization, https://www.wto.org/english/res_e/booksp_e/dtd2023_e.pdf.

Ismail, Y. (2026). A post-AfCFTA Digital Trade Protocol research agenda to address LDCs' challenges. In Ferracane, M.F., & Nordås, H. (Eds) (2026), Digital trade in Africa: A research agenda. European University Institute. Retrieved from <https://hdl.handle.net/1814/95026>.

Italian Agency for Development Cooperation (2024), "Inauguration of the coffee laboratory marks a new milestone in the partnership between Italy and Kenya", <https://nairobi.aics.gov.it/news/inaugurazi-one-del-laboratorio-del-caffe-segna-un-nuovo-traguardo-nel-partenariato-tra-italia-e-kenya/?lang=en> (accessed on 18 July 2025).

Kettunen, M. (2023), "Nature-positive trade for sustainable development", International Institute for Sustainable Development (IISD), <https://www.iisd.org/articles/policy-analysis/nature-positive-trade-sustainable-development> (accessed on 27 November 2025).

KOICA Kenya Office (2025), Income Generation Project: Strengthening the Operation Systems of Coffee Cooperatives in Embu County, Kenya, Korea International Cooperation Agency (KOICA), Nairobi, https://www.goodneighbors.ke/wp-content/uploads/2025/03/KGN.SED_KOICA_EMBU_2025.004.pdf.

López-González, J. and Sorescu, S. (2021), "Trade in the time of parcels", OECD Trade Policy Papers, No. 249, OECD Publishing, Paris, <https://doi.org/10.1787/0faac348-en>.

López-González, J., Sorescu, S. and Kaynak, P. (2023), "Of bytes and trade: Quantifying the impact of digitalisation on trade", OECD Trade Policy Papers, No. 273, OECD Publishing, Paris, <https://doi.org/10.1787/11889f2a-en>.

Ministry of Foreign Affairs of Denmark (2024), Danida Green Business Partnerships (DGBP), Copenhagen.

OECD (2021), "Development Co-operation Report 2021: Shaping a Just Digital Transformation", OECD Publishing, Paris, <https://doi.org/10.1787/ce08832f-en>.

OECD (2023), "A Decade of Development Finance for Biodiversity", OECD Publishing, Paris, <https://doi.org/10.1787/e6c182aa-en>.

OECD (2024), OECD Economic Surveys: Indonesia 2024, OECD Publishing, Paris, <https://doi.org/10.1787/de87555a-en>.

OECD (2025a), “OECD Supply Chain Resilience Review: Navigating Risks”, OECD Publishing, Paris, <https://doi.org/10.1787/94e3a8ea-en>.

OECD (2025b), “The digitalisation of trade documents and processes: Going paperless today, going paperless tomorrow”, OECD Publishing, Paris, <https://doi.org/10.1787/64872f25-en>.

OECD (2025c), Deriving experimental estimates of digital trade, OECD Publishing, Paris, <https://doi.org/10.1787/c7dbbc14-en>.

OECD (2025d), “OECD Trade Facilitation Indicators: Monitoring Policies Up to 2025”, OECD Publishing, Paris, <https://doi.org/10.1787/fd6f27dc-en>.

OECD (2025e), “OECD Services Trade Restrictiveness Index 2026: Policy Trends”, OECD Publishing, Paris, <https://doi.org/10.1787/db87d74e-en>.

OECD (2025f), “The OECD Index of Digital Trade Integration and Openness (INDIGO): Policy Trends up to 2025”, OECD Publishing, Paris, <https://doi.org/10.1787/623087f9-en>.

OECD (2026a), *Enhancing Resilience Through Traceability*, Organisation for Economic Co-operation and Development: Paris. Available at https://www.oecd.org/en/publications/enhancing-resilience-through-traceability_a898687d-en.html.

OECD (2026b), Trends in Global Value Chains, OECD Publishing, Paris, <https://doi.org/10.1787/8217c2ff-en>.

OECD (2026c), Scaling Up Private Action for Nature: Opportunities for Development Co-operation and Finance, OECD Publishing, Paris, <https://doi.org/10.1787/cae9a3dc-en>.

OECD and ITC (2024), “Understanding Sustainability Initiatives: A Typology Framework”, OECD Publishing, Paris, <https://doi.org/10.1787/8f8a3d7f-en>.

Olarreaga, M. (2021). Rethinking LDC Trade Priorities. Enhanced Integrated Framework (EIF) and World Trade Organization (WTO).

Team Sweden (2025), Sustainability, Team Sweden.

Trusty (2026), Trusty’s model in Côte d’Ivoire: Digital Traceability Drives Local Community Development, Trusty.

UNCTAD (2021). Digital Economy Report 2021: Cross-border Data Flows and Development: For Whom the Data Flow? United Nations Conference on Trade and Development, Geneva, <https://unctad.org/publication/digital-economy-report-2021>.

UNCTAD (2022). Digital Trade: Opportunities and Actions for Developing Countries. UNCTAD Policy Brief No. 92, <https://unctad.org/publication/digital-trade-opportunities-and-actions-developing-countries>.

UNCTAD (2025), “Trade and BioTrade’s contribution to the Kunming-Montreal Global Biodiversity Framework and synergies with the other Sustainable Development Goals”, UN Trade and Development UNCTAD, Geneva, <https://unctad.org/publication/biotrades-contribution-to-the-kunming-montreal-global-biodiversity-framework>.

UNCTAD (2026), “Digital services exports are growing fast. Least developed countries are not keeping pace”, <https://unctad.org/news/digital-services-exports-are-growing-fast-least-developed-countries-are-not-keeping-pace>.

UNECA (2023). Digital trade regulatory environment: opportunities for regulatory harmonization in Africa. African Trade Policy Centre (ATPC) Report. Retrieved from <https://dtri.uneca.org/assets/data/publications/Digital-trade-regulatory-environment-Opportunities-for-regulatory-harmonization-in-Africa-en.pdf>.

UNIDO (2026a), “Building Sustainable Supply Chains for Developing Economies: Pathways to 2050”, UN Industrial Development Organization (UNIDO), <https://www.unido.org/sites/default/files/unido-publications/2026-02/Building%20Sustainable%20Supply%20Chains%20for%20Developing%20Economies%20-%20Pathways%20to%202050.pdf>.

UNIDO (2026b), “The green transformation and the future of manufacturing: challenges and opportunities for developing countries”, Policy Brief Series: Insights on industrial development, UN Industrial Development Organization (UNIDO), <https://www.unido.org/sites/default/files/unido-publications/2026-03/IID%20Policy%20Brief%2029%20-%20The%20green%20transformation%20and%20the%20future%20of%20manufacturing.pdf>.

van der Ven, C. (2024). “Emerging Trade Opportunities for LDCs from the Green Transition.” In LDC Trade Priorities: Looking Forward. Geneva: World Trade Organization (WTO).

Vásquez Callo-Müller, M. and Kugler, K. (2023). “Digital Trade, Development, and Inequality”, AJIL Unbound, 117, 116-121, <https://www.cambridge.org/core/journals/american-journal-of-international-law/article/digital-trade-development-and-inequality/391975DF6FD9F792C651E9313C0DD6FA>.

World Bank (2021), Central America Digital Economy: Digital Economy Enabling Environment Assessment, Central America Digital Economy Analytical Support, Report No. AUS0002020, World Bank, Washington, DC, <https://documents1.worldbank.org/curated/en/099135003042216854/pdf/P1749140834e850f0bb030fec5cfdcf329.pdf>.

WTO (2023), World Trade Report 2023: Re-globalization for a Secure, Inclusive and Sustainable Future, https://www.wto.org/english/res_e/publications_e/wtr23_e.htm.

WTO (2026), *Digitally delivered services trade dataset*, World Trade Organization website, https://www.wto.org/english/res_e/statis_e/gstdh_digital_services_e.htm.

WTO and OECD (2024), *Aid for Trade at a Glance 2024*, World Trade Organization, Geneva and OECD Publishing, Paris, <https://doi.org/10.1787/7a4e356a-en>.

WWF and AXA Group (2019), *Into The Wild: Integrating nature into investment strategies*, World Wide Fund for Nature, Gland, Switzerland and AXA Group, Paris, <https://www.elysee.fr/admin/upload/default/0001/04/96b8bf42c3f41a5919b1d9fe3034199b07877cba.pdf> (accessed on 15 April 2025).

Zabel, A., Nanhthavong, V. and Epprecht, M. (2025), "Gaps between demand and supply of biodiversity impact finance in the Global South", *Current Opinion in Environmental Sustainability*, Vol. 76, Art. 101568, <https://doi.org/10.1016/j.cosust.2025.101568> (accessed on 15 October 2025).

Endnotes

- 1 Electronic transactions framework; electronic authentication and signatures, electronic contracts, electronic invoicing, paperless trading, single window data exchange and system interoperability, and electronic payments.
- 2 Customs duties on electronic transmissions, open government data and access to and use of the internet for electronic commerce.
- 3 Consumer protection, unsolicited commercial electronic messages, personal data protection and cybersecurity.
- 4 At the WTO 14th Ministerial Conference, 67 WTO members adopted interim arrangements on 28 March 2026 for the entry into force of the Electronic Commerce Agreement, covering approximately 70 per cent of global trade. The modelling referenced in the text is based on a broader group of 71 participating economies at the time of the analysis.
- 5 OECD Trade Facilitation Indicators Simulator. Available at <https://sim.oecd.org/default.ashx?lang=En&ds=TFI&d1c=oecd&cs=oecd>
- 6 The available Index of Digital Trade Integration and Openness (INDIGO) data highlight that, in 2025, the WTO e-commerce moratorium represented 24 per cent of existing digital trade integration and openness. The successful implementation of the Agreement on E-commerce is estimated to increase global digital trade integration and openness by 21 per cent. The more economies that join the Agreement, the higher the overall impact on the INDIGO (OECD, 2025c).

Abbreviations

ADB	Asian Development Bank
ACWL	Advisory Centre on WTO Law
AfCFTA	African Continental Free Trade Area
AfDB	African Development Bank
ASEAN	Association of Southeast Asian Nations
CAREC	Central Asia Regional Economic Cooperation
DAC	Development Assistance Committee
DFI	Development finance institution
DFQF	Duty-free and quota-free
DMC	Developing member country
DPI	Digital public infrastructure
EAC	Energy attribute certificate
EBRD	European Bank for Reconstruction and Development
EIF	Enhanced Integrated Framework
EU	European Union
GDP	Gross domestic product
ICT	Information and communications technology
IDB	Inter-American Development Bank
IFD	Investment Facilitation for Development
IFT	International Forum on TOSSD
INDIGO	Index of Digital Trade Integration and Openness (OECD)
JICA	Japan International Cooperation Agency
LAC	Latin America and the Caribbean
LDC	Least-developed country
LLDC	Landlocked developing country
MC14	14 th WTO Ministerial Conference
MDB	Multilateral development bank

MEL	Monitoring, evaluation and learning
MSME	Micro, small and medium-sized enterprises
NFIDC	Net food-importing developing country
NTP	Non-trade provision
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
OOF	Other official flows
OSBP	One-stop border post
PIDA	Programme for Infrastructure Development in Africa
PTA	Preferential trade agreement
RTA	Regional trade agreement
S&DT	Special and differential treatment
SME	Small and medium-sized enterprise
SPS	Sanitary and phytosanitary
SSC	South-South Cooperation
STDF	Standards and Trade Development Facility
SVE	Small, vulnerable economy
TACB	Technical assistance and capacity building
TBT	Technical barriers to trade
TFA	Trade Facilitation Agreement
TFIs	Trade Facilitation Indicators (OECD)
TFP	Trade Facilitation Programme
TOSSD	Total Official Support for Sustainable Development
UNCTAD	UN Trade and Development
WTO	World Trade Organization

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Supporting greater integration of developing economies, including least-developed countries (LDCs), into global trade has been a long-standing objective of the international community. Since the launch of the Aid for Trade initiative in 2006, US\$ 795 billion has been disbursed to bolster infrastructure, build productive sectors and strengthen trade institutions in these economies. These efforts have played an important role in helping developing economies increase their participation in the multilateral trading system.

“Two decades of trade and development partnerships: Trends and impact of the Aid for Trade initiative” examines trends in trade-related development assistance and the evolving participation of developing economies, including LDCs, in global trade. It also explores emerging priorities for developing economies in a changing trade and development cooperation landscape. The report sheds light on how partnerships for trade and development can be strengthened in the future to help developing economies, including LDCs, benefit more fully from global trade.

