

CHAPTER 12

AID FOR INCLUSIVE TRADE AND POVERTY REDUCTION

Contributed by the World Trade Organization

Abstract: *A growing body of evidence highlights the effectiveness of aid for trade in generating positive trade outcomes. The focus on capturing trade outcomes such as increases in exports or reductions in trade costs, however, is now being complemented by an increasing focus on tracing the direct and indirect impacts of aid interventions on poverty reduction, in particular for women. In that context, this chapter has three main objectives. The first is to demonstrate that poor physical and digital connectivity are among the factors keeping people in poverty. The second is to provide evidence on how infrastructure and digital connectivity are contributing to poverty reduction, market access, financial inclusion and women's economic empowerment. The third is to highlight some of the key points emanating from the 2017 aid-for-trade monitoring and evaluation exercise, including how combined efforts from various stakeholders can facilitate inclusive development and contribute to eradicating poverty.*

INTRODUCTION

A growing body of evidence highlights the effectiveness of aid for trade in generating positive trade outcomes. Research has suggested that for every USD 1 invested in aid for trade, there is an increase of approximately USD 8 in exports from developing countries and USD 20 in exports from countries eligible for International Development Association (IDA)¹ assistance (OECD-WTO, 2013). The focus on capturing trade outcomes (e.g. increases in exports or reductions in trade costs) is now being complemented by an increasing focus on tracing the impacts of aid-for-trade interventions on poverty reduction, in particular for women, on whom the burden of poverty falls heaviest. Eliminating extreme poverty is the first goal of the 2030 Agenda for Sustainable Development and has been integrated into the strategic objectives of development finance institutions. The World Bank's twin target of reducing extreme poverty and boosting shared prosperity is a case in point.

Developmental outcomes can be derived from aid-for-trade projects on at least three levels: 1) direct outcomes, such as improvements in the business environment; 2) intermediate outcomes, such as improvements in competitiveness, diversification and trade integration; and 3) final outcomes, such as higher income and more jobs (OECD, 2013). Such a log-frame method of evaluation emphasises the range of outcomes that aid for trade can engender for social and economic development at different stages. Establishing direct interactions between aid for trade and poverty reduction is still complex. OECD, for instance, describes a "black box" between inputs and impacts, in which attribution can become lost (OECD, 2006).

Gaps in the availability of quality data concerning poverty reduction further complicate analyses of the impact of aid-for-trade projects on poverty reduction. Nevertheless, efforts are being expended to trace and measure the impacts of aid-for-trade funding on the poor, and on women in particular (Box 12.1). Various metrics have been used, e.g. simple ex-post assessments or randomised controlled trials. The 2015 edition of the present publication also discussed the strengths and weaknesses of Theories of Change in impact evaluations (OECD-WTO, 2015). This edition adds that a combination of different methods is needed to establish a robust evidence base to measure the impact of aid for trade on poverty reduction.

Box 12.1. The UK Department for International Development's approach to trade and poverty

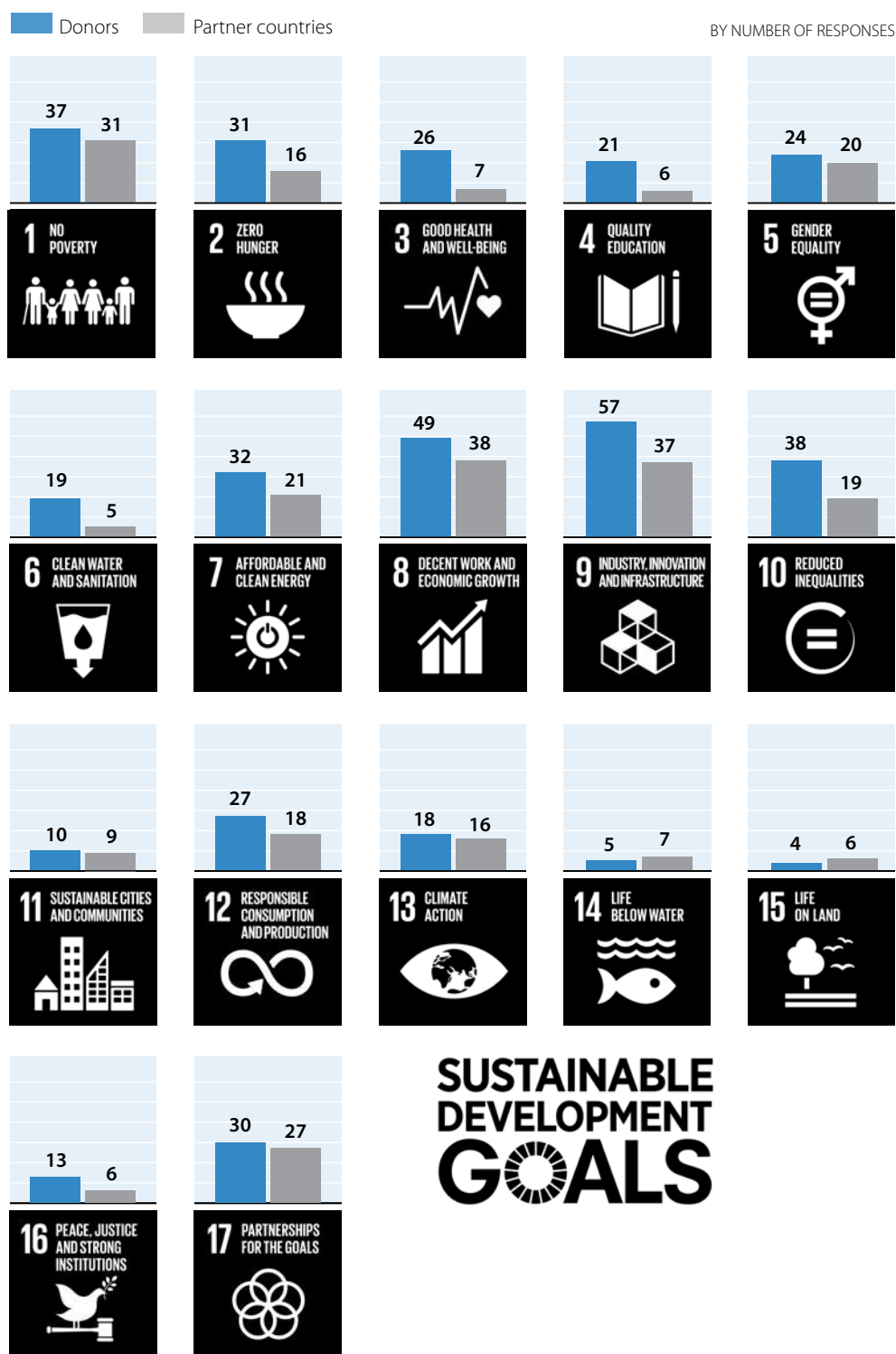
Recognising that there are winners and losers from trade and trade programmes, the United Kingdom's (UK) Department for International Development (DFID) undertakes assessments of the expected poverty impacts of all its new trade programmes. In addition to ongoing trade and poverty-specific policy support and oversight, detailed guidance—in programme design, during implementation and in reviewing existing programme—helps staff to better understand the distributional effects of trade programmes. This covers analysis of high-level economic indicators—trade patterns, labour market and sector segmentation, tariff revenue change impacts for diverse groups, and adjustment costs—as well as the gathering of qualitative data, which is especially important given the data limitations regarding marginalised groups in developing countries.

Crucially, transmission mechanisms and context are assessed at the country or regional level; this is the only way to properly understand how the linkages among trade, inclusive growth and poverty reduction may play out in any given situation. Recognising the difficulty of anticipating all possible impacts in advance, DFID includes robust monitoring and evaluation arrangements to track impacts, allowing for course adjustment as more is learned.

DFID also recognises that poverty is gendered; since May 2014, all DFID programmes (including trade programmes) must demonstrate that they have meaningfully considered gender issues in line with the Gender Equality Act. DFID will also work closely with the UK Department for International Trade to integrate gender equality throughout the UK trade policy.

Source: The UK Department for International Development

Figure 12.1. Which SDGs can aid for trade help to achieve?



Source: OECD-WTO aid-for-trade monitoring exercise (2017), www.oecd.org/aidfortrade/countryprofiles/.

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Responses to the 2017 OECD-WTO aid-for-trade self-assessment questionnaires demonstrate that poverty eradication ranks high among the objectives that developing countries and their development partners wish to see aid for trade achieve. Questionnaire responses illustrated in Figure 12.1 seem to suggest that developing country governments and donors would like aid for trade to contribute, above all, to achieving Sustainable Development Goals (SDGs) 9 (industry, innovation and infrastructure), 8 (decent work and economic growth), and 1 (no poverty). Industry, innovation and infrastructure were cited 94 times in total, by both partner country and donor respondents, followed by decent work and economic growth (identified 87 times), and poverty eradication (identified 68 times).

Against this background, this chapter builds on the four characteristics of poverty identified in the 2015 World Bank and World Trade Organisation report on *the Role of Trade in Ending Poverty*: gender, informality, the poor's location in rural areas, and fragile states. This report proposed actions to make trade opportunities accessible and affordable to the poor, and in particular to micro, small and medium enterprises (MSMEs) and women. These actions included lowering trade costs for the deeper integration of markets; improving the enabling environment and complimentary policies; intensifying the poverty impact of integration policies; managing and mitigating risks faced by the poor; and improving data and analysis to inform policy (WB-WTO, 2015).

This chapter will further explore the relationship between connectivity and poverty reduction by discussing the following:

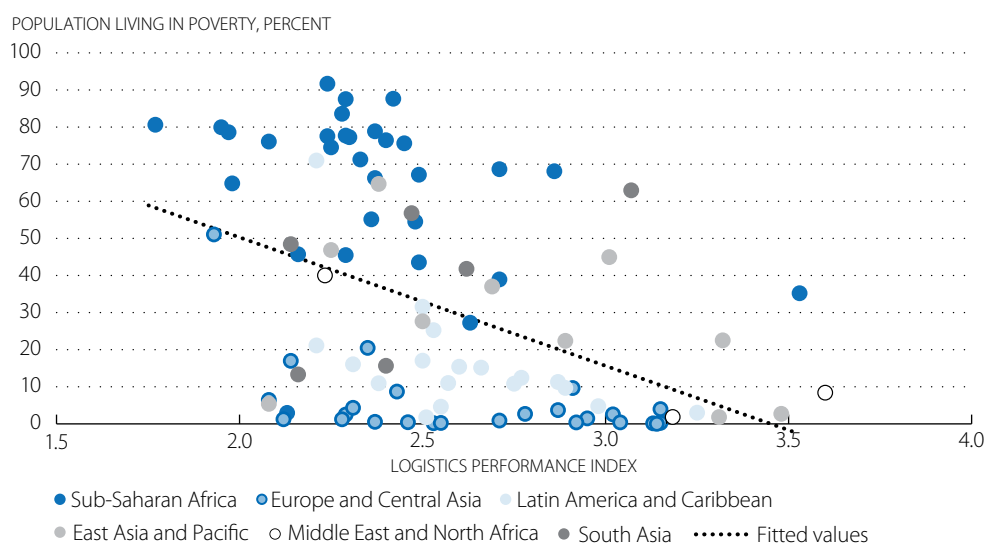
- How does the incidence of poverty map with that of connectivity—both physical and digital?
- How is connectivity reducing poverty?
- What have we learnt from 2017 aid-for-trade programmes and projects?

POOR CONNECTIVITY CAN BE MAPPED AGAINST POVERTY

Poor connectivity is one of the factors keeping people in poverty. A preliminary step in establishing this relationship is to map the incidences of poverty against physical and digital connectivity. Such mapping can be conducted at two levels: at the national level using aggregate statistics, and at the local level using national data. Importantly, poor connectivity is not offered as a reason why people find themselves in poverty, but rather as a factor keeping them in poverty. Action to address connectivity is therefore one step in removing the binding constraints that keep people in poverty.

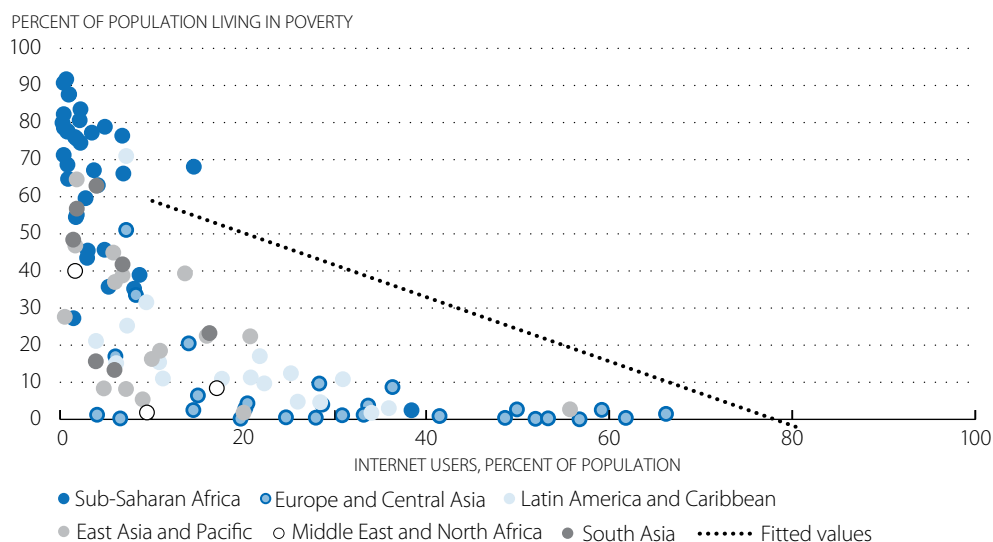
In terms of physical connectivity, one observation is that logistics performance scores are lower in regions with higher poverty rates. The World Bank's Logistics Performance Index (LPI) assesses the performance of countries based on components such as trade and transport infrastructure (World Bank, 2016c). Figure 12.2 illustrates the negative correlation between LPI scores and poverty rates by region; as LPI scores improve, poverty rates tend to decrease.

Similarly, Internet connectivity is significantly lower in regions with higher poverty rates. At the global level, there is a strong correlation between income level and key indicators of participation in the digital economy (World Bank, 2016a). The poor are less likely to have access to technology. In African countries, the bottom 40% of the population, by income, is only one-third as likely to have access to the Internet as the upper 60% (World Bank, 2016a). Figure 12.3 demonstrates that there is an inverse relationship between Internet usage and poverty rates; as internet usage increases, poverty rates tend to decrease.

Figure 12.2. Poverty rates by region and logistics performance

Source: WTO Secretariat based on WB World Development Indicators, Poverty Rates (2008-2014 average) and Logistics performance index (2007). World Bank Regional Classification.

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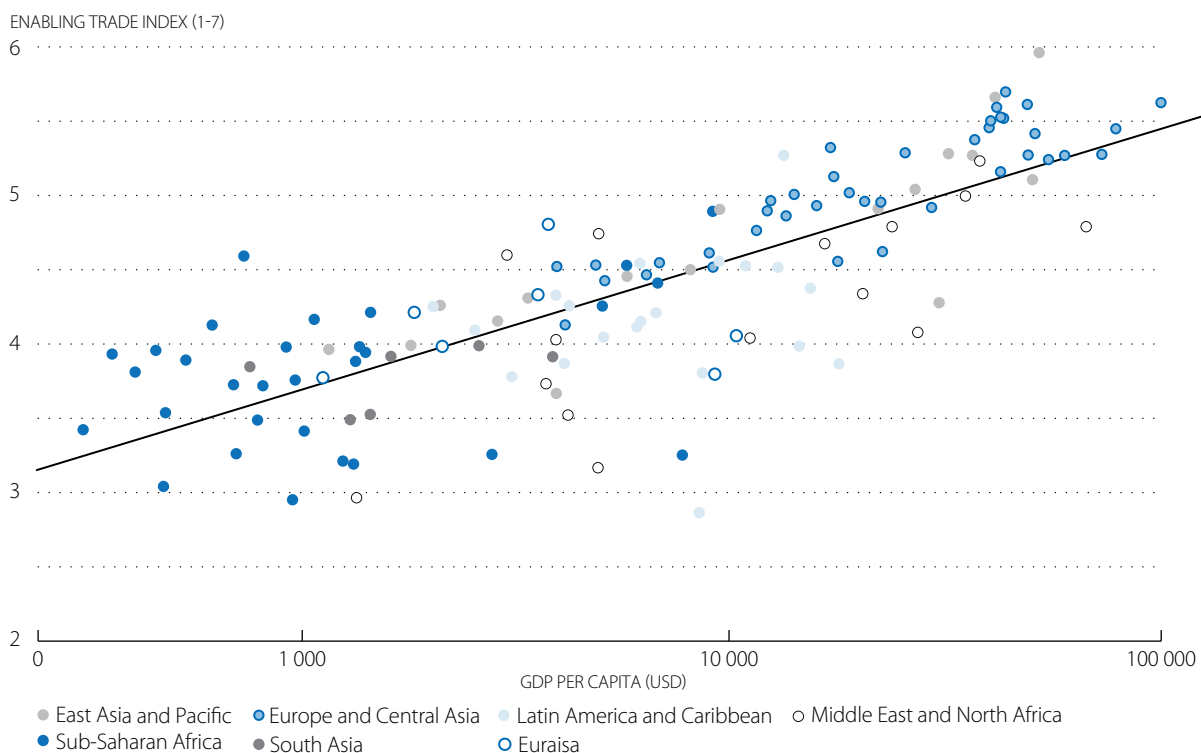
Figure 12.3. Poverty rates by region and percentage of Internet users

Source: WTO Secretariat based on WB World Development Indicators (2008-2014 average) and ITU World Telecommunications/ICT Indicators, Internet Users (2007). World Bank Regional Classification.

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These findings are complemented by those of the *Global Enabling Trade Report 2016* (GATF-WEF, 2016), which ranks seven of the most populous countries, some of which are home to most of the world's extreme poor, very low on the Enabling Trade Index. Research from the *Global Enabling Trade Report 2016* indicates that 394 million of the world's 767 million people living below the international poverty line are located in only eight countries, and six of these countries rank lower than 100 on the Enabling Trade Index. Figure 12.4 illustrates the correlation between per capita income and the enabling trade index by region.

Figure 12.4. GDP per capita and Enabling Trade Index 2016 scores



Note: *The Global Enabling Trade Report* is a joint publication of the World Economic Forum (WEF) and the Global Alliance for Trade Facilitation (GATF).

Source: GATF-WEF (2016), *The Global Enabling Trade Report 2016*.

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Table 12.1. Average tariffs versus income levels in India

| Income decile | Household weekly consumption | | Average tariff faced (%) |
|---------------|------------------------------|------|--------------------------|
| | Rupees | USD | |
| 1 | 511 | 9.6 | 24.4 |
| 2 | 783 | 14.8 | 22.9 |
| 3 | 962 | 18.2 | 22.4 |
| 4 | 1 130 | 21.3 | 21.5 |
| 5 | 1 305 | 24.6 | 20.3 |
| 6 | 1 504 | 28.4 | 19.2 |
| 7 | 1 761 | 33.2 | 18.4 |
| 8 | 2 118 | 40.0 | 17.5 |
| 9 | 2 713 | 51.2 | 16.0 |
| 10 | 5 112 | 96.5 | 14.5 |

Source: Mendoza et al. (2016), *Are the poor getting globalised*.

In practice, approaches based on local-level data are still in their infancy. However intra-country findings have revealed that trade costs tend to decrease as per capita income increases. For instance, one analysis of income levels across deciles in India, home to 30% of the world's extreme poor (WB-WTO, 2015), found that urban workers faced better market access conditions than their rural counterparts: 22.6% compared to 11.7%, respectively). In addition, tariffs faced by women were found to be higher than those faced by men: 20.4% compared to 14.4%, respectively. In the same study, the tariffs faced by enterprises in the formal sector were found to be more liberal than those in the informal sector: 7.2% compared to 9.8%, respectively. Market access and income levels were found to be inversely correlated, even within sectors (Table 12.1).

Physical connectivity is strongly related to poverty reduction

Studies have found that physical connectivity is a strong determinant of poverty reduction. For example, roads and transport-related infrastructure connect people, not only to markets, but also to health services, education and employment opportunities (World Bank, 2014). Furthermore, as most of the poor live in rural areas and a significant share of them depend on agriculture for a living (Cervantes and Dewbre, 2010), physical connectivity can reduce the time and costs associated with the transport of perishable goods, as well as the need for intermediaries, raising the revenue potential of the agricultural sector. Abdi (2004) found that farmers in Kenya's Kisumu and Nyandarua districts faced market access barriers and high production costs, which affected their agricultural performance. These constraints, according to the study, could be addressed by improving infrastructure so as to connect farmers directly to consumers, removing potentially exploitative middlemen, and reducing the costs of intermediation between farmer and consumer.

Fan et al. (2002) found that in rural China, "Estimated elasticities with respect to road density are 0.08 for agricultural GDP per worker, 0.10 for non-agricultural employment, and 0.15 for wages of non-agricultural workers." Furthermore, another study found that rural roads have the most significant impact on the incidence of poverty. It was estimated, for example, that 3.2 persons were lifted out of poverty with every 10 000 Yuan invested in rural roads in China (Ali and Pernia, 2003). The framework below (Figure 12.5) illustrates the various channels through which infrastructure development can benefit the poor, directly through income distribution effects, and indirectly, through rural economic growth.

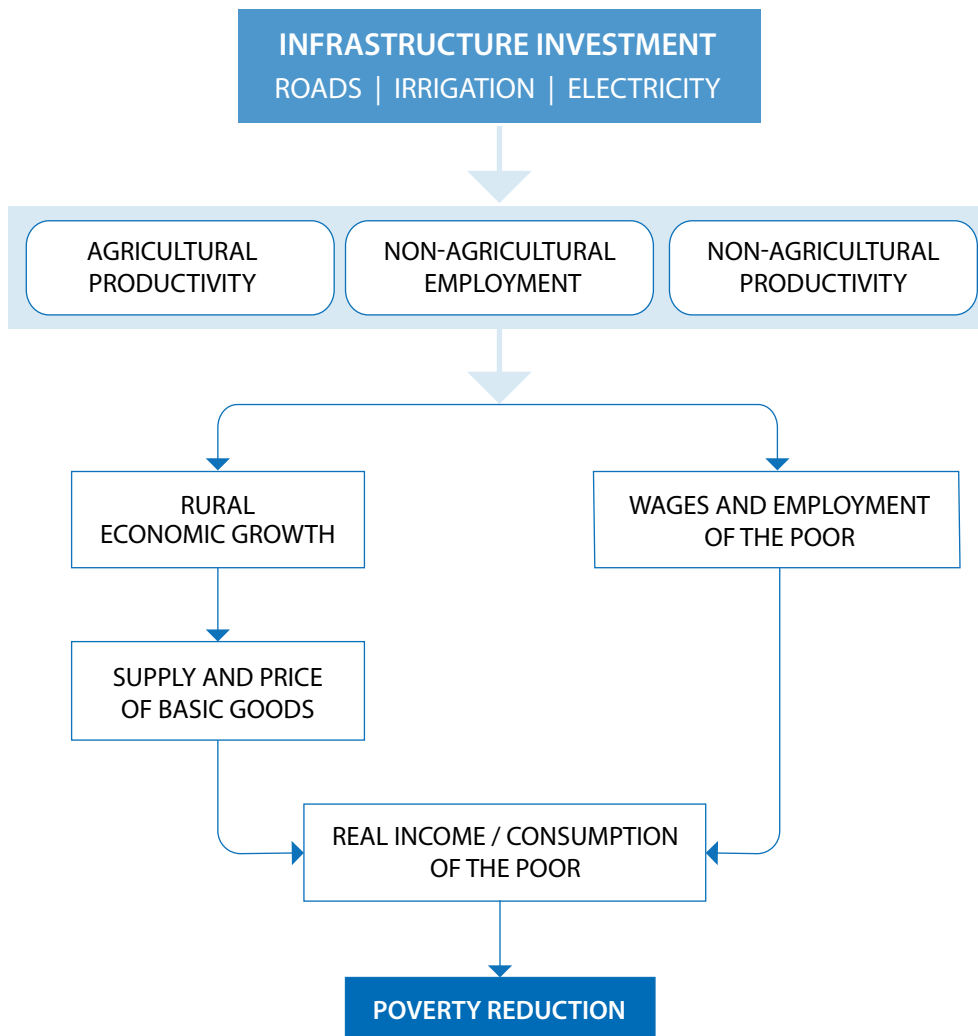
While the development of physical infrastructure can drive intra-country, rural-urban linkages, the link between improvements in regional transport corridors and poverty reduction is more complex. One of the reasons is that trade-associated time and costs tend to be significantly higher across countries, and even more so across developing and least-developed countries (Box 12.2). Some of the 2017 aid-for-trade case stories provided evidence of how lengthy customs clearance procedures between neighbouring countries in Africa have burdened cross-border traders and transporters (e.g. *OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 65 and 71).

Box 12.2. Intra-regional trade costs in Africa

If the residents of San Francisco faced the same charges in crossing the Bay Bridge to Oakland as do residents crossing the Congo River between Kinshasa and Brazzaville, a similar distance, they would pay more than USD 1200 for a return trip (...). In southern Africa, a truck serving supermarkets across a border may need to carry up to 1 600 documents as a result of permits and licenses and other requirements. Slow and costly customs procedures and delays caused by other agencies operating at the border, such as standards, raise the costs of trading. For example, one supermarket chain in Southern Africa reports that each day one of its trucks is delayed at a border costs USD 500 and it spends USD 20 000 per week on securing import permits to distribute meat, milk, and plant-based goods to its stores in one country alone.

Source: Anabel Gonzales for World Bank (2015)

Figure 12.5. A basic analytical framework depicting the links between infrastructure and poverty reduction



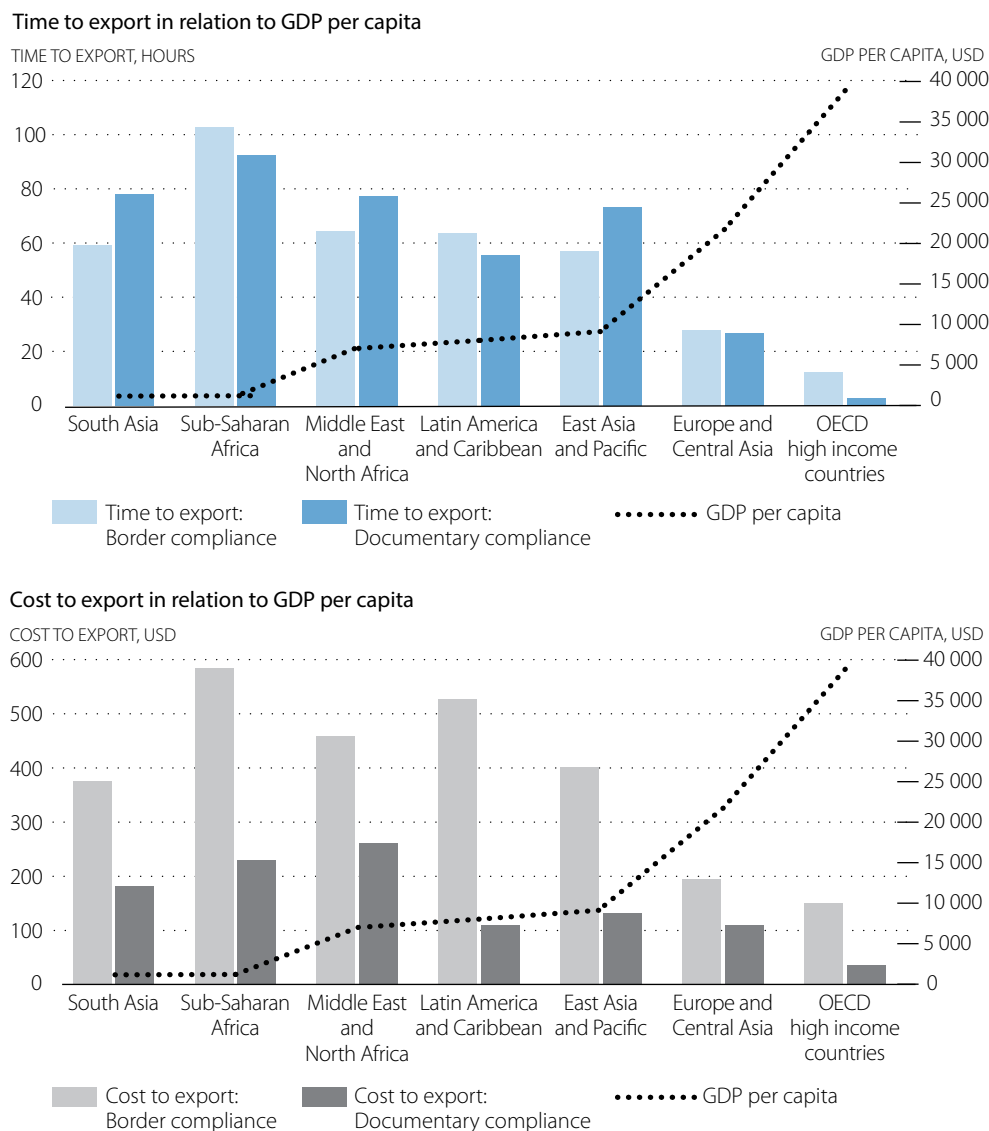
Source: Adapted from Ali and Pernia (2003), *Infrastructure and Poverty Reduction-What is the connection?*
<https://www.adb.org/sites/default/files/publication/28071/pb013.pdf>

The World Bank's *Doing Business* database records the time and cost associated with the logistical process of exporting and importing goods. The 2016 *Doing Business* database shows that the time and cost to clear customs increase as per capita income by region decreases. Figure 12.6 illustrates the comparative advantage of traders in higher income regions in efficiently meeting customs clearance requirements for export. For example, South Asia and sub-Saharan Africa have the lowest per capita income by region, at USD 1 542 and USD 1 588 respectively, compared to USD 39 267 for OECD high-income members, yet in OECD high-income countries the time needed to meet border compliance procedures is more than five times lower than in South Asia, and around eight times less than in sub-Saharan Africa. Similarly, Figure 12.6 shows that the cost of meeting border clearance procedures for export is highest in sub-Saharan Africa and Latin America and the Caribbean, whilst being lowest in Europe and Central Asia, and in OECD high-income countries.

The time and cost to meet documentary compliance procedures for export also increase as per capita income decreases. Figure 12.6 demonstrates that it takes only around 2 hours to complete documentary compliance for export from OECD high-income countries, compared to 78 hours in South Asia and 92 hours in Sub-Saharan Africa. The average cost of

completing documentary compliance for export is also significantly higher in the Middle East and North Africa (USD 261), sub-Saharan Africa (USD 229), South Asia (USD 182), and East Asia and the Pacific (USD 132) when compared to OECD high-income countries (USD 36). Another practical issue that arises in documentary compliance is the capacity and knowledge of the relevant procedures for export.

Figure 12.6. Time and cost to export and GDP per capita, by region



Sources: WTO Secretariat based on WB *Doing Business* (2016) and *World Development Indicators* (2015).

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Producers in developing countries benefitting from tariff preferences may also still be faced with high freight costs. For example, the Inter-American Development Bank (IADB, 2008) estimates that Latin America and the Caribbean countries face transport costs that are significantly higher than tariffs for most sectors and markets. Transport costs in Latin America and the Caribbean tend to be higher, largely because of deficiencies in infrastructure and weak competition in shipping services, airfreight in particular. IADB argues that the impact of reductions in freight costs on both the volume and the diversification of trade in Latin America and the Caribbean can be significantly larger than that of tariff liberalisation.

Intra-regional trade accounts for only 5% of South Asia's total trade, compared to 25% in the Association of Southeast Asian Nations (ASEAN). South Asia, which comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, is home to a population of 1.7 billion, among which 262 million people were living under USD 1.90 per day in 2013. Limited transport connectivity, onerous logistics and regulatory barriers make it more costly to trade within South Asia than between South Asia and countries in other regions (World Bank, 2017). Landlocked countries, such as Nepal and Bhutan, also face higher transport costs, as the ability of producers in these countries to trade depends on the affordability of transit costs through neighbouring countries.

Table 12.2 below provides a breakdown of the costs to import from Kolkata to Nepal; it shows that freight costs alone account for 60% of import costs, at approximately USD 707 per twenty-foot container. Added to these costs are handling charges at the Kolkata-Haldia port—which amount to approximately USD 139—and warehouse charges, at USD 25 per twenty-foot container. High costs to transit, as well as operational inflexibilities (information exchange, logistics or payments), can negatively affect both trade efficiency and the productivity of truck drivers (De, 2015).

Another example of high transport costs is in Rwanda, where smallholders in the coffee sector face a number of logistics and other cost-related challenges. Rwanda's landlocked geographical status and limited infrastructure mean that coffee producers pay higher transport costs than in neighbouring countries. Transporting coffee cherries quickly over Rwandan roads, and moving processed beans out of the country in a timely and cost-effective manner represent some of the practical challenges they face.

| Table 12.2. Disaggregated import costs in Nepal (per twenty-foot equivalent unit) | | |
|------------------------------------------------------------------------------------------|--------------------|---------------------------------|
| Procedure | Cost in USD | Share of total costs (%) |
| Contact importer / broker | 0.15 | 0.01 |
| Fix trade terms | 0.52 | 0.04 |
| Sign and exchange contract | 7.16 | 0.61 |
| Letter of credit opening service charge | 39.55 | 3.37 |
| Insurance cost | 49.30 | 4.20 |
| Obtain approval from concerned ministry | 0.00 | 0.00 |
| Collect and prepare required document | 7.24 | 0.62 |
| Hand over document to clearing agent by courier | 6.60 | 0.56 |
| Handling charge at Kolkata-Haldia port | 138.71 | 11.82 |
| Customs clearing cost at transit customs | 14.50 | 1.24 |
| Warehouse charge at Kolkata-Haldia | 24.87 | 2.12 |
| Freight from Kolkata to factory in Nepal | 707.27 | 60.26 |
| Cargo transfer | 28.78 | 2.45 |
| Customs service charge | 30.45 | 2.59 |
| Clearing cost to Customs House Agent at importer's customs | 6.09 | 0.52 |
| Other (including informal costs) | 112.56 | 9.59 |
| Total (import process costs in Nepal) | 1 173.75 | 100.00 |

Source: De, Prabir (2015), *Disentangling transit costs and time in South Asia: Lessons from firms in Bhutan and Nepal importing through Kolkata and Haldia ports*, www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10260.pdf.

High transit costs can therefore exacerbate the market access divide for producers in landlocked LDCs. While these costs are not exclusive to landlocked LDCs, as pointed out in the *2015 Aid for Trade at a Glance* publication, “Consumers in these (isolated) countries cannot take advantage of competitively priced goods from abroad and their firms cannot access high quality foreign inputs or export to overseas markets.” Furthermore, high prices tend to disproportionately impact on the incomes, consumption and welfare of the poor (OECD-WTO, 2015).

Transport infrastructure was identified as a priority in the national development strategies of 46 respondents to the 2017 AFT partner country questionnaire. Within countries, as the distance from urban to rural areas increases, so typically do the costs of transport. For the rural poor, the inability to cover distances to service centers or foreign markets and may also negatively affect their overall well-being. In 2014, 85% of multi-dimensionally poor people lived in rural areas; this is higher than the rural share of income-based poor people, which was estimated at 70-75% in the same period (OPHDI, 2014).

Connectivity can contribute to tourism development

Efforts to connect the rural poor can also facilitate the development of trade in services. Tourism and travel is a services sector with high penetration rates in some developing and least-developed countries. In Vanuatu, for instance, the tourism and travel sector contributed to up to one third of GDP in 2013 (WT/COMTD/LDC/W/60). Tourism is also the largest export sector in the Maldives, a recently graduated LDC (in 2011) whose GNI per capita was almost five times the income graduation threshold by 2010 (UN, 2012).

The United Nations World Tourism Organisation (UNWTO) refers to connectivity as an important characteristic of tourism in low-income countries and the poor communities within them. Given the many different activities and inputs that constitute the tourism product, and its large and diversified supply chain, UNWTO finds that tourist spending benefits a wide range of sectors, including agriculture, handicrafts, transport and other services. Tourism is also described as having a multiplier effect through secondary spending by people whose income is supported by tourism (UNWTO, 2017). Box 12.3 lays out seven channels through which the poor can benefit from the development of tourism.

Box 12.3. Transmission channels through which the poor can benefit from tourism development

The following are seven sustainable tourism-eliminating poverty (ST-EP) mechanisms that can benefit the poor directly:

1. employment of the poor in tourism enterprises
2. supply of goods and services to tourism enterprises by the poor or by enterprises employing the poor
3. direct sales of goods and services to visitors by the poor
4. establishment and running of tourism enterprises by the poor, e.g. MSMEs or community-based enterprises
5. taxes or levies on tourism income or profits with proceeds benefiting the poor
6. voluntary giving/support by tourism enterprises and tourists
7. investment in infrastructure stimulated by tourism and also benefiting the poor in the locality, directly or through support to other sectors

Source: UN Steering Committee on Tourism for Development, “Tourism and Poverty Reduction Strategies in the Integrated Framework for Least Developed Countries” cited in UNDP (2011).

Challenges in accessing remote areas where the poor tend to be concentrated pose an impediment to the export of touristic and complementary services. For example, 32 partner country respondents cited poor transport infrastructure as a constraint to the growth of their national services capacity. The ST-EP mechanism outlined in Box 12.3 acknowledges the benefits of infrastructure development for the rural poor. On that point, the United Nations Development Programme (UNDP) describes investment in rural infrastructure as having a multiplier effect on poverty reduction: “Tourism development, particularly in a new, remote or rural location, can include investment in new infrastructure, such as roads, water and energy supply, sanitation and communications. With careful planning, such infrastructure can also bring positive benefits to the poor, by providing them with basic services and opening up new and faster routes to access markets” UNDP (2011).

Digital connectivity is high on the list of development concerns

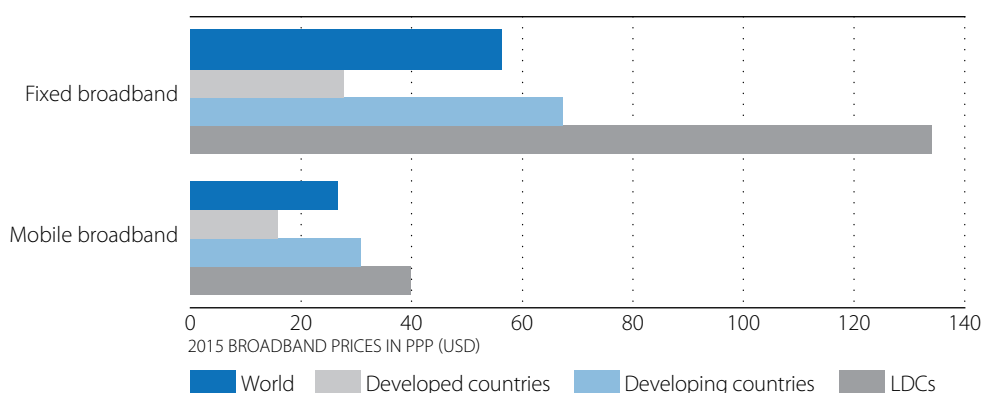
The 2016 World Bank *World Development Report* highlights a series of positive characteristics associated with digital innovations, including traceability, market access, food safety, improvements in logistics, quality control in agricultural supply chains, consumer protection, and improved livelihoods for farmers (World Bank, 2016a). Information and communications technology (ICT) is high on the list of national development concerns in developing countries. Also high on this list are infrastructure for road transport and telecommunications, emphasising the importance of both physical and digital connectivity for development.

The extent to which digital connectivity reduces poverty is contingent on the costs of getting the poor online. For persons whose daily income is USD 1.90 or less, it is unlikely that they will be able to meet the basic costs of digital connectivity, including the costs of mobile handsets, computer equipment, electricity and Internet connections. In 2010, the Ghana Census revealed that 47.8% of Ghanaians own a mobile phone. Going further, the same census revealed that while 63.4% of urban dwellers own phones, only 29.6% of rural dwellers do so. Globally, of the 800 million people lacking mobile internet access, 63% are in the bottom 40% of global income distribution (World Bank, 2016a).

In 2011, the Broadband Commission aimed for entry-level broadband to be made affordable in developing countries by 2015—at 5% of average monthly income—through adequate regulation and market forces. By the end of 2015, 83 developing countries had achieved the Broadband Commission’s affordability target. However, only 5 LDCs met the target, leaving a substantial amount of the world’s poor without access to affordable broadband Internet (ITU, 2016). Among the partner countries surveyed in the 2017 aid-for-trade monitoring exercise, 61.7% noted that the cost of broadband subscriptions constrains access to Internet for both enterprises and consumers in their countries, while 41.7% stated that access is constrained by the cost of mobile phone subscriptions.

In 2015 in Myanmar, one operator’s charges for an entry-level (500MB) mobile broadband package represented around 4% of the average monthly per capita income (USD 4), falling under the Broadband Commission’s 5% target. The Alliance for Affordable Internet (A4AI) notes that for the 26% of Myanmar’s population living under USD 1 per day, this price is still unaffordable, as it represents 13% of their monthly income. In other LDCs in the region, broadband costs were higher—9.82% of GNI per capita income in Bangladesh, and 7.92% in Nepal (*OECD-WTO aid-for-trade monitoring exercise 2017, Academia and NGOs case story 05*).

Figure 12.7 compares the prices of mobile broadband and fixed broadband across regions, taking into account purchasing power parity (PPP). In LDCs, fixed broadband services are on average more than three times as expensive as mobile broadband services. Not surprisingly, fixed broadband penetration is less than 1% in the LDCs compared to 8% in developing countries and 30% in developed countries. Similarly, mobile penetration rate in the LDCs is an estimated 19%, less than half the penetration rate in developing countries (41%) and less than one-quarter of the rate in developed countries, which is estimated to be 90% (ITU, 2016).

Figure 12.7. Fixed- and mobile-broadband prices in purchasing power parity, 2015

Source: ITU (2016), *ICT Facts and Figures 2016*.

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Lack of available, affordable Internet access can impede the poor's direct participation in trade as consumers and as sellers; it also limits their access to information, finance and trade-related capacity building. UNCTAD (2010) noted the importance of mobile technology in addressing information-related market failures among farmers, fisher folk, small manufacturers and service providers. At the same time, including the poor in international trade also requires affordable delivery and logistics services for both supply and demand. In many developing countries and LDCs, particularly in rural areas, addresses and postal services are complicated or unavailable altogether. In that context, the manner in which the digital and physical divides intertwine to hinder the socio-economic integration of the rural poor becomes evident.

For women, traditional constraints in connecting to trade opportunities may be alleviated through digital connectivity. Digital connectivity can reduce interactions and proximity in trade transactions, thereby generating positive outcomes for female traders. For instance, women often face substantial time constraints because of the uneven distribution of responsibilities in the household. A survey of women traders in Africa highlighted shortage of time as a major reason for cancelling trips to markets to sell their household goods, because of the priority placed on work in the home and bearing and caring for children (WB-WTO, 2015). Digital connectivity can reduce the time required to engage in trade, while also lessening the need for women traders to cross borders, lowering the potential risks of harassment and assault—a regular occurrence at many border crossings in Africa (Brenton et al., 2011).

In a similar context, the digitisation of finance—making it possible to conceal the identity of the payee and therefore to make and receive payments independently of men—has helped shift economic decision-making toward women (World Bank, 2016a). In this way, women's economic empowerment may not only be reliant on digital and physical connectivity, but on the inclusion of women in the digital payments economy. In a study by the Bill and Melinda Gates Foundation, it is noted that digital payments can “promote women's economic empowerment by facilitating greater account ownership and asset accumulation and increasing women's economic participation” (World Bank, 2014b).

One study found that, in Uganda, only 68% of urban women and 52% of rural women made decisions on the use of their cash earnings (Table 12.3). Distances to financial centres and unfamiliarity with financial systems are other reasons why digitization of payments can be supportive of women empowerment, as their participation in trade is linked not only to the availability but also to the accessibility of financial resources. In one case story, the Asian Development Bank found that despite the availability of loans, there was low demand for micro-financing from women entrepreneurs in Indonesia, describing cases where women had never been to banks, lacked confidence in borrowing money from banks, or were simply afraid of taking out loans (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 94). The ITC reports that as many as 90% of female-led enterprises in Latin America are in the informal sector, and noted that the low percentage of women who can access formal financial institutions for business purposes is striking—about 0.2% in El Salvador (Vergara, 2016).

Table 12.3. Who makes decisions on how a woman's cash earnings are used in Uganda?

| | | Mainly wife | Mainly husband | Husband and wife jointly | Other/information missing | Total | |
|------------------|--------------------------|-------------------------------------------|----------------|--------------------------|---------------------------|-------|-----|
| Residence | Urban | 68 | 4.2 | 27 | 0.9 | 100 | |
| | Rural | 52 | 15 | 32.7 | 0.3 | 100 | |
| Regions | Central 1 | 71 | 8.1 | 20.3 | 0.5 | 100 | |
| | Central 2 | 74.5 | 9.1 | 16.4 | 0 | 100 | |
| | Kampala | 79.2 | 1.9 | 18.2 | 0.7 | 100 | |
| | East Central | 56.9 | 20.3 | 22.9 | 0 | 100 | |
| | Eastern | 24.4 | 18.1 | 57.6 | 0 | 100 | |
| | North | 36.7 | 16.9 | 45.6 | 0.1 | 100 | |
| | West Nile | 72.4 | 4.9 | 22.4 | 0.3 | 100 | |
| | Western | 44.5 | 16.9 | 38.3 | 0.3 | 100 | |
| | Southwest | 39.4 | 15.8 | 43.2 | 1.6 | 100 | |
| | North Sub-Regions | Internally Displaced Persons (IDP) | 37.6 | 14.9 | 47 | 0.5 | 100 |
| | | Karamoja | 50.4 | 9.7 | 39.9 | 0 | 100 |

Source: Hisali, Eria, *Trade, employment and gender: The case of Uganda*, www.oecd.org/site/tadicite/48722379.pdf.

Financial access barriers, in addition to high business start-up costs and lengthy administrative procedures can pose impediments to the participation of women, and micro, small and medium-sized enterprises more generally, in the formal economy. The World Bank's *Doing Business* data 2016 shows that in sub-Saharan Africa, domestic business start-up costs are around 54% of income per capita and requires approximately one month to start; while in OECD high-income countries, the same start-up costs are around 3% of income per capita, and requires a little over one week to start (World Bank, 2016b).

As Internet adoption rates increase, a farmer working his or her own land may be able to take advantage of a price change to sell, or a hairdresser in a large city may spend some of his or her commute time performing simple data-entry services instead through a micro-work platform. However, the challenge is that traders like these—freelancers or individual entrepreneurs—may continue to operate in the informal sector. To date, there is no evidence that trade integration results in growth in the informal sector, but the extent to which this remains so as e-commerce grows will need to be studied further (WB-WTO, 2015).

Governments in developing countries will have to navigate the regulatory complexities of a growing number of individuals and small, potentially informal firms participating in trade. While the objective in all countries may be to support the growth of the formal sector, it is important that this be done gradually and takes into account the importance that trade in general (and increasingly, e-commerce specifically) may have as a source of income for the large number of people working in the informal sector.

An additional challenge for governments is that the lack of data available on e-commerce in general is compounded when many traders are operating informally. Without a more accurate picture of the participation of the informal sector in this type of trade, there is a risk that policies will be designed without an adequate evidence base, incurring a risk of negative impacts. However, as connectivity continues to improve, technology offers a method for gathering better data about the participation of traders operating in the informal sector; this includes through methods such as mobile phone surveys, or through partnerships with online retail platforms or mobile phone operators to gather data on users, while respecting privacy.

HOW IS CONNECTIVITY REDUCING POVERTY?

This section focuses on how efforts to improve physical and digital connectivity are reducing poverty. While tracing impacts on poverty reduction is complex, the report *The Role of Trade in Ending Poverty* describes several actions that can help to make trade more accessible for the poor (WB-WTO, 2015):

- lowering trade costs for deeper integration of markets
- improving the enabling environment and complimentary policies to maximise the gains of openness for the poor.
- intensifying the poverty impact of integration policies
- managing and mitigating risks faced by the poor
- improving data and analysis to inform policy.

The discussion in this section is articulated around these actions, and the analysis draws mainly from case stories submitted to the 2017 aid-for-trade monitoring and evaluation exercise.

Physical and digital connectivity are critical for market access

Streamlining customs processes has contributed to reducing trade costs and increasing revenues in developing countries. Enabling automation and reducing the friction in cross-border trade is essential to lower costs and connect producers to markets and value chains. This can be especially relevant for the typical MSME or individual trader participating in either online or offline trade. A case story submitted by Trademark East Africa describes how the establishment of a one-stop border post (OSBP) connecting Kenya and Uganda led to an increase in revenue collected of around USD 5.5 million, reduced the average time it takes to cross the border by 80%, boosted cross-border trade for small traders and improved the working conditions for staff and transporters. The Busia OSBP warehousing facilities, for instance, have lowered storage costs for small traders as they wait to clear taxes. Transport costs have also been reduced, allowing several small traders whose goods are being transported to a particular destination to consolidate goods and hire one truck driver. The border post also caters to the needs of the physically challenged, as well as women with children (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 71).

Another case story describes how the Uganda Revenue Authority, with support from TradeMark East Africa, rolled out an intervention to improve customs processes and increase the ease of doing business in Uganda, a move which has decreased customs clearance times, increased revenue collection, and improved savings for local traders. For example, improvements in the examination and inspection of goods, as well as the acceptance of pre-arrival import declarations, saves one company USD 150 per day on the 25 containers they receive each month, in addition to administrative savings. The company's savings are reinvested into the business and used to increase employee earnings (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 79).

A trade facilitation initiative along the Dakar-Bamako corridor has helped to reduce escort fees by 50% for truck drivers in Senegal. The reduction of transport and transaction costs resulting from trade facilitation measures also had spill-over effects for local communities, such as enhancing the competitiveness of the local private sector and reducing consumer prices. This initiative has also lessened the stressfulness of working conditions for truck drivers, who suffered from the scarcity of border posts (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 65).

Among the partner countries surveyed, 95% identified the development of services infrastructure and related services markets as key for achieving the SDGs. The A4AI emphasises the importance of public access to connect the unconnected; its 2017 Affordability Report identifies projects that are being rolled out to promote universal Internet access in developing countries. In Dar es Salaam, Tanzania, for example, Wi-Fi services will be installed in public spaces and recreational venues. In the Philippines, there are plans to make free Wi-Fi available in public areas throughout the country, including schools, hospitals, airports and parks. In India, the government intends to provide free public Wi-Fi hotspots to over 1 050 villages across the country as part of its Digital Village programme (A4AI, 2017).

Efforts to improve Internet connectivity are strongly contingent on infrastructure development. In Tonga, the Asian Development Bank estimates that 22.5% of the population lives below the national poverty line (AsDB, 2016). A case story presented by the Asian Development Bank describes how an undersea fibre-optic cable has facilitated high-speed Internet connectivity in Tonga (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 97). The cable brings a wide range of benefits to Tongans: international connectivity costs have been reduced by 60%; education and health resources have been improved; international trade opportunities, particularly in tourism and business outsourcing, have increased; and other services (e.g. bill payment, remittances and communication services) have been facilitated at affordable rates.

Internet connectivity is also enabling artisans and entrepreneurs to overcome some of the traditional barriers that impede their access to markets, such as information asymmetries and high business-related and travel costs. In Africa, Jumia Market described how they leveraged the power of the digital economy to help tens of thousands of small traders in Cameroon, some of whom have never used a computer, to gain access to consumers and merchants via their online platform (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 74). The increase in income for small traders resulting from online demand has trickled down to their households, enabled them to save, and has driven their productivity and ambition. Another case story presented by Alibaba described how the Rural Taobao platform has helped rural mountain villagers to earn income by selling products from their remotely located region online (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 21).

Digital connectivity can promote the inclusion of farmers in trade despite their distance from markets and urban centres. A case story submitted by TradeMark East Africa describes how in Kenya, gaining a certificate of origin required travel—which meant additional trade costs, thus decreasing agricultural gains. A new automated system run by the Kenya National Chamber of Commerce and Industry issues certificates of origin online. Prior to automation, agricultural exporters had to undergo a manual process, which had to be completed either in the country's capital, Nairobi, or in the port city, Mombasa. The new automated system is said to have reduced the time needed for application for and issuance of certificates by up to 86%, lowering direct trade costs by up to 75%. The online system is linked to commercial banks for automated payment services, and also includes options for mobile payment services (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 73).

Connectivity contributes to women's economic empowerment

Case stories have also provided evidence of the importance of mobile connectivity for the rural poor. The Asian Development Bank found that countries in Central Asia are leapfrogging to "mobile first connectivity", noting that "rollout and connectivity policies and programmes do need to recognise that mobile is the agent of change and most people coming online now are doing so via a mobile device" (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 108). According to World Bank estimates, while just 2% of adults worldwide have mobile money accounts, 12% of people in sub-Saharan Africa have one. For the poor, often unbanked and constrained by distances to bank agencies and cash machines, the promotion of financial inclusion via mobile money services is already well documented. One study, for example, found that within eight years, M-PESA had lifted 194 000 households out of poverty, helping people develop greater financial resilience and savings, especially among female-headed households (Suri et al, 2016).

Lifting women out of poverty is linked to making available financial services easily accessible to women. The Better than Cash Alliance notes that digital financial services have the potential to be a powerful tool for financial inclusion and can address the needs of women in new and different ways from traditionally provided financial services (Better than Cash Alliance, 2015). For instance, women's limited control over financial resources is among the restraints that may be alleviated through mobile money transfers. Evidence from a cash transfer programme in Niger has shown how the greater control allowed by mobile money transfers and the privacy these afford can shift intra-household decision-making in favour of women (Porter et al, 2015).

Telenor provided examples of how mobile money initiatives are reducing poverty and gender disparities in rural Pakistan, where education stipends transferred to rural families via mobile transfers help pay for schooling for young girls. Before mobile money technology, the cost of disbursing stipends, at times, exceeded the value of the stipend itself. Pakistan has also been reaching the poor through the use of digitally enabled government-to-citizen (G2C) services. Box 12.4 below describes a universal access programme in Pakistan that has yielded results in both the rural and urban parts of the country (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 33).

Box 12.4. Pakistan's digital economy

Pakistan has the lowest broadband cost-as-a-percentage-of-income for people living in poverty, and the country ranks eighth out of 30 developing countries in terms of affordability of mobile broadband.

The Universal Service Fund is one of Pakistan's public sector programmes, whose main objective is to increase the level of telecom penetration in rural areas by: encouraging telecom operators to focus on Pakistan's rural and un-served populations; improve broadband penetration in the country; and significantly boost e-services in both rural and urban parts of the country. The results in 2016 included:

- contracts signed for 486 896 broadband subscribers
- more than 700 000 broadband subscribers reached
- 1 328 educational broadband centres established
- 369 community broadband centres established

Source: UN Steering Committee on Tourism for Development, "Tourism and Poverty Reduction Strategies in the Integrated Framework for Least Developed Countries" cited in UNDP (2011).

The Internet is also playing an important role in connecting women to markets. A case story submitted by SPINNA, an organisation offering training, mentoring, and business opportunities for women designers, artisans and entrepreneurs, describes how technology has been an enabler for the inclusion of women artisans in international textile supply chains. It has leapfrogged traditional connectivity methods, helping to reduce even practical communication and language barriers (*OECD-WTO aid-for-trade monitoring exercise 2017*, Academia and NGOs case story 82). Another case story submitted by the ITC describes the SheTrades initiative, which aims to connect one million women entrepreneurs to markets by 2020. Already, 4 600 women businesses have registered on their mobile app platform (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 127).

Greater use of online platforms for trade could support the increased participation of women in trade by reducing gender bias in relationships between buyers and sellers through anonymity, and by allowing for more flexible working hours. On Elance, a freelancing platform that is part of Upwork, 44% of workers are women, compared with 27% in the non-agriculture economy more widely (World Bank, 2016a). This contrasts with the situation in traditional trade, where the fact that business networks are male-dominated can result in women traders receiving less returns for their goods and services than male traders. Analysis of male- and female-owned firms suggests that male-owned firms are more likely to find customers through traditional networks of contacts, while women-owned firms tend to secure customers through other channels (Bossuroy et al, 2012).

The UNDP, in its response to the 2017 OECD-WTO donor questionnaire, stated, "The digital economy facilitates forms of economic participation that allow women to better reconcile household demands on their time with gainful economic activities." Similarly, all 63 partner country respondents noted that e-commerce can contribute to women's economic empowerment. Some of the additional information provided by respondents is presented in Box 12.5.

Box 12.5. Can growth in e-commerce make a contribution to women's economic empowerment?

Cameroon E-commerce can become an instrument of trade development that can be used by women to lift themselves out of poverty and become economically self-sufficient. (original in French)

El Salvador 'Female entrepreneurship' in the region forms part of the efforts being made to empower women economically. One obvious obstacle to doing business is the disadvantage faced by women compared to men of looking after the family and bearing greater responsibility to care for relatives. Women are therefore less mobile and have fewer opportunities to travel. Technology is clearly a strategy that enables them to do business and mobilise resources without having to leave the home. This is evidenced by the fact that women make greater use of social networks for business purposes. (original in Spanish)

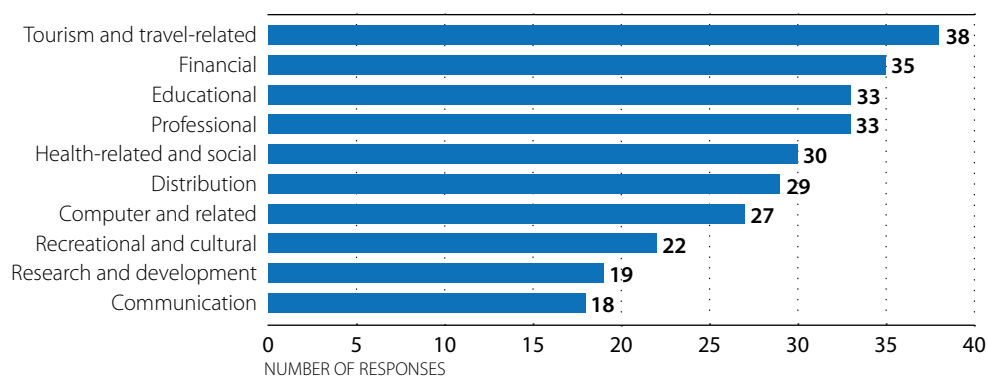
Uganda E-commerce will enable women, especially in rural areas, to conduct businesses and transactions online, for instance mobile money transactions.

Yemen E-commerce will enable women to work and conduct business from their homes. This method of work would enable them to overcome the restrictions imposed by tradition and religion, including interaction with the different sex. E-commerce would empower women by making them economically better and more independent.

Source: OECD-WTO aid-for-trade monitoring exercise (2017), www.oecd.org/aidfortrade/countryprofiles/.

In addition to e-commerce, respondents note that the development of capacity for trade in services is important for women's economic empowerment. Tourism, in particular, has a positive impact on women's lives through the promotion of private sector development and the creation of job and income opportunities. With support from New Zealand, the Enhanced Integrated Framework (EIF) has launched a tourism development project to upgrade tourism infrastructure on Vanuatu's seafront and increase resilience to natural disasters and climate change. An estimated 11 000 women working in the handicrafts sector, for example, will earn incomes from this project (EIF, 2016). Figure 12.8 shows the service sectors that partner country respondents identified as contributing most to women's economic empowerment, the most important being tourism and travel-related services.

Figure 12.8. Top ten service sectors expected to contribute to women's economic empowerment



Source: OECD-WTO aid-for-trade monitoring exercise (2017) www.oecd.org/aidfortrade/countryprofiles/.

StatLink  <http://dx.doi.org/10.1787/888933527621>

One concern related to the responses in Figure 12.8 above is that less than 50% of respondents consider computer and related services to be supportive of women's economic empowerment. Case stories corroborate this finding by affirming that there is a gender gap in the use of and participation by women in computer and related services, mainly the Internet. The *A4AI 2015 Affordability Report* noted that while in general, the affordability picture appears stark for those living in poverty, the cost for women to connect remains even higher (*OECD-WTO aid-for-trade monitoring exercise 2017*, Academia and NGOs case story 02). Although e-commerce offers a number of ways of reducing the constraints to maximise trade opportunities, inequality in access to technology must be overcome. In Africa, women are still less likely than men to own a mobile phone, and 18% of men report using the Internet compared to 12% of women (World Bank, 2016a).

The foundations of an inclusive digital economy rest on affordable modern telecommunications infrastructure and an educated population that can engage in and contribute to the information society. Initiatives such as Intel's She Will Connect Africa provide insights into how digital education programmes have helped to expand women's technical knowledge, in order for them to take full advantage of Internet usage (*OECD-WTO aid-for-trade monitoring exercise 2017*, Private sector case story 18). The ITU also co-led a Women's Digital Literacy Campaign with the Philippines-based NGO Telecentre, training unskilled women in over 80 countries to use computers and ICT applications to improve their livelihoods and access opportunities for education, employment and income (ITU, 2017).

Connectivity can help to manage risks

Another area where connectivity can have positive impacts is in fragile or disaster-affected environments. World Bank research highlights the important environmental impact on poverty, suggesting that extreme weather alone pushes around 26 million people back into poverty each year. In developing countries, the economic cost of disasters since 1980 amounts to USD 1.2 trillion, equivalent to about one-third of all official development aid (Narimatsu-World Bank, 2013). The Inter-Governmental Panel on Climate Change (IPCC, 2001) notes that climate change will intensify poverty, with developing nations most affected because of their geographical and climatic conditions, their high dependence on natural resources, and their limited capacity to adapt to a changing climate: "Within these countries, the poorest, who have the least resources and the least capacity to adapt, are the most vulnerable" (Abeygunawardena et al, 2009).

The welfare of the poor is not only affected by catastrophic earthquakes or tsunamis, but also by frequent or sudden weather variations resulting in flooding and drought. The impact of these events on food security, water scarcity and living conditions can be catastrophic. The 2015 earthquake in Nepal and the 2015 cyclone in Vanuatu have caused major setbacks to the tourism sector in these countries. Health crises can also pose a major setback to sustainable development and poverty reduction. The EIF notes, for example, that an ecotourism project in Sierra Leone was placed on hold due to the outbreak of Ebola, a health crisis that also undermined the development of tourism services in Liberia and Guinea.

In a case story submitted by Japan, the respondent noted the importance of ICT for disaster awareness and management (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 75). Japan has already assisted the Philippines in better predicting tsunamis with satellite technologies and seismographs. After the 2010 earthquake in Haiti, mobile money allowed humanitarian donors to contribute to the recovery of populations in one of the least banked countries in the world, leading to the development of a mobile ecosystem; by 2012, 85% of Haitian households had access to mobile phones (GSMA, 2012).

Mobile connectivity is also assisting in managing and mitigating risks faced by the poor, and in improving data and analysis to inform policy. The World Bank's Listening to Africa initiative, for example, partners with national statistical offices and NGOs across Africa to gather data on the challenges faced by the poor. Trade professionals interview respondents over the telephone; where necessary, respondents are provided with mobile phones, solar chargers and credit. The survey has already presented timely results on the frequency of power cuts in Togo as well as on food insecurity in Madagascar (Ndip, 2016).

WHAT HAVE WE LEARNT FROM THE 2017 AID-FOR-TRADE PROGRAMMES?

Several highlights emerge from the 2017 aid-for-trade monitoring and evaluation exercise:

- **Aid-for-trade programmes or projects in both the public and private sectors are inclusive.**

There is targeted public and private assistance for women and the rural poor, including those in the agricultural sector. Questionnaire results also evidence a strong connection between the development of services sectors and women's economic empowerment. Going forward, there is focus on collaborative approaches, including private sector engagement, for development and the achievement of the SDGs, notably poverty eradication.

- **Both physical and digital connectivity are priorities in developing countries.**

In developing countries, transport and communications infrastructure are top development priorities. Partner countries identified the development of infrastructure as key to the achievement of the SDGs, and case stories showed how improvements in physical infrastructure and facilities at borders have promoted trade, increased revenues and improved working conditions. Partner countries place less emphasis on the development of e-commerce as a stand-alone priority, but acknowledge the positive impact it can have on women's economic empowerment and poverty reduction.

- **Aid-for-trade programmes are focusing on reducing trade costs.**

Trade costs associated with physical infrastructure, logistics, transport, and Internet connectivity are critical to the integration of the poor in international trade, and are being addressed in aid-for-trade programmes. The case stories highlight how literacy and regulatory barriers as well as difficulties in meeting customs requirements are also being alleviated through aid-for-trade programmes.

- **Digital technologies are helping people to earn incomes through trade, financial inclusion and capacity building.**

Access to the Internet and mobile technology is increasing the capacity of entrepreneurs to target consumers and market their products and services. Connectivity is enabling the poor to access information and networks, and reducing distances to consumers. Mobile technology, in particular, is promoting financial inclusion and increasing the participation of women and entrepreneurs in trade.

- **Internet connectivity represents a trade cost that is affecting the poor in many aspects of their lives.**

This year's M&E results illustrate that barriers to Internet access and affordability limit the participation of the poor as both consumers and suppliers. The Pacific regional initiative described earlier demonstrates the impact of broadband in improving connectivity and promoting social and economic development. Access to the Internet also allows services to be traded cross-border, hence providing opportunities for economic diversification and socio-economic advancement.

Regional initiatives to promote connectivity

The A4AI's 2017 *Affordability Report* explains that slow progress in Internet connectivity is placing the poor at the back of the connectivity queue. Less than half the countries surveyed for the A4AI 2017 *Affordability Report* had developed plans to reduce connectivity costs by facilitating the sharing of infrastructure resources (towers or fibre networks) among telecommunications companies (A4AI, 2017).

The AsDB has recognised the need for investment in regional infrastructure to make the Internet available to all. The Regional Public Goods Initiative of the IADB is also based on the premise that the countries of Latin America and the Caribbean can address shared challenges more effectively and efficiently through regional collective action and co-operation. IADB-funded initiatives include a regional integrated satellite information system and a technology hub for regional competitiveness (IADB, 2017).

On the African continent, the importance of high-speed Internet connectivity has been highlighted by the AfDB, noting that “the absence of regional connectivity between states with access to the submarine cable and landlocked countries, and more generally the scarcity of cross-border backhaul links, is one of the key broadband access gaps in Africa.” The Connect Africa Initiative has mobilised funding for several regional fibre projects, with co-ordination support from the World Bank, to resolve connectivity barriers so that high-speed Internet can be made available to the African population (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 16).

In addition, the AfDB highlighted the importance of national “backbones” in facilitating the widespread use of advanced communication, such as the need for policy and regulatory interventions to abolish exclusivity in market entry, reduce license fees and simplify licensing procedures. AfDB also considers the promotion of open, transparent and non-discriminatory access to national networks a necessary foundation for improved regional broadband networks in Africa (*OECD-WTO aid-for-trade monitoring exercise 2017*, Public sector case story 16).

Aid for trade contributes to the SDGs in numerous areas

Questionnaire responses demonstrate the importance partner countries attribute to aid-for-trade programmes and their contribution to the achievement of the Sustainable Development Goals (Box 12.6). Responses also highlighted how collaborative approaches can complement aid-for-trade efforts for poverty eradication and the achievement of the SDGs. Partner countries, for instance, have indicated their willingness to work with various stakeholders to achieve development objectives.

Box 12.6. How can aid for trade help implement the Sustainable Development Goals?

Niger Aid for trade can contribute to poverty reduction, to the insertion of youth and to the promotion of women entrepreneurship. (original in French)

Democratic Republic of the Congo The availability of trade-related infrastructure creates effects that contribute to the achievement of the SDGs. More aid for trade contributes to increasing trade, which is the basis for increasing economic growth and, in turn, economic growth is the underpinning factor of economic development favouring the reduction of poverty incidence and undernourishment. (original in French)

Burundi If aid for trade increases, it will significantly reduce the level of poverty. (original in French)

Zambia Aid-for-trade programmes help to unlock existing barriers to trade. Trade as an enabler of Industrial development facilitates the achievement of SDGs.

Colombia Aid for trade contributes to the achievement of the SDGs, through the development of quality, sustainable and reliable infrastructure, including regional and cross-border infrastructure to support economic development and human wellbeing with a focus on affordable and equitable access for all. (original in Spanish)

Indonesia Aid for trade supports enhancing procedure capacity and empowers women through entrepreneurship. Aid for trade is also able to stimulate development partners to take part through triangular mechanism.

Source: *OECD-WTO aid-for-trade monitoring exercise (2017)* www.oecd.org/aidfortrade/countryprofiles/.

Donors have also highlighted the importance of multi-stakeholder engagement. Canada stated, for example, “In the 2030 Agenda context, all partners must pull together to eradicate poverty, build peace and achieve sustainable development.” The ITC works with the private sector to “provide markets for products and services from SMEs; for in-kind and financial partnership in implementation of trade-related projects on the ground; and for supporting public/private dialogue on trade policy and regulatory issues such as trade facilitation, non-tariff measures and e-solutions.”

Sweden, in its response, stated, “Partnerships with the private sector can help pool sustainable investments in sectors where aid for trade supports policy reforms. However, some key principles must be adhered to. Poverty focus must be at the core (not partnering for the sake of partnering), as must untied aid. Other key criteria include high sustainability standards, ensuring additionality and avoiding market distortion.”

What we have learnt from the results of this year’s aid-for-trade monitoring exercise is that efforts to improve connectivity are having positive impacts on the wellbeing of the poor in the areas of education (SDG 4), gender equality (SDG 5), industry, innovation and infrastructure (SDG 9), and decent work and economic growth (SDG 8). The extent to which connectivity can contribute directly to eradicating poverty (SDG 1) is, with some exceptions such as mobile money, more complex and difficult to ascertain. This is perhaps due to the multitude of other variable factors that can affect poverty alleviation efforts, including regulatory frameworks, inequalities and gender discrimination.

Notwithstanding these complexities, the results of the 2017 aid-for-trade monitoring exercise demonstrate that there is a relationship between income level, infrastructure, access to the online world and the achievement of the SDGs. This underlines the importance of efforts to increase participation and lower the costs of Internet access through a mix of financing and regulation that attracts public and private resources in telecommunications infrastructure. At the same time, digital connectivity does not make distances disappear, and physical remoteness poses a significant constraint to the poor’s participation in the digital economy. Hence, strategies to pursue affordable and reliable physical and digital connectivity, working in tandem, could maximise the impact of poverty eradication efforts, especially for communities in remote, rural areas.

CONCLUSIONS

Poor connectivity is one of the factors keeping people in poverty. To reduce poverty, the costs of digital and physical connectivity need to be addressed in order to enable the poor to participate in the physical and digital economy.

The first section of this chapter mapped the relationship between connectivity and poverty, demonstrating that regions with higher poverty rates have low physical and digital connectivity. Within and across countries, the costs of doing business tend to increase with distance, thus making physical connectivity a strong determinant of the poor’s ability to access basic goods and services, earn an income or integrate into supply chains. A similar association is evident between digital connectivity and poverty—the lower the per capita income, the lower the Internet usage rate. Broadband is also less affordable in least-developed countries, where the majority of the world’s poor are concentrated. For women and rural populations, limited digital and physical connectivity together with socio-cultural and other regulatory factors can intensify the burden of poverty.

Efforts to improve physical and digital connectivity are lowering trade costs and reducing poverty. The second section of this chapter provided evidence from 2017 aid-for-trade case stories, which demonstrated that digital approaches to trade facilitation can reduce bottlenecks at borders, increase revenue, and facilitate the participation of small traders and women in cross-border trade. Internet access is also alleviating distance barriers, information asymmetries, and non-tariff barriers, helping smallholder farmers, women, and entrepreneurs earn income by selling online. Mobile money has promoted financial inclusion, lifted people out of poverty and increased women’s economic empowerment, helping them overcome some of the constraints of traditional financial barriers.

The third section highlighted some of the key points emanating from the 2017 aid-for-trade monitoring exercise in the context of inclusiveness and poverty reduction. Evidence of trade outputs and outcomes from aid-for-trade projects and programmes is now being complemented by the results of efforts to trace poverty reduction impacts at various stages using targeted indicators. Both the public and private sectors are actively engaged in programmes to connect the poor and help them earn/increase incomes. The case stories submitted emphasise the inclusiveness of connectivity programmes, which target the development of the poor, smallholder farmers and women. Based on the responses to the 2017 aid-for-trade monitoring exercise, both developing countries and donors believe that aid-for-trade support can contribute to eradicating poverty, and have expressed interest in collaborating with various stakeholders, including the private sector, to work towards the achievement of the 2030 SDGs.

As connectivity is multidimensional and is progressing rapidly, there is a need for further research and improved data metrics to understand the challenges facing the poor so as to make sure they are not left behind. With the rapid spread and use of digital technologies in particular, one challenge for developing countries and the LDCs is to make affordable, high-speed Internet connections available to those who are still offline. To that end, mechanisms to improve regulatory environments and mobilise funding for shared infrastructure resources could merit further research and discussion. ■

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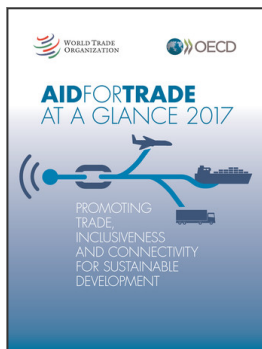
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NOTES

1. The International Development Association is the part of the World Bank that helps the world's poorest countries; 77 countries are eligible for IDA assistance, including 39 in Africa: <http://ida.worldbank.org>.



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