

CHAPTER 3: VALUE CHAINS AND THE DEVELOPMENT PATH

This chapter addresses how value chains offer a path to economic development. Based on the findings from the 2013 OECD/WTO survey, it assesses the resonance that value chains have in the aid-for-trade priorities and strategies of partner countries, bilateral and multilateral donors, and providers of South-South trade-related co-operation. The analysis in this chapter of the agri-food, ICT, textiles and apparel, tourism, and transport and logistics value chains highlights that developing country suppliers are integral to these value chains – and that developing countries use their participation to achieve growth, employment and poverty reduction objectives. The responses to the OECD-WTO questionnaire highlight that there is much scope to improve these countries' participation. Many developing countries pay a competitiveness penalty due to inefficient border procedures, high tariffs and non-tariff barriers that unnecessarily constrain trade in goods or services; restrictions on the flow of information; impediments to foreign direct investment (FDI); and restrictions on the movement of people. The challenge for developing countries is to design and implement broad strategies that tackle these key barriers to integration and upgrading in value chains.

INTRODUCTION

During the last three decades, the integration of the world market has proceeded apace. Multilateral, regional and unilateral trade liberalisation has greatly increased market access and together with sharply falling transportation and communication costs, this has facilitated the emergence of value chains. Production that once was primarily located close to sources of major suppliers of inputs (or near consumers in final markets) is now increasingly carried out wherever the necessary skills and materials are available at competitive cost and quality. This fragmentation of production has created new opportunities for developing countries to enter global markets as components or services suppliers, without having to build the entire value chain. By providing access to networks, global markets, capital, knowledge and technology, integration in an existing value chain can provide a first step to economic development – a path that is often easier to travel than building a complete value chain (OECD, 2013a: 10).

The emergence of value chains has major policy implications for economic growth in developing countries. For many industries, the global spread of integrated production segments across countries has lowered the costs of production of associated final goods, and increased the productivity of associated labour and capital. As Baldwin (2011) points out, this has two consequences for developing countries. Firstly, it has created an avenue through which countries can industrialise at a much earlier stage of development as producing firms choose to off-shore fragments of the production value chain to countries where labour is cheaper, or where other locational advantages confer a competitive cost advantage on the whole value chain. Such participation in value chains grants considerable benefits. It may allow

suppliers to meet standards and regulations that permit them to access rich country markets; it may allow imports under privileged tariff treatment for intra-firm trade; it may permit the utilisation of network technology that would not otherwise be available; and finally, it may open up new sources of capital. However, the second consequence of a world in which production can be allocated to locations with the lowest cost is that countries trying to industrialise through import substitution policies, such as those prevalent in the pre-1990 period, are unlikely ever to reduce their costs to the point of being competitive on global markets. Stated differently, value chains raise the penalties for countries that seek to expand their exports through using their policy space to build competing domestic production networks; high border and regulatory barriers will only result in high-cost local production and poor connectivity to the global market.

In short, value chains appear to create opportunities for faster economic growth, but they also raise the penalties for maintaining inefficient border procedures, high tariffs, non-tariff barriers that unnecessarily constrain goods or services trade, restrictions on the flow of information, impediments to FDI, and restrictions on the movement of people. Participants in value chains share a political interest in reducing policy-induced delays and inefficiencies in the value chain – and in that sense can be powerful allies for reducing trading costs.

This chapter addresses how value chains offer a path to economic development. Based on the responses to the 2013 OECD/WTO survey, it assesses the resonance that value chains have in the aid-for-trade priorities and strategies of partner countries, bilateral and multilateral donors, and providers of South-South trade-related co-operation. As highlighted in the introductory chapter, one of the innovations of the 2013 OECD/WTO monitoring exercise was to solicit the views of the private sector on constraints that limit the opportunities of suppliers in developing countries to connect to value chains. Special attention has been paid to the specific constraints in value chains that are most important to developing country suppliers, *i.e.* agri-food, information and communications technology (ICT), textiles and apparel, tourism, and transport and logistics. This chapter suggests ways to engage the private sector more closely in the design, delivery and evaluation of aid-for-trade programmes.

VALUE CHAINS AS A PATH TOWARDS DEVELOPMENT

Motivated by the success of emerging economies within value chains, increasing numbers of developing countries are also aiming to become more integrated into international production networks.¹ Value chains as a new form of globalisation allow these countries to integrate more rapidly into the global economy. But despite their large advantages in terms of for example low absolute labour costs, developing countries are disadvantaged in other respects, such as high trade costs resulting from a broad range of factors including tariff- and non-tariff barriers, logistics and transportation costs, but also from geographical distances and cultural differences. As shown by a new global dataset of bilateral trade costs, developing economies face higher trade costs and larger connectivity constraints, which directly raise the costs of offshoring to these countries.²

According to a recent study, reducing supply chain barriers, which are especially detrimental to small and medium-sized enterprises (SMEs), could increase world GDP six times more than the increase that would result from eliminating all tariffs (WEF, *et al.*, 2013). The same study reveals that if every country improved its border administration, as well as its transport and communication infrastructure, even halfway towards world best practices, global GDP could increase by 4.7 percent and exports by 14.5 percent. Consequently, the authors argue that, given the significance of supply chain barriers, the international community should urgently address these barriers. The Inter-American Development Bank (IDB, 2013) concurs with this assessment. It also highlights the vital role transportation networks and efficient logistics play in reducing trade costs and improving competitiveness.

A common theme with respect to these constraints is speed: every day of delay in the movement of goods in the value chain diminishes competitiveness and raises prices for the final consumer. This means importing has to be as efficient as exporting, and services have to be competitive. Poor “connectivity” can occur either because natural barriers impede ready access to global markets (e.g. in a country that is landlocked, because poor infrastructure makes transportation costly, because institutions function poorly, or because policies have imposed barriers such as trade restrictions). Improvement in trade facilitation and logistics was a key factor behind the success of global value chains (GVCs) in East Asia and the emergence of “Factory Asia” (WTO/IDE-JETRO, 2011). Co-ordinating delivery times and multiple inputs into production at a given stage mean that a wide variety of both public and private services are critical to linking the production process over different countries (OECD, 2013a).

Trade costs play a larger role in vertical trade within value chains compared to regular trade, as vertical specialisation leads to goods crossing national borders more times before reaching the final consumer (Yi, 2003; Ma and Van Assche, 2010). Tariffs, for example, can add up to a significant level by the time the finished good reaches customers, stifling demand and affecting production and investment at all stages of the value chain. Protection against imports of intermediate goods and services increases the cost of production and reduce a country’s ability to compete in export markets: tariff and other barriers on imports are in effect a tax on exports. Policies that restrict access to foreign intermediate goods and services also have a detrimental impact on a country’s position in regional and global supply chains.

Integration into value chains depends to a large extent on the ease and costs of international flows of goods, services, capital, knowledge and people, etc. Effective policies at the border, as well as behind-the-border, are necessary to increase engagement in value chains. The reduction of trade barriers has strongly favoured the shift from import substitution to export promotion policies and has, for example, greatly promoted the economic integration of East Asia (Hummels, *et al.*, 2001). Trade barriers depend on the level of tariffs and the existence of non-tariff barriers; the efficiency of border processes and customs practices are also an important determinant of the costs and time to export and import. Furthermore, domestic regulations and trade-related bureaucracy are significant cost factors for companies that have to operate in a competitive and timely manner within value chains (WTO/IDE/JETRO, 2011).

Foreign direct investment is an important driver of export capacity. The cumulative effect of a number of seemingly small costs may discourage firms from investing, or from maintaining investment, in the country – and may lead them to relocate production facilities, technologies and jobs elsewhere. Just like trade barriers, lower investment barriers facilitate the integration of countries into international production networks as they attract investments by lead firms. In addition to specific investment rules or restrictions, barriers to investment cover a broad range of policy areas that determine how attractive countries are for international investment: investment policy, trade policy, competition policy, tax policy, human resources, infrastructure, corporate governance, responsible business conduct, public governance, promotion and facilitation (OECD, 2013a: 159).

Quality of infrastructure is increasingly considered a determinant for the success of countries in international production networks. High-quality transportation is an important factor influencing countries’ integration into value chains. Gateway ports, hubs, and their inland transport connections are crucial for the international transfer of goods, services and people. Maritime transport has greatly benefitted from containerisation: standardisation, automation and inter-modality of freight have resulted in faster movement of intermediate and final goods within value chains. Air transport has become important, especially for the (international) transfer of high-value and low-volume products as well as for time-sensitive goods due to just-in-time production and other lean production processes within value chains (OECD, 2013a: 160).

Speed and flexibility are crucial not only for the exchange of physical goods/services, but especially for information flows across countries within value chains. Adherence to international standards has become more important for the production of increasingly modular physical goods, as well as for the exchange of information across borders. Value chains crucially depend on seamless and uninterrupted information flows across companies and countries; ICT networks channel business information and data needed for the efficient co-ordination of activities across locations. A well-developed ICT infrastructure is therefore necessary to connect countries to the value chain activities of companies (OECD, 2013a: 161). Overall, reductions in effective transportation and communication costs can be seen as equivalent to trade liberalisation in reducing the costs of exchange and enhancing trade between countries (Globerman, 2011).

In addition to investments in “hard” transportation and communication infrastructure, the development of a “soft” infrastructure (*i.e.* facilitating policies, procedures and institutions) is at least as important for the integration of countries into value chains. Recent research has pointed to the quality of the institutional framework as a source of comparative advantage (Grossman and Helpman, 2005). Since value chains involve a large number of activities contracted between different companies, *i.e.* lead firms and independent suppliers, contract enforceability is crucial for the smooth functioning of value chains. Countries with better legal systems are indeed found to export more in more complex industries (Levchenko, 2007; Costinot, 2009). Moreover, tasks that require more complex contracts (*e.g.* R&D, design, branding) are more cheaply conducted in countries that have well-functioning contractual institutions (Acemoglu, *et al.*, 2007). Countries characterised by bad governance and political instability have failed to attract foreign investors to export processing zones despite the fact that these dedicated zones promised to shelter investors from local rules (Cadot, *et al.*, 2011).

Competitiveness in value chains is critically dependent upon efficient services inputs. Embedded services largely represent the “glue” between countries’ infrastructure and companies’ activities within the trade-investment-services nexus of value chains. Investments in logistics services (*i.e.* services and processes for moving goods from one country to another) are found to be strongly trade enhancing; examples are the organisation and management of international shipment operations, tracking and tracing, and the quality of transport and information technology infrastructures. High-quality logistics impact trade relatively more than less policy-dependent trade determinants such as distance and transport costs. A recent OECD study indicates that every extra day needed to ready goods for export and import reduces trade by around 4 percent (Korinek and Sourdin, 2011).

Last but not least, the supply capacity of domestic firms (often SMEs) is key to connect them better to value chains. Lead firms are attracted to “deep” markets in their search for independent suppliers in foreign markets: if the market is large, companies will have a better chance to find the appropriate match and in the case the supplier fails to deliver, alternative solutions are available (WTO, 2008).

Capturing the gains

Connecting to value chains is a first step towards economic development, but the principal objective of partner countries remains to capture more of the value-added in each chain. Indeed, the link between participation in value chains and development still is questioned (Ismail, 2013) and while participation in value chains can bring benefits, it also presents risks.

Maximising the benefits

Not all value chains increase the transfers of skill and technology from lead firms to local suppliers in developing countries. Staritz, *et al.* (2011) analysed the role of value chains in socio-economic upgrading and observed that the literature often focused on the economic rather than social dimensions of upgrading (*i.e.* improved working

conditions, higher-skilled and better paid jobs). Although the economic and social dimensions of upgrading are often intertwined, one does not necessarily lead to the other. Winkler (2013) analysed more systematically the spill-over effects of foreign investment in value chains, using survey data on direct supplier-lead firm linkages in Chile, Ghana, Kenya, Lesotho, Mozambique, Swaziland and Viet Nam. Based on a literature review, the author suggests that the spill-over effects depend on the foreign investor characteristics (*e.g.* degree and structure of foreign ownership, length of foreign presence, technology intensity, the foreign investor's home country, sourcing strategy and motivations behind FDI), the recipient country's absorptive capacity (*e.g.* technology gap, R&D, skill level, firm size, exporting and location), and transmission channels (*e.g.* demand effect, assistance effect, diffusion effect, availability and quality effects). Accordingly, investment promotion alone is not sufficient to benefit from FDI spill-overs. Instead, the author emphasises the importance of embedding foreign investors in the local economy to increase the amount and quality of linkages, and therefore the potential for FDI spill-overs in the long-term.

To enable developing countries to capture more of the value-added along the production chain, it is necessary to strengthen backward linkages to the local economy. Poorly designed policies could, however, create new barriers to interconnectivity, undermine a country's participation in value chains, and leave it open to challenges under WTO rules (notably those relating to the Agreement on Trade-related Investment Measures - TRIMs). This is the case, for example, with national content rules that aim at capturing more of the value-added by reserving some activities to national firms or establishing a preference for domestic rather than imported inputs. In general, such rules negatively affect the competitiveness of local firms and the attractiveness of the country for foreign investors. Others, however, argue that such policies are essential to promote backward linkages and argue that TRIMs rules are at best an oversight and at worst "organised hypocrisy" (Adhikari, 2008). Therefore, it is essential for governments to identify those policies that are compatible with value chain participation, such as schemes to reward local sourcing, or policies to build local capacities that respond to the needs of lead firms.

Aid-for-trade programmes, such as support for upgrading the supply capacities of local SMEs or helping them to meet international standards, are already helping developing countries to achieve these objectives.³ Moreover, lead firms are providing support to local suppliers with potentially important spill-over effects. For example, employees who are trained by lead firms could diversify their sales, *e.g.* by supplying other intermediate products, lead firm buyers in different markets and other lead firms in the same value chain; or the acquisition of new technologies could help to create a local production cluster. These public and private transfers and their spill-over effects contribute to enhancing local supply-side capacities and to capturing more of the gains of value chain participation.

Minimising the risks

Global value chains have contributed to increasing developing countries' exposure to external economic shocks through higher trade elasticity (Escaith, *et al.*, 2010). For example, the difficulties of the automotive industry in the United States were immediately transmitted through the value chain, affecting the income of rubber tappers in Liberia who were supplying raw materials for tires (Jansen and von Uexkull, 2010). In general, trade flows have become more volatile: changes in business strategies and practices can result in rapid shifts in demand and reconfiguration of the value chain. For example, the 2008-09 economic crisis resulted in the consolidation or reduction of the length of several value chains (*i.e.* the shortening of the segmentation of the chain or even the exclusion of some countries from the chain).

Value chains are sometimes criticised for the predatory behaviour of some lead firms that tap into developing countries' human and natural resources in an irresponsible or unsustainable manner, or do not share enough of the profits with local suppliers. This is probably more an issue for non-extractive (manufacturing) activities, which exist only because of global value chains, as foreign direct investment in mining and oil pre-date by decades, if not centuries, the

emergence of GVCs. Actually, the mere existence of factory-less firms, which rely mainly on their brand and reputation with the consumer, are providing new channels, such as codes of conduct and corporate social responsibility (CSR), for dealing with the issue. It is therefore important to carefully monitor the growing array of supplier codes and guidelines,⁴ and corporate and social responsibility codes, and create incentives for lead firms to comply with major principles for responsible investment and business, such as the UN Principles for Responsible Investment or the UN Global Compact. The OECD has also developed Guidelines for Multinational Enterprises. Beyond responsible investment, vertical relations in value chains may raise competition issues. Governments need to develop adequate competition frameworks to avoid captive relationships and the loss of economic freedom in the value chains.

ARE VALUE CHAINS PRIORITISED IN AID FOR TRADE?

The challenge for developing economies is to design and implement broad strategies that tackle the key barriers to integration and upgrading in value chains. To assist developing countries in alleviating these constraints and entering and moving up the value chains, support from the development community can help, especially when buttressed by appropriate domestic policies. Support through aid-for-trade programmes depends on mainstreaming value chain-related issues in national and sectoral development strategies and raising these issues in dialogues with the donor community. This section looks at whether value chains are a priority in the strategies of partner countries, bilateral and multilateral donors and the providers of South-South trade-related co-operation. Next, it highlights partner countries' perceptions of the specific barriers their firms face when trying to connect to value chains.

Donor experiences with value chains development

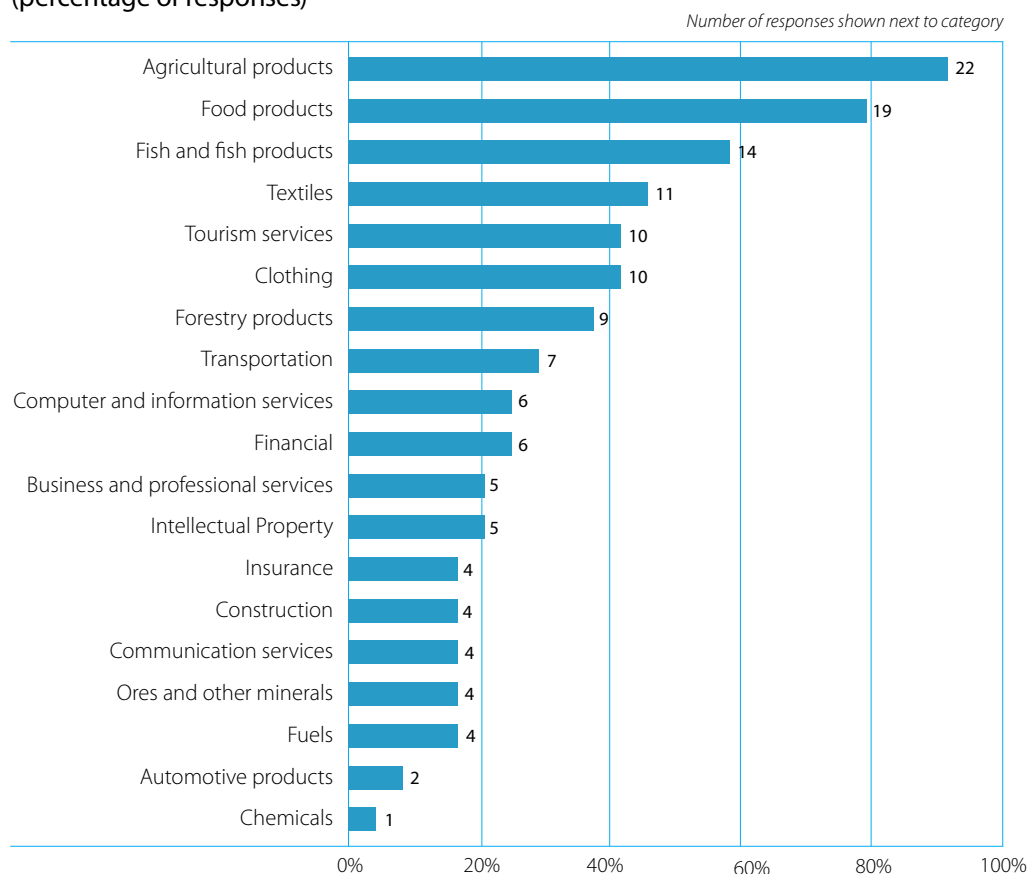
The responses to the OECD/WTO questionnaire indicate that value chains are increasingly influencing donor programming. Donors' experience with value chains is most advanced in the agricultural and food sectors. Bilateral donors report strong engagement in these sectors, in addition to value chains in fish and fish products, textiles and apparel, and tourism. Multilateral donors report that they have more experience with value chain development in transportation, financial services, and business and professional services. For providers of South-South trade-related co-operation, value chain development in textiles and apparel as well as automotive products is more prominent (Figures 3.1, 3.2 and 3.3).

There are numerous examples of donors providing support to partner countries that promote supply chains associated with exports – mostly in agriculture and fisheries. Many of these projects are working at the “intensive margin” to support existing trade flows, *i.e.* improving quality or reducing delivery costs to supply to lead firms. In addition, donors provide support to strengthen the private sector in developing countries through creating a business friendly environment, including with respect to governance issues and policy, legal and regulatory frameworks. Aid for the private sector also encompasses activities which try to address market failures, overcome information asymmetries and provide business development services, such as R&D, standardisation and certification, and provision of financial services (OECD/WTO, 2013).

Some donor activities target individual enterprises in specific value chains with technical assistance, information and advisory services and the provision of finance. For example, these activities have included projects in Cameroon to promote the export of bananas and plantain, in West Africa to improve cotton and rice cultivation, in Rwanda to improve the quality of tea, in Ethiopia and Tanzania to improve the quality of coffee, in Bangladesh to upgrade quality in the readymade garment sector, in Guatemala to improve organic crops, in Honduras to improve oriental vegetables, in Grenada to improve fisheries, in Peru to improve milk quality, in Mozambique to revive processed cashew exports

and in Tonga to control fruit flies, as well as in Indonesia to improve dairy livestock. Several projects were financed by donors to aid producers in meeting quality standards in their home and other export markets. Examples include EU assistance for fish production in Fiji, Honduras and Mozambique fisheries, as well as assistance for palm oil production in Ghana (OECD/WTO, 2013).

Figure 3.1 Bilateral donors' experience with value chain development (percentage of responses)

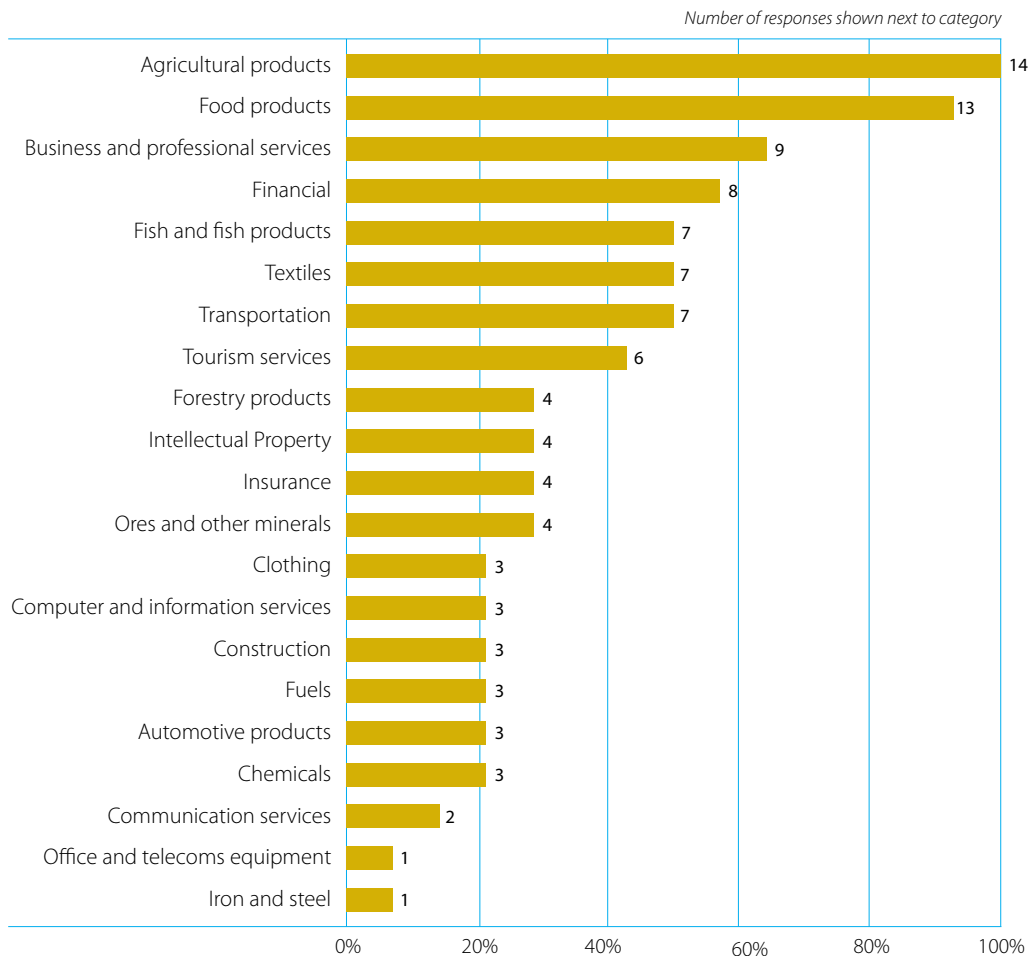


Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Major donors, including the United Kingdom and the United States, operate numerous programmes that focus directly on the issue of value chains. The Africa Free Trade Initiative (AFTi), supported by the UK, aims to support 3 million additional people by 2015 to benefit directly from national and cross-border value chains, for example through the Africa Enterprise Challenge Fund, which runs various projects to help people benefit from agribusiness value chains in Africa. The United States, through the Agriculture Development Value Chain Enhancement Programme (ADVANCE) in Ghana, has put in place a USD 32 million programme designed to improve the competitiveness of key agricultural commodity value chains in domestic and regional markets. The Trade and Global Value Chain Initiative supports increased and better employment opportunities, as well as improved incomes and working conditions within horticulture and garment sector value chains in Kenya and South Africa, and Bangladesh, respectively. The Responsible and Accountable Garment Sector initiative aims to improve working conditions in the garment value chain in poor countries. The Food Retail Industry Challenge Fund awards grants through a competitive selection process open to European businesses to develop and test new ways for African food exports to reach consumers.

Figure 3.2 Multilateral donors' experience with value chain development (percentage of responses)



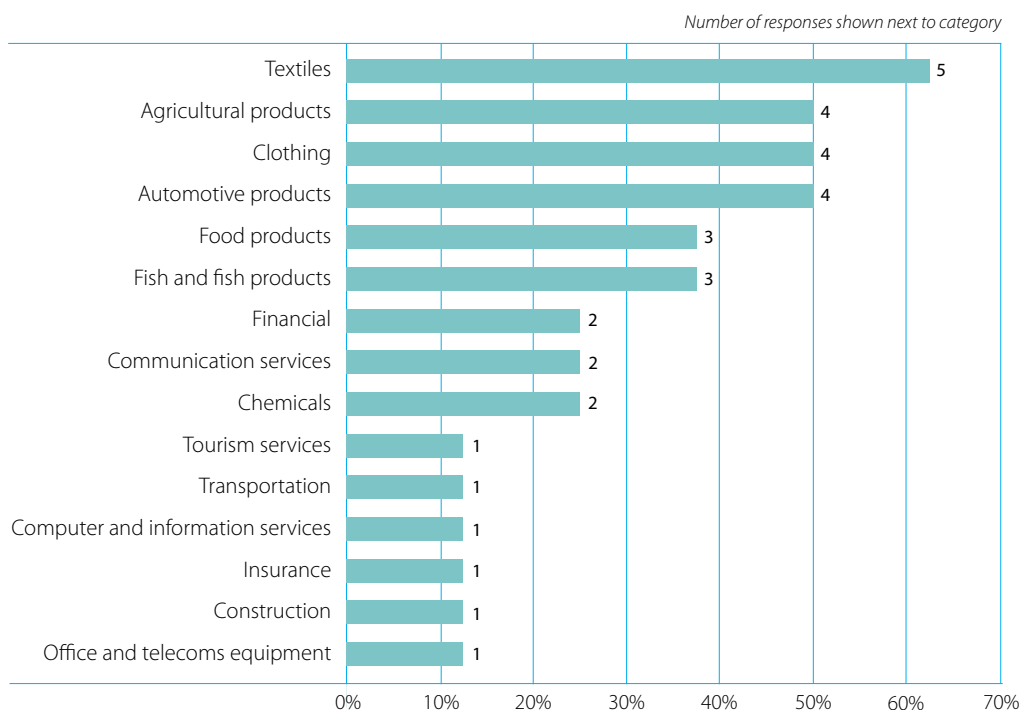
Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Through its Sustainable Economic Growth Strategy, which guides aid-for-trade activities, Canada is actively supporting a number of efforts to strengthen access to global value chains. These efforts have primarily focused on agribusiness value chains in Bangladesh, Ukraine and Viet Nam, and in the extractive sector value chains, most notably in Peru. Value chain development has been a strategic priority for Denmark since 2010, while New Zealand's Aid for Trade focus is on helping the Pacific Islands to engage in value chains and to encourage greater access to the New Zealand market. Germany's priority is to improve integration into regional and international value chains and strengthen compliance with social and environmental standards (BMZ, 2011:6). Germany also helps SMEs and small-scale farms to improve their exports and marketing capabilities, so as to use value chains at the micro level to achieve higher levels of value added.

Enabling SMEs in developing countries to export, which is a core objective of the International Trade Centre (ITC), often means developing the domestic and international segments of the value chain. This involves, for example, work towards the development and implementation of regional value chain strategies in the commodity sector in Africa (e.g. the cotton initiative). Many projects focus on the improvement of quality and standards to meet the requirements of lead firms (e.g. Ethiopian coffee quality improvement) or create products of appeal to lead firms (e.g. the Ethical

Figure 3.3 South-South providers' experience with value chain development
(percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Fashion Initiative). ITC also provides training that specifically targets supply-chain management and participation in international value chains, and explores further areas of co-operation with lead firms to improve developing countries' supply chain management and to better connect women-led SMEs to value chains.⁵ As public-private dialogue is a critical ingredient for developing domestic value chains in developing countries, similarly, public-private co-operation in designing and delivering assistance to communities and other beneficiaries is a key dimension for success.

So far, few of these bilateral programmes have been evaluated, but those that have report tangible results. For example, UK's interim monitoring of its value chain activities and aid-for-trade projects found improved incomes, working conditions, and employment for partner country workers. Recently, the Netherlands also evaluated its value chain programmes for tea, cotton and cocoa and found an increase in household income and sustainability.

For many years, a number of specialised international organisations have been working in the least developed countries (LDCs) to promote the expansion of local and international value chains that benefit small agricultural producers and entrepreneurs, who create jobs and income. A recent example is the 2010 Abuja Declaration⁶ which mandated the Food and Agriculture Organization (FAO), the International Fund for Agricultural Development (IFAD), the African Development Bank (AfDB) and the UN Industrial Development Organization (UNIDO) to initiate joint action in the areas of African agribusiness value chains. In response, the organisations launched the Accelerated Agribusiness and Agro-industries Development Initiative (3ADI). They report that the Initiative builds on existing political commitment to promote an agricultural sector that will increase to 50 percent the proportion of differentiated high-value products of the continent's food products. This 3ADI objective is financed through increased private sector investment flows and by mobilising donor resources. Furthermore, UNIDO has designed and implemented technical assistance programmes and provided integral policy support. Its interventions concentrate on the key pillars

of agribusiness development: upgrading entire value chains, strengthening technology, promoting innovative sources of financing, and stimulating private sector participation.⁷ The Haitian government also officially requested technical assistance from UNIDO to accelerate the development of the most promising agro-value chains (banana and tubers).⁸

While for some donors value chain issues are not addressed specifically in their aid-for-trade strategy (for example, Sweden has not institutionalised value chain analysis and identification in its programming), for others they are implicitly included. For example, while the term “value chain” is not used in France’s aid-for-trade strategy, activities identified within that strategy look precisely at the activities firms undertake to create value.

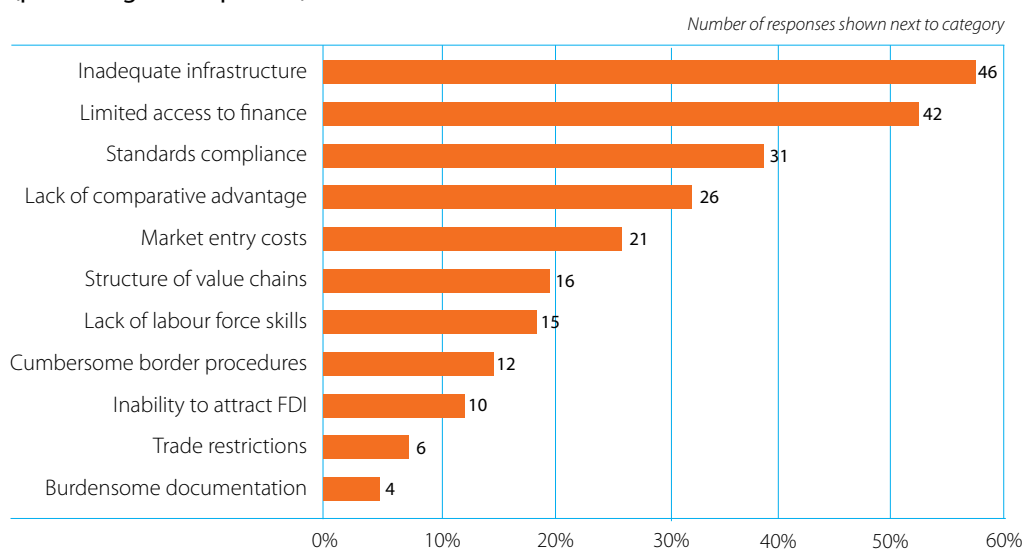
PUBLIC VIEWS ON ENTRY BARRIERS TO VALUE CHAINS

While many producers in developing countries are competitive at the farm or factory gate, a range of constraints undermine their competitiveness in regional and global markets and thus limit their potential for growth. This section highlights the barriers suppliers in developing countries face when entering value chains, as reported by partners, donors and providers of South-South co-operation in response to the OECD/WTO questionnaire. Finally, based on partner countries’ responses, an assessment is provided of the effectiveness of donor support in easing entry barriers.

Inadequate infrastructure is identified by partner countries and providers of trade-related assistance as the single most important constraint (Figures 3.4, 3.5, 3.6 and 3.7). In fact, 68 percent of partner countries reported electricity as a major constraint, confirming the findings of OECD (2013b) that access to and reliability of electricity is a major binding constraint to trade performance of developing country firms. The importance of this barrier is also consistently highlighted in the World Bank *Enterprise Surveys*.

Partners, multilateral donors and providers of South-South trade-related co-operation identify access to trade finance as the second most important binding constraint (bilateral donors consider it the third most binding). Trade finance is the lifeline of international trade, with more than 90 percent of these transactions involving some form of credit, insurance or guarantee. In particular, small exporters lack adequate access to trade finance (ITC, 2009:2).⁹

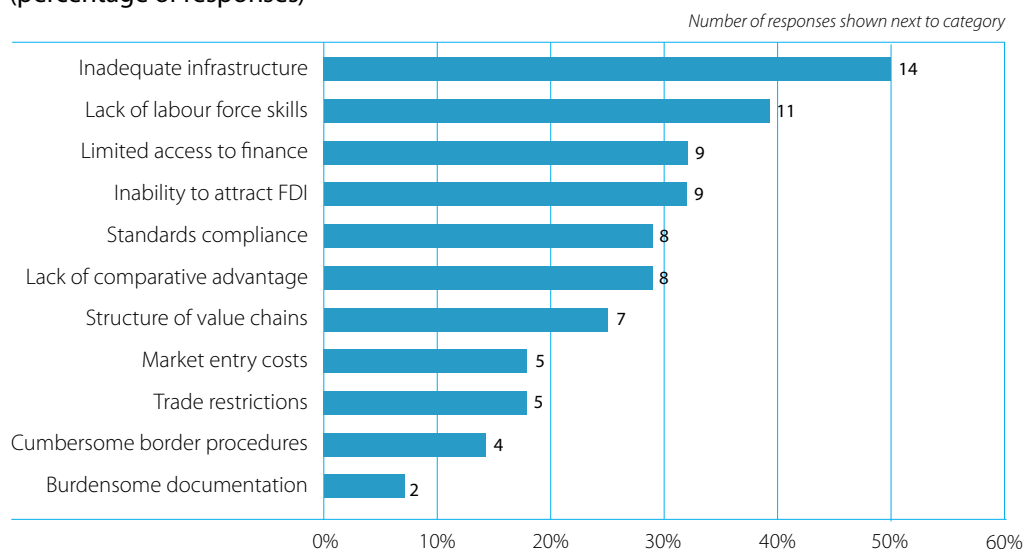
Figure 3.4 Partner countries’ views on main barriers to firms entering value chains (percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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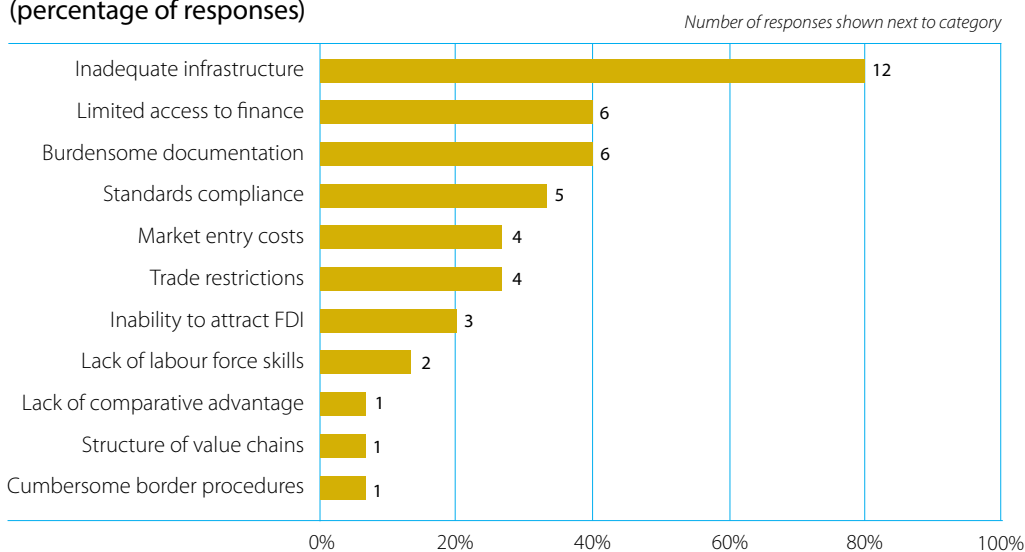
Figure 3.5 Bilateral donor's views on main barriers to firms entering value chains (percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Figure 3.6 Multilateral donor's views on main barriers to firms entering value chains (percentage of responses)



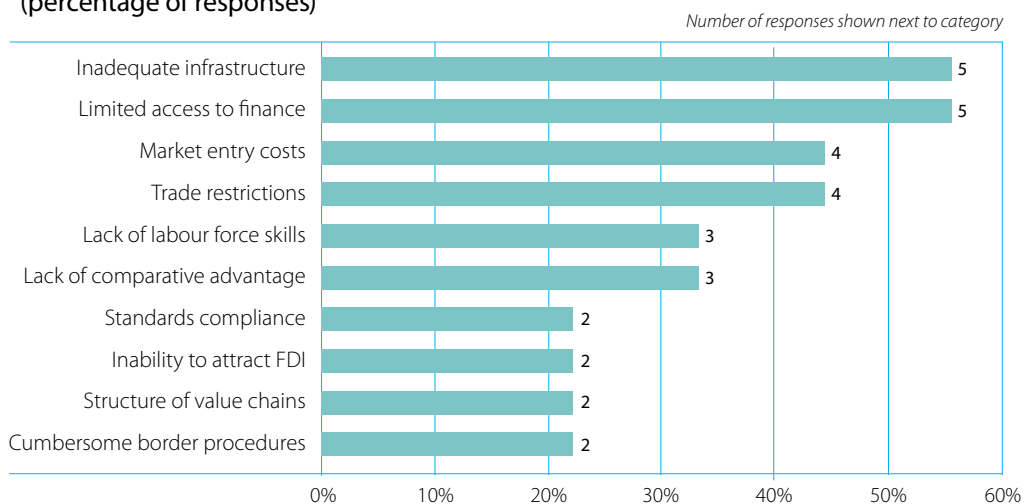
Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Another major constraint highlighted by partner countries and bilateral and multilateral donors, and to a lesser extent by providers of South-South trade-related co-operation, is meeting and certifying the technical, health and safety standards requirements that are necessary to access mature markets and participate in value chains. While high standards underwrite trade by instilling confidence in buyers and consumers, they can sometimes also act as an arbitrary and unjustified trade barrier that is difficult to challenge and hard to remove.

Bilateral donors highlight a lack of skills and human capital, as well as the inability of partner countries to attract FDI. Multilaterals pay more attention to business environment issues and refer to burdensome red tape, regulations, and associated documentation as a major barrier for firms to enter value chains. These types of barriers were not ranked as high by partner countries, bilateral donors and providers of South-South trade-related co-operation. Market entry costs and trade restrictions are also seen as an impediment, particularly among multilateral donors and providers of South-South trade-related co-operation, but significantly less so by partner countries and bilateral donors. The views of all respondents converge around the relative importance of impediments such as a lack of comparative advantage and the structure of value chains.

Figure 3.7 Providers of South-South trade-related cooperation views on main barriers to firms entering value chains (percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

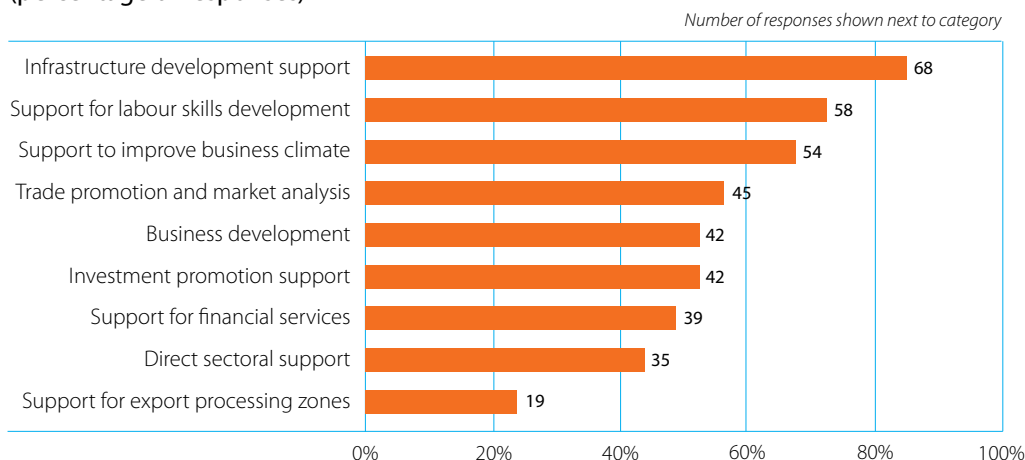
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How effective is donor support?

Partner countries consider that aid for trade is effective in addressing their trade-related constraints. They report that infrastructure development support is very effective (68 countries) or effective (10 countries) in assisting firms to enter and move up value chains (Figure 3.8). Although partner countries, as noted above, did not identify labour skills as one of the major barriers to entering and moving up value chains, they did consider programmes to upgrade labour skills to be effective in addressing trade-related constraints. Donor support to improve the business climate is also among the top three aid programmes that are most effective in helping their firms connect to value chains. The findings of Chang *et al.* (2009) largely confirmed that the positive impact of trade on growth is greater if it is accompanied by improved economic infrastructure, increased education and skills, and deeper financial markets, but also institutional and regulatory reforms. Partner countries perceive that these types of programmes are particularly effective.

Direct sectoral support is not considered to be as effective as more focused support for trade promotion, market analysis, business development and investment promotion. Support to export processing zones is perceived as notably less effective. Indeed, not all economic processing zones have been successful and investments in infrastructure and generous tax incentives have not necessarily led to an increase in FDI. Even where FDI has been forthcoming, value-added has often been low, and backward linkages and technology transfers quite limited (Engman, *et al.*, 2007). Overall, the impact of most of these zones in Africa, particularly on local economic development, has been ambiguous at best.

Figure 3.8 Types of aid for trade identified as ‘very effective’ by partner countries (percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

StatLink  <http://dx.doi.org/10.1787/888932854347>

PRIVATE VIEWS ON ENTRY BARRIERS TO VALUE CHAINS

The OECD/WTO private sector survey was directed to firms in five sectors that are of particular importance to developing country suppliers: agri-food, textiles and apparel, tourism, information and communications technology, and transport and logistics. The exercise was undertaken in collaboration with Grow Africa, the International Chamber of Commerce (ICC), the International Trade Centre (ITC), the International Telecommunication Union (ITU) and the United Nations World Tourism Organization (UNWTO).

The survey, with close to 700 responses from over 120 countries, may perhaps not be considered as statistically significant due to the methodological constraints of this type of exercise. But the breadth and depth of the responses provide a good indication of the constraints that confront the private sector in expanding value chains to developing country suppliers, particularly when these responses are considered in the context of other research on the same issues (OECD, 2013a).

Firms were invited to self-select from two categories of respondent: either developing country suppliers or lead firms. They were asked to rank the main barriers to the participation of firms from developing countries as suppliers in value chains, and the main drivers of lead firms' decisions to source and invest in suppliers from developing countries to link them to their value chains. This section draws heavily on the more in-depth sector studies on value chains in the agri-food, textiles and apparel, tourism, ICT, and transport and logistics sector which are published as separate background reports for the Fourth Global Review of Aid for Trade.

Main findings

Developing country suppliers from the agri-food, textiles and apparel, tourism, ICT, and transport and logistics sectors all ranked lack of access to finance (in particular, trade finance) as the main obstacle preventing them from entering, establishing or moving up value chains. Transportation and shipping costs, inadequate infrastructure, and regulatory uncertainty (often tied to a complex business environment) were also cited as major obstacles. Lack of labour force skills was cited as a particular supply-side constraint by developing country suppliers across all five sectors.

Among lead firms across all five sectors customs procedures ranked high as a particular obstacle in bringing developing country suppliers into their value chains. Other prominent concerns included regulatory uncertainty (reflecting developing country suppliers' issues with the complex business environment) and standards compliance issues. Informal practices and payment requests were also cited as of particular concern in their relationships with suppliers.

Factors influencing sourcing and investment decisions cited included production and labour costs, standards compliance, production quantity and turn-around time (a particular issue for textiles), and investment and tax incentives. Labour skills also scored high (particularly in the ICT, textiles and apparel and tourism sectors) as a factor influencing investment decisions. Poor business environments, customs delays, lack of regulatory certainty, and corruption and graft were all cited as factors negatively influencing sourcing and investment decisions.

Both developing country suppliers and lead firms considered that future support should primarily be targeted to improving the business environment. Likewise, both sets of respondents reported that better market access would help them enter, establish or move up the value chain. Developing country suppliers put more emphasis on financing (access and incentives for domestic and foreign investment) as being effective support. Lead firms put particular focus on trade facilitation and better public-private dialogue. Labour force training also emerged as an effective way to increase supply-side capacity.

Findings from the sector studies

Agri-food

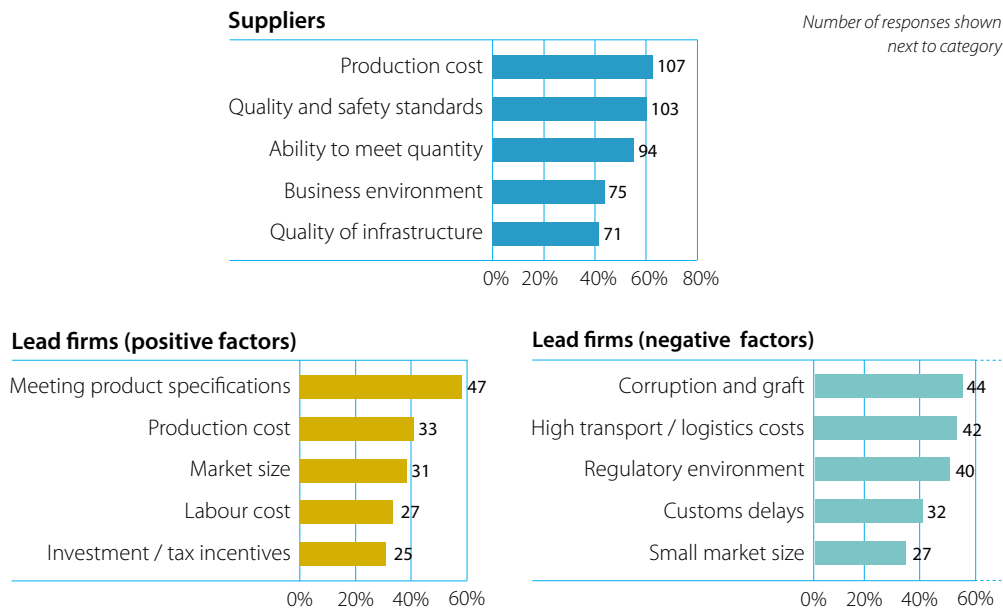
The agri-food sector is in a state of dynamic change. Rapid urbanisation and rising income levels in developing countries, changing diets, information and communications technologies (ICT), structural transformation in retail markets, and export market opportunities are catalysing this rapid change. Collectively, these factors are contributing to a paradigm shift in the way food is produced, processed, and sold – albeit at different speeds both across and within markets in developed, developing and least developed countries. New export markets, notably fast-growing populous Asian markets, are also a defining feature of this trend. So, too, is the penetration of modern retailing into developing countries, including low income countries.

The emergence of local, regional and global value chains is catalysing greater involvement of the private sector in agriculture and a focus on developing and improving agriculture value chains in terms of quality, productivity, efficiency, and depth. As (urban) consumer demands related to safety, quality and convenience grow, so the pace of change in food markets is quickening. In many agricultural markets, this is leading to a more active and assertive role for the private sector vis-à-vis the state.

Responses to the OECD/WTO questionnaire were received from 250 firms in the agri-food sector in 79 countries; 160 from suppliers in developing countries and 89 from lead firms.¹⁰ They highlighted that costs (*e.g.* transport and labour) play an important role in decisions to link suppliers to value chains. The ability to meet standards and product specifications was also prominently identified, together with other factors such as the regulatory environment and labour skills. Access to finance and lack of infrastructure mainly represent a source of concern for suppliers in developing countries wanting to join value chains. Some other factors, such as the size and proximity of the domestic market, are important to lead firms and investors.

Suppliers in developing countries consider that the following factors most influence sourcing and investment decisions in agri-food value chains: production costs (64 percent of responses), the ability to meet quality and safety standards (60 percent), the business environment (44 percent), the quality of infrastructure (42 percent), and labour

Figure 3.9 What factors most influence sourcing and investment decisions in agri-food value chains
(percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

StatLink <http://dx.doi.org/10.1787/888932854366>

skills/productivity (38 percent). Lead firms consider a developing country attractive for sourcing and investment opportunities, in the context of value chains development, if it is able to consistently meet product specifications (58 percent), has low production and labour costs (41 percent and 33 percent, respectively), has a large domestic market (38 percent) and offers attractive investment or tax incentives (31 percent).

Other factors include confidence in the regulatory environment (27 percent), labour skills (26 percent), the depth of local goods and services (26 percent), market openness and participation to trade agreements (25 percent each), language (25 percent), market proximity (21 percent), and short order completion times (16 percent). A country will be unattractive if it is subject to corruption and graft (53 percent) and has high transport and logistics costs (51 percent), a weak business and regulatory environment (48 percent), customs delays (38 percent), a small market size with low purchasing power (33 percent), and low labour skills (27 percent).

Asked about the support needed to join and move up value chains, developing country suppliers indicated that they seek as a priority better access to finance (59 percent of the answers), incentives for investment (57 percent), better market access (56 percent), investment in infrastructure (46 percent), internationally recognised standards (38 percent), and labour training schemes (36 percent). This largely mirrors the wishes expressed by lead firms, which point to better market access (52 percent), investment in infrastructure (46 percent), better public-private dialogue with national authorities (44 percent), trade facilitation measures (42 percent), better standards infrastructure and certification capacity (37 percent), and support to improve the business environment (36 percent).

Among the 160 developing country suppliers that responded 70 percent benefitted from a government initiative, 50 percent from a development agency initiative, and 20 percent from a foreign company initiative. For those firms that benefitted from support, the main impact has been better export market intelligence (46 percent of the responses), geographical and product export diversification (46 percent exported to new markets and 25 percent exported new products), improved standards compliance (33 percent), and improved competitiveness (28 percent). Less than 5 percent of the enterprises surveyed considered that aid-for-trade projects had no effects or were counterproductive.

Textiles and apparel

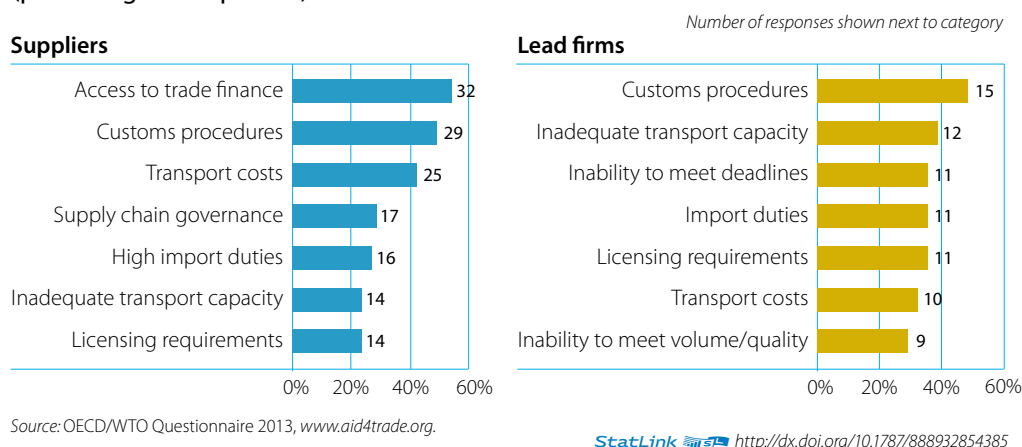
The textiles and apparel industry plays a central role in the industrial development of many low income and least developed countries. Low capital requirements, high labour intensity, and relatively simple production technology have made it a characteristic sector for early stage industrialisation (Gereffi and Memedovic, 2003). The industry, particularly the apparel sector, accounts for a significant share of total manufacturing exports for some LDCs, such as Lesotho (70 percent), Bangladesh (71 percent), Cambodia (85 percent) and Haiti (86 percent) (Frederick and Staritz, 2012). It has also generated significant employment opportunities for unskilled workers, most of them women. A clear benefit for developing countries entering into textiles and apparel value chains is that they generate employment for many women, especially young and less educated ones (*e.g.* the share of female workers in this sector is 80 percent in Bangladesh, 82 percent in Sri Lanka and 89 percent in Cambodia) (ILO, 2005).

With the expiry of the WTO Agreement on Textiles and Clothing on 1 January 2005, the trading environment for global apparel moved from a structure of managed trade to one of more open global competition. Market distortions remain, however, in the form of tariff escalation, peaks and continued use of export subsidies. Duty-free, quota-free access for LDC exports remains an unresolved issue in the stalled Doha Development Agenda negotiations – although progress has been registered with existing schemes maintained and improved, and with new schemes established by developed and emerging economies. Preferential access schemes, notably the EU’s Everything But Arms Scheme, the United States’ African Growth and Opportunity Act, and both WTO members’ GSP schemes, play a major role in defining global market access conditions for low income countries. Together, both the EU (44 percent) and the US (23 percent) accounted for two-thirds by value of global imports of clothing in 2011 – a global market worth USD 431 billion. A number of emerging market destinations are also growing in importance. Import growth of between 65 percent and 132 percent was recorded by Brazil, Chile, China, India, the Russian Federation and Thailand between 2009 and 2011. Together these six markets accounted for USD 17.1 billion in clothing imports in 2011, up from USD 3.9 billion in 2005.

Changes in trade policy and market access conditions have been accompanied by new dynamics in the apparel market. Supply chains have undergone profound reconfiguration to meet new market demands for “fast fashion”, marked by rapid shipments, higher quality requirements and low retail inventories. The reconfiguration towards new styles and models has put a premium on shorter delivery cycles, improvements in factory skills and supply chain management, including fabric production, material sourcing and finishing process. On a global scale, buyers and intermediaries worldwide have turned increasingly towards suppliers that can source materials, co-ordinate logistics, induce creative development, and operate in geographically dispersed locations that allow shorter delivery cycles. Rapid and reliable transport networks and minimum customs clearance times have become as critical as labour and material costs.

The result has been significant supply chain consolidation, with fewer countries and larger suppliers, and the emergence of strategic sourcing relationships. Major buyers have shifted away from sourcing a multitude of small firms, and from the old-style cut, make and trim sewing facilities, to forging relationships with a smaller number of strategic suppliers, managing production across multiple factories and international locations, sharing financial liability, providing greater value-added services and, in the end, making a larger share of profits in the textiles and apparel trade. Apparel manufacture has declined sharply since 2005 in the Dominican Republic (-194 percent), Costa Rica (-174 percent), the Philippines (-63 percent), Mexico (-57 percent), Chinese Taipei (-57 percent), Swaziland (-51 percent) and South Africa (-45 percent), but expanded vigorously in value terms in Bangladesh (+192 percent), Viet Nam (+181 percent), China (+106 percent), Malaysia (+84 percent), Cambodia (+82 percent), Pakistan (+79 percent) and India (+64 percent).

Figure 3.10 Difficulties to connect developing countries to textiles and apparel value chains
(percentage of responses)



Replies received to the OECD/WTO questionnaire underscore these changes in market dynamics. A total of 106 responses were received from 47 countries – including 39 lead firms from 27 countries (of which 19 were from developing countries or territories) and 63 developing country suppliers across 35 countries. Five of the lead firms and one of the developing country suppliers reported revenues in excess of US1 billion.

Both developing country suppliers and lead firms (Figure 3.10) accorded high priority to customs procedures (32 and 15, respectively). Efficient customs procedures are extremely important in a value chain that is characterised by low retail inventories, high order volumes and just-in-time manufacturing processes that respond to swiftly changing fashion trends. The need for speed is also apparent in the high priority given to constraints related to shipping costs and delays (25 supplier responses and 10 lead firms responses) and inadequate airport, maritime or transport capacities or links (12 lead firm responses). More than in most of the other value chains, trade policies are still an important barrier in the textiles and apparel industry; 16 supplier firms and 11 lead firms pointed to high import duties as well as export and licencing agreements.

Suppliers mention access to finance as the most important barrier to entering textiles or apparel value chains (52 percent). The 2008-09 economic crisis brought the importance of suppliers' financial stability to the attention of all buyers. The crisis has made access to credit much more difficult and, in the future, firms will have to prove their financial stability in order to become suppliers. To make matters worse, some customers are delaying payments and banks are becoming stricter with credit access. The general decline in credit availability is affecting all suppliers, but particularly hard hit are small and medium-sized firms and locally-owned firms (*i.e.* those with the least working capital), with credit providers being more risk averse in their lending decisions (Barrie and Ayling, 2009; Driscoll and Wang, 2009).

Asked about the factors that influence sourcing and investment decisions in value chains, suppliers and lead firms both point to production costs (70 percent and 48 percent, respectively) and the ability to meet standards (50 percent and 48 percent, respectively). Much less agreement exists about labour skills, which suppliers rate as an important barrier (55 percent) but lead firms consider less important (19 percent). This probably reflects the different perspectives of the respondents. Whereas quotas help to initiate a textiles and clothing industry in developing countries, maintaining or improving a country's position in the global apparel value chain requires a continuous process of workforce development. In the long run, innovative capacities depend on suitable human capital (Gereffi and Frederick, 2010).

Tourism

Tourist arrivals surpassed 1 billion for the first time in 2012. Despite occasional shocks, international tourist arrivals have enjoyed virtually uninterrupted growth – from 277 million in 1980 to 528 million in 1995, and 1.035 billion in 2012.¹¹ Developing countries are playing an increasingly prominent role in this expanding sector. Tourism is one of the top three exports for the majority of developing countries. It is the lead export for at least 11 LDCs and an important sector of economic activity in all LDCs that have managed to or are about to graduate out of LDC status.

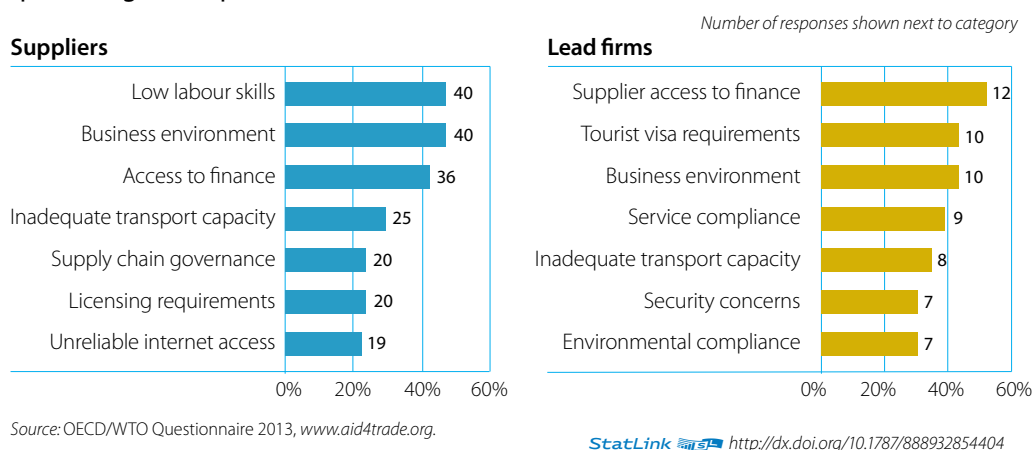
The tourism sector is contributing to economic growth in developing countries and offers significant further potential. Tourism is employment intensive and has linkages to many other parts of the economy. It contributes directly to poverty reduction – notably among women. This has been recognised by policy makers both at the national and international level. Development strategies in LDCs and other low income countries often highlight the tourism sector and its important potential to stimulate growth and poverty reduction. The majority of LDC Diagnostic Trade Integration Studies highlight tourism as a priority sector for growth and exports.

This section examines tourism value chains and the role of developing country firms within this global sector. It focuses on identifying bottlenecks that impede developing country firms from connecting to tourism value chains or that make it difficult for developing countries to reap benefits from tourism. It focuses on the 113 responses received from lead firms and developing country tourism operators across 46 countries collected through a joint OECD-WTO-UNWTO monitoring survey, conducted in collaboration with the International Chamber of Commerce (ICC), the International Trade Centre (ITC) and Grow Africa. In total, 23 lead firms replied from 17 countries (including from 6 developing countries) and 83 developing country operators from 34 countries. Among the lead firms, three respondents had a turnover in excess of USD 1 billion per annum. The survey results (Figure 3.11) highlight that:

- The quality of the general business environment and access to finance play a crucial role when it comes to allowing suppliers in low and middle income countries to operate effectively and to connect to global value chains. This is in line with findings in relevant empirical literature and with anecdotal evidence.
- Labour skills are another crucial determinant for the success of suppliers of services in the tourism sector. Although this determinant has received less attention in previous literature, the role of skills does not come as a surprise given the frequency and importance of personal contacts between service providers and clients in the tourism sector.
- Openness to imports, security and a smoothly functioning visa scheme are other elements that are crucial for the tourism sector to engage in a strong and sustainable growth path.
- The availability and quality of infrastructure plays a key role in the development of the tourism sector because of its role in bringing tourists to the country and in allowing them to travel through the country.

In order to maximise spill-over effects of the tourism sector to other sectors of the economy, inter-linkages matter, such as the possibilities to source food from the local economy, to offer other leisure services, or to sell local products to travellers. Increasingly, attempts are being made to gear the sector's growth pattern towards resource efficiency, notably in terms of water and energy, thus controlling the sector's impact on the environment.

Figure 3.11 Difficulties to connect developing countries to tourism value chains
(percentage of responses)



Careful management of inter-linkages with other parts of the economy is necessary to fulfil tourism's development potential. In national policy making, this would require co-ordination across different ministries – most notably the tourism and trade ministry – and other relevant agencies, business communities and local authorities. In the context of aid for trade, this would require co-ordination across implementing donor and partner agencies, and across different target areas of aid (notably infrastructure and tourism), and possibly an increase in the typical size of aid projects targeting the tourism sector.

There is evidence that donors and implementing organisations are recognising the need for a co-ordinated approach to technical assistance projects in the area of tourism. A number of recent projects try to strengthen simultaneously the tourism sector itself and supplying sectors, like handicrafts or agriculture. The implementation of such projects is facilitated by increased co-ordination among international agencies, notably in the context of the United Nations Steering Committee on Tourism for Development.¹²

Transport and logistics

Transport and logistics is a sector in which global value chains play a vital role in connecting countries, spreading technology, and promoting best practice around the world. The transport and logistics value chain is notable for the variety of lead firms involved in it – including major shipping, express delivery, and freight forwarding firms – and the range of local operators they partner with. Increasingly, transport and logistics value chains are extending their reach into developing countries, including some low income countries and least-developed countries.

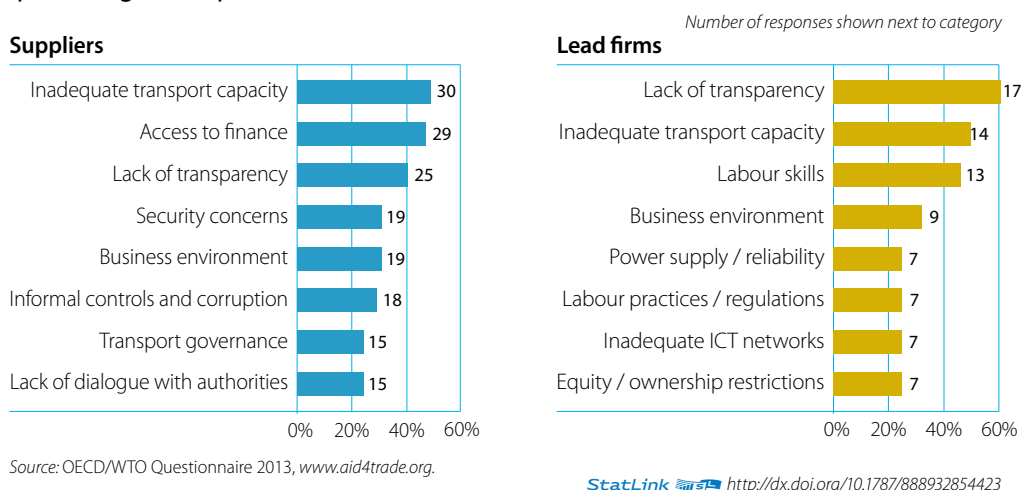
In addition to its role as a value chain in its own right, the transport and logistics sector is also key for the performance of other sectors of the economy. Manufacturing and agriculture both depend on being able to ship their goods to consumers quickly, cost-effectively and reliably. The value chain business model that has become so important in sectors such as electronics or agri-food is impossible to implement without a strong transport and logistics sector in each of the countries involved. The data suggest that countries with better logistics performance tend to specialise more in manufacturing value chains.

Indeed, transport and logistics have a number of direct and indirect links with important economic and social development goals. On the one hand, transport and logistics can boost trade performance, which, under appropriate circumstances, leads to higher incomes, employment gains and lower poverty rates. Sectoral performance is also a key determinant of a government's ability to move important human development goods – like basic foodstuffs and vaccines – to its population, particularly in remote areas, at the lowest possible cost.

The available data suggest that there is an encouraging trend of improvement in many aspects of transport and logistics sector performance in the developing world. Of course, performance varies considerably from one region to another, which suggests that there is a significant potential for South-South knowledge exchange to take place in this area. In terms of the main areas that influence performance of the transport and logistics value chain, the OECD/WTO survey data¹³ from the private sector (Figure 3.12) reveal the following trends:

- *Infrastructure:* Trade and transport infrastructure remains a serious constraint in many developing countries. However, there is some evidence of improvement over recent years in Sub-Saharan Africa, the Middle East and North Africa. The most striking trend, however, is the rapid diffusion of information and communications technology (ICT) in most developing regions. Mobile telephony, in particular, has an enormous potential for bridging the communication gap, especially in rural areas. The availability of cheap and easy-to-use telecommunication devices has a particular interest when developing agricultural or eco-tourism clusters in developing countries. It stands out as an area in which donors (multilateral and bilateral), partner country governments and the private sector have all made important contributions to a significant development outcome.
- *Customs and other border procedures:* Although improvements are evident in border procedures in most regions, they are more pronounced in customs than in other areas. In part, this dynamic reflects the global dispersion of best practice through international instruments, as well as the active involvement of donors and partner countries in upgrading customs. However, other border agencies, such as health/quarantine agencies and agencies administering sanitary and phytosanitary measures, also need attention in order to improve supply chain performance. These other agencies are particularly important for developing countries involved in emerging agri-food value chains.
- *Private services and regulation:* The data suggest that the quality of private providers of transport and logistics services is generally improving around the world. Efforts at private sector development in this area would therefore appear to be bearing fruit. By contrast, improvement in the regulatory measures that support and shape the private sector's performance is taking place at a slower pace. It is important that policy makers and sectoral regulators ensure that further private sector upgrading is not inhibited by an unduly restrictive regulatory environment.
- *Red tape:* Data from the World Bank's Doing Business project suggest that although performance improvements are evident in many areas of the transport and logistics value chain, red tape remains a serious issue facing importers and exporters in many developing countries. Reductions in documentary formalities have been minimal in recent years, and costs have actually increased in many countries. Many countries have scope to further reduce delays and improve supply chain performance by rationalising red tape burdens.
- *Governance:* Excessive red tape often means that operators are more willing to make unofficial "speed money" payments, which undermines the objective of improving governance. The data suggest that governance remains a significant constraint in many developing countries. The uncertainty associated with poor supply chain governance can translate into increased indirect costs for operators. Transport and logistics service providers often find it easier to deal with a known delay, even if it is not as short as it could be, than with a highly uncertain one. Governance should therefore be an important aspect of value chain upgrading around the world.

Figure 3.12 Difficulties to connect developing countries to transport and logistics value chains
(percentage of responses)



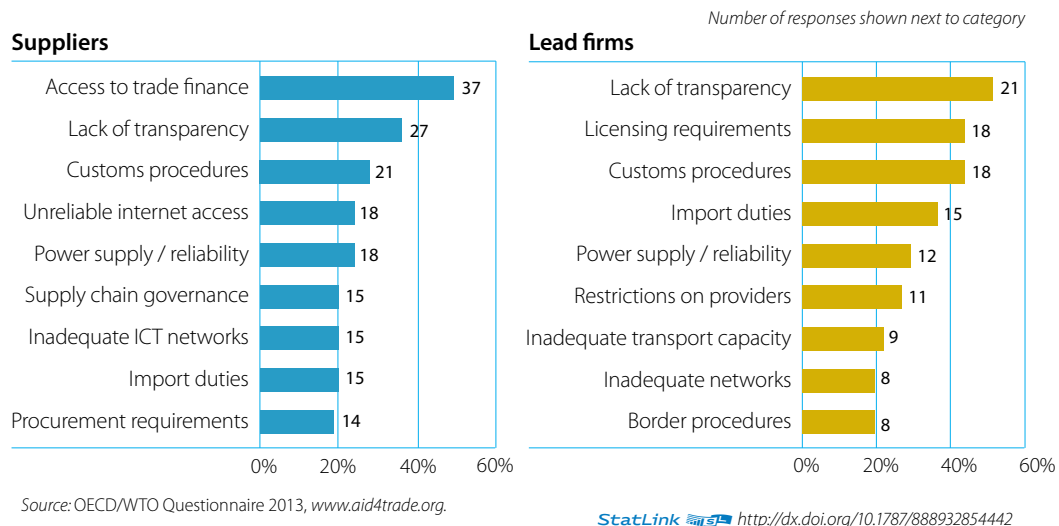
Partner countries consistently see domestic and foreign private investment, as well as official development assistance, as important sources of financing for development of the transport and logistics value chain. According to partner countries, the following areas will remain key for the agenda in the transport and logistics sector: *“Hard” infrastructure*: Many developing countries still require significant investments in basic infrastructure like ports, airports, roads and rail links. Mobilising funds for initial investment is not enough, however. It is also important to ensure that funds are available for continuous maintenance, so that facilities remain productive in years to come. *“Soft” infrastructure*: Hard infrastructure development only brings maximum benefits if it is combined with transport sector regulation, as this governs the conditions under which operators can access key international gateways. Customs and border procedures also matter, as they can have serious impacts on delays and uncertainty faced by traders. Finally, private sector development is also key, as the private sector is the engine of technological upgrading in the sector, a role that is enhanced as the transport and logistics value chains develop further.

Information and communications technology

Value chains in ICT cover a wide array of activities carried out by both manufacturing and services firms. Due to technical standards and standardised design and interfaces, ICT manufacturing value chains are modular in nature, with suppliers producing components following the design of lead firms. As a result of this modularity, ICT manufacturing is among the industries where the production process is the most fragmented internationally, relying on a high share of imported inputs.

Value chains in ICT manufacturing are concentrated in “Factory Asia”. China, Japan and Korea are the largest producers, with China alone accounting for 37 percent of world ICT exports. Least developed and low and middle income countries are of marginal importance for production and trade in ICT manufacturing chains, with the exception of India, Indonesia and the Philippines. The potential for a developing country to successfully integrate into ICT manufacturing value chains depends, among other things, on its closeness to a big market or to a regional production network such as “Factory Asia”.

Figure 3.13 Difficulties to connect developing countries to information and communications technology value chains (percentage of responses)



ICT services might offer greater potential for developing countries to integrate into ICT value chains, as distance and scale economies are less important than for manufacturing. Furthermore, ICT services such as telecommunications and computer services are vital inputs to other sectors and are hence crucial for the productivity of domestic firms and a country's broader economic development. Results from the OECD/WTO partner questionnaire confirm that ICT services are a greater priority for developing countries than ICT manufacturing. While more than 55 percent of ODA recipients have included communication services and computer and information services in their development strategies, only 12 percent have done so for the manufacturing of office and telecommunications equipment.

Telecommunication regulation plays an important role in the productivity of firms and economic development by promoting universal access and ensuring competition. Since the mid-1990s developing countries have privatised state-owned incumbent operators, set up independent regulators and introduced competition. Most countries in Latin America have introduced full competition in their telecommunications markets, while in Africa and the Arab states some monopolies or limited competition are still in place. Similarly to developed countries, developing countries face regulatory challenges such as spectrum management or Internet Protocol (IP) interconnection. While developing countries have made significant progress in liberalising their telecommunications market, few countries still apply foreign ownership restrictions or maintain discretion regarding the licensing and entry of foreign firms.

ICT infrastructure access and use are necessary conditions for economic development and can be an important catalyst to the achievement of the Millennium Development Goals. Developing countries have made significant progress in ICT infrastructure development since 2005. Mobile phone penetration in LDCs increased from 7 percent in 2005 to 46 percent in 2011. Despite these positive developments, the digital divide between developed countries and developing countries, LDCs in particular, is still large. Only 7 percent of LDC inhabitants use the internet and fixed broadband penetration is below 1 percent. However, there is rapid growth in mobile broadband access, with subscriptions in Africa expected to increase from 4 percent in 2011 to 11 percent by the end of 2013.

Following the diffusion of mobile phones, developing countries face the challenge of ensuring broadband access to individuals and businesses which would foster economic growth and development. While infrastructure investments in undersea cables are to a large extent private sector driven, development finance and public-private

partnerships can incentivise and leverage such investments. Besides facilitating infrastructure investments, policy makers and regulators face the challenge of increasing competition in access to undersea cables so that lower access prices will accelerate the proliferation of broadband.

ICT is an enabler of economic and social development for firms and households. Internet and mobile phones have allowed the rise of e-commerce. E-commerce provides entrepreneurs with improved access to domestic and foreign markets and allows for new types of services such as mobile money. However, developing countries still face significant challenges regarding e-commerce such as lack of internet access, insecure payments systems, lack of digital literacy or inadequate distribution networks, and customs procedures for the shipping of goods sold online.

The analysis of the replies of 80 suppliers from 41 countries and 44 lead companies from 30 countries (9 of which had an annual turnover in excess of USD 1 billion) to the OECD/WTO private sector questionnaire provides insights regarding the main difficulties developing country firms face when trying to enter, establish or move up ICT value chains.

Access to trade finance and customs procedures are the trade-related difficulties most often mentioned by suppliers, and are also highlighted by lead companies (Figure 3.13). Lead companies furthermore consider informal payment requests as a typical trade problem when dealing with developing country suppliers. Access to finance and lack of ICT skills in the labour force are the main national supply-side constraints for suppliers from developing countries. Absence of a sound business environment and of transparency in the regulatory environment is the most typical obstacle for lead companies when establishing a commercial presence in developing countries.

Hence, in many instances ICT firms face similar problems to suppliers in other value chains, and would benefit from aid-for-trade interventions targeted at significant horizontal constraints such as access to finance and trade financing, the business and regulatory environment, and customs procedures and delays. On the other hand, aid-for-trade interventions play a significant role in helping to overcome three sector-specific barriers: lack of ICT skills of the labour force, inadequate ICT infrastructure, and regulation of telecommunications markets.

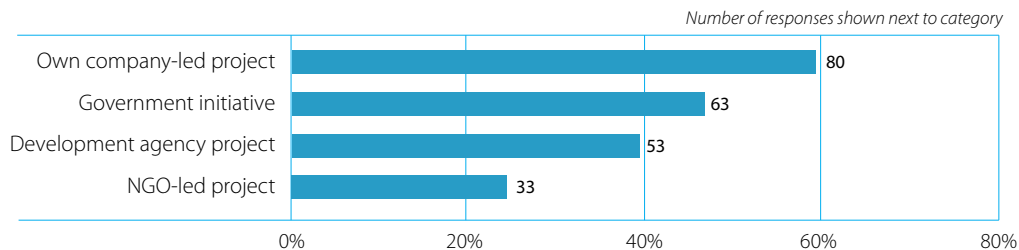
Furthermore, the responses to the OECD/WTO questionnaire reveal that while ICT infrastructure is as important as power supply to many developing country suppliers, power supply is the main supply-side constraint faced by LDC suppliers. The volume of aid to ICT projects is much lower than that to transport and energy infrastructure. This lower support can be explained by the fact that investments in ICT infrastructure tend to be more private sector driven and less capital intensive. On the other hand, the digital divide between developing and developed countries still exists and is widening in the case of LDCs.

ENGAGING THE PRIVATE SECTOR

The Aid-for-Trade Initiative has always recognised the pivotal role of the private sector. Case stories collected in the preparation of the Third Global Review of Aid for Trade shed some light on the convergence of the public and private sectors' agendas (World Bank, 2011; OECD/WTO, 2013). Furthermore, donors and partner countries report that they have intensified their dialogue with the private sector (see Chapter 2).

This section addresses the main drivers of private sector engagement in capacity building activities in developing countries and provides that sector's assessment of the effectiveness of donor programmes in connecting supplier firms in developing countries to value chains. Finally, the section highlights the lessons learned from initiatives to link developing country suppliers to value chains.

Figure 3.14 Leadership actions by lead firms to connect developing country suppliers to value chains (percentage of responses)



Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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The OECD/WTO survey provides further information about this convergence and public-private partnerships in aid-for-trade practice. Over 65 percent of the 219 lead firms surveyed declared that they were engaged in actions aimed at better connecting developing countries to their value chains. These actions are primarily led by the companies themselves, but are also significantly undertaken in association with governments and donor agencies, with more than 40 percent of the lead firms involved in projects led by development agencies (Figure 3.14).

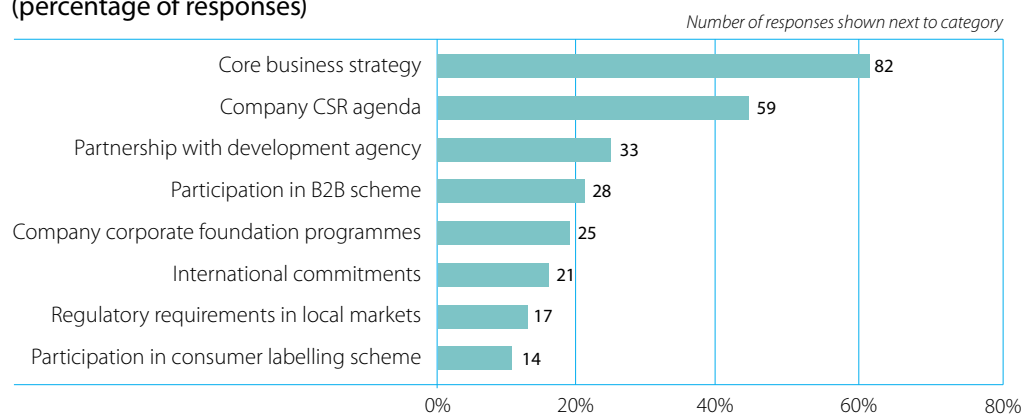
Increasingly, a new generation of programmes for better connecting developing countries to value chains has emerged, involving donors, partner countries, private firms and civil society organisations. For example, the Grow Africa programme is a partnership platform convened by the Commission of the African Union, the New Partnership for Africa's Development (NEPAD) and the World Economic Forum and seeks to accelerate private-sector investments, enable multi-stakeholder partnerships, and expand knowledge and awareness of best practices and existing initiatives, with a view to fostering transformative change in African agriculture based on national agricultural priorities.

The main drivers of the engagement of lead firms in actions to better connect suppliers in developing countries to their value chains are company based. The most important driver is related to these firms' core business strategies (Figure 3.15). In addition, the corporate social responsibility (CSR) agenda of lead firms explains more than 40 percent of their actions in this area. Also important is participation in Business-to-Business schemes (*e.g.* suppliers' codes of conduct) and corporate philanthropy. For one out of four lead firms, their actions are mainly motivated in response to specific programmes in this area undertaken in partnership with development agencies.

According to lead firms, the impact of those actions has been largely positive: only a marginal share (less than 5 percent) of the participating firms found those actions had no impact or a negative impact. Efforts to better connect developing countries to their value chains helped lead firms develop new products, increase their exports and save costs. In addition, they achieved results that are perfectly aligned with the objectives of development community, such as: improved workers' skills, poverty alleviation, improved environmental performance, job creations, better infrastructure, better working conditions, and improved health among workers or local community. Consumers also benefited from lower prices (Figure 3.16).

Figure 3.15 Reasons for lead firms to better connect developing country suppliers to their value chains

(percentage of responses)

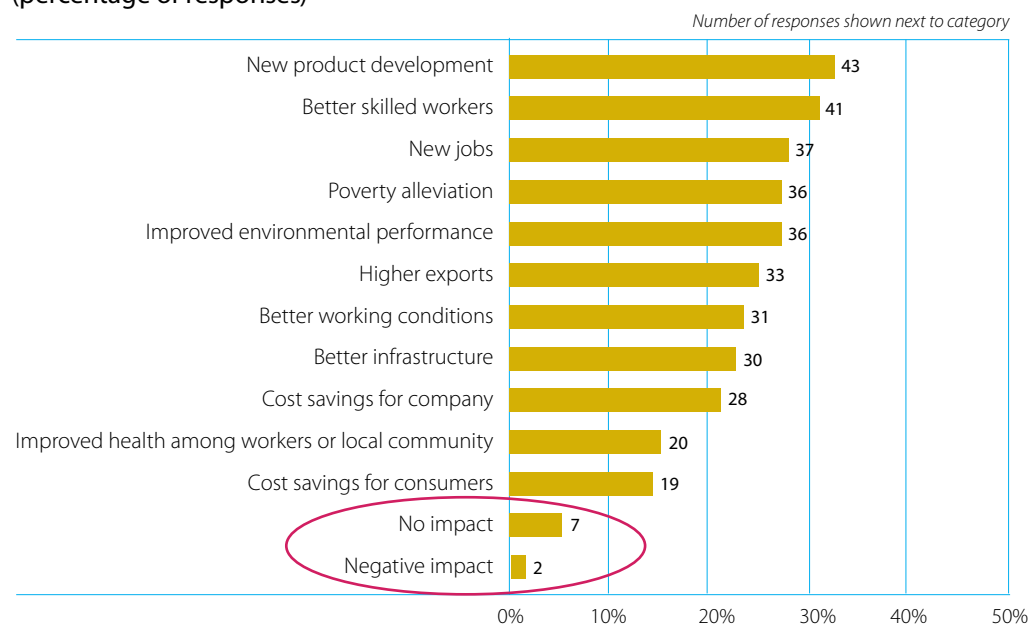


Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

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Figure 3.16 Lead firms' assessment of the impact of activities to connect developing country suppliers to value chains

(percentage of responses)

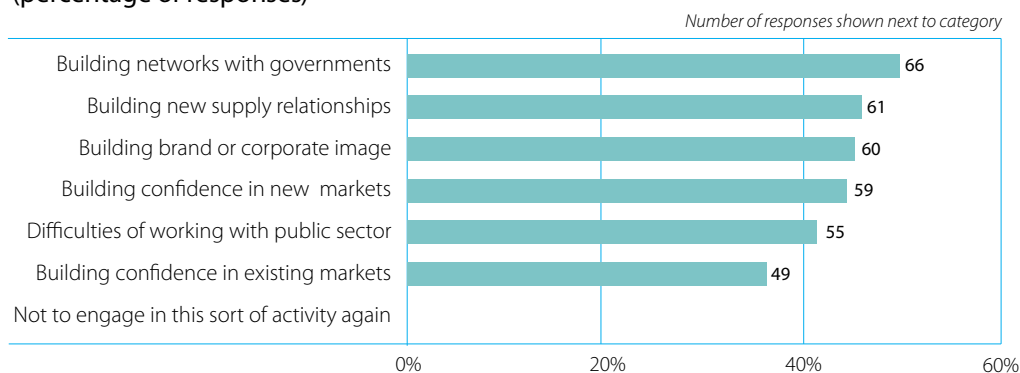


Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

StatLink  <http://dx.doi.org/10.1787/888932854499>

Lessons learned from these experiences are equally positive. None of the firms surveyed excluded their future participation in such activities (Figure 3.17). Lead firms found that their value chain development activities in developing countries were useful to their business: in particular, they helped build new relationships with suppliers and consumers, and contributed to improve their corporate image. However, close to 40 percent of the firms which participated in the survey still experienced difficulties in working with the public sector, suggesting room for improvement in public-private partnerships (Figure 3.17).

Figure 3.17 Connecting developing country suppliers to their value chains: lessons learned
(percentage of responses)

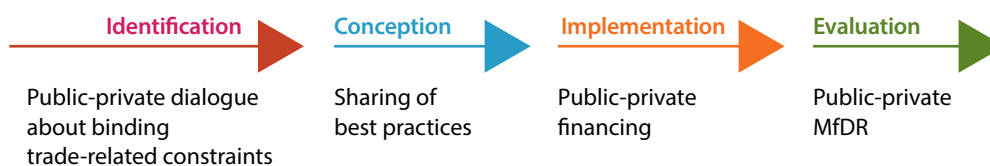


Source: OECD/WTO Questionnaire 2013, www.aid4trade.org.

StatLink  <http://dx.doi.org/10.1787/888932854518>

Engaging the private sector more closely in aid for trade could be achieved at four different stages of the aid-for-trade project life cycle: at the stage of identification of the projects to alleviate binding trade related constraints, where the views of the private sector could be solicited to provide information about obstacles to be removed or incentives to be improved (OECD, 2013c); at the stage of conception of the projects, where the private sector could share best practices they have observed from other aid-for-trade programmes or programmes they have implemented themselves; at the implementation stage of the projects, where governments, donors and private companies could join forces to scale up their actions and maximise their impact; and at the stage of management and evaluation of the projects, where the private sector could provide evidence of success or failure (Figure 3.18).

Figure 3.18 Public-private management of the aid-for-trade programmes



Source: OECD (2013c)

CONCLUSIONS

Value chains create opportunities for economic growth in developing countries. The analysis of agri-food, ICT, textiles and apparel, tourism, and transport and logistics value chains highlights that developing countries are integral to these value chains – and can use their participation in them to achieve growth, employment and poverty reduction objectives. The responses to the OECD/WTO questionnaire also highlight that there is much scope to improve their participation, with many developing countries paying a competitiveness penalty due to inefficient border procedures, high tariffs, non-tariff barriers that unnecessarily constrain goods or services trade, restrictions on the flow of information, impediments to FDI, and restrictions on the movement of people. The challenge for developing economies is to design and implement broad strategies that tackle these key barriers to integration and upgrading in value chains.

The responses to the OECD/WTO questionnaire indicate that value chains are indeed increasingly influencing donor programming. Bilateral donors' experience with value chains tends to be especially in the agriculture and food sectors, in addition to fish and fish products, textiles and apparel, and tourism. Multilateral donors tend to have more experience in transportation, financial services, and business and professional services, while for providers of South-South trade-related co-operation, textiles and apparel as well as automotive products are more prominent.

The main policy priorities of the governments of developing countries, *vis-à-vis* expanding their exports of goods and services, are to add value to their exports and to address export competitiveness issues. The main obstacles cited in this context were inadequate domestic infrastructure, access to trade finance, and standards compliance issues. Donors and South-South partners also pointed to the inability to attract foreign direct investment and the lack of comparative advantage. Increased exports and economic growth, together with employment and poverty alleviation, were rated the most important impacts of connecting to value chains by developing countries.

Developing country suppliers all ranked access to finance (in particular, trade finance) as the main obstacle preventing them entering, establishing or moving up value chains. Transportation and shipping costs, inadequate infrastructure and regulatory uncertainty (often tied to a complex business environment) were also cited as major obstacles, together with a lack of labour force skills. Among lead firms customs procedures ranked high across all five sectors as a particular obstacle to bringing developing country suppliers into their value chains. Other prominent concerns included regulatory uncertainty (reflecting developing country suppliers' issues with the complex business environment) and standards compliance issues. Informal practices and payment requests were also cited as of particular concern in their relationships with suppliers.

Factors influencing sourcing and investment decisions cited by suppliers and lead firms included production and labour costs, standards compliance, production quantity and turnaround time (a particular issue for textiles), and investment and tax incentives. Labour skills also scored highly, particularly in the ICT, textiles and apparel and tourism sectors, as a factor influencing investment decisions. Poor business environments, customs delays, lack of regulatory certainty, and corruption and graft were cited as factors negatively influencing sourcing and investment decisions.

These results also provide clear guidance about where aid for trade could help developing countries connect to value chains. There is a clear match between the perception of governments, donors and the private sector on the issues to be addressed. The priorities revealed by the survey could help to establish closer co-operation and synergies between the public and private sector in identifying aid-for-trade projects, financing their implementation, improving their monitoring and impact assessment, and ultimately increasing aid effectiveness. Such an approach would be very much in line with the Paris Declaration (2005), the Accra Agenda for Action (2008) and the Busan Partnership for Effective Development Cooperation (2011).■

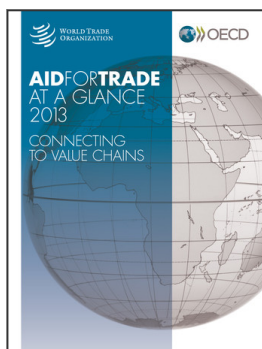
NOTES

1. Not all value chains are the same. Among other things, they differ in degrees with respect to the extent of market competition within the chain, barriers to access to the final market, and the control exerted by the lead firm (over technology, product specifications, and branding). Gereffi, *et al.* (2005) distinguish five general types of value chains, each with a different “governance” and role of firms: (i) *Market-driven* chains in which both buyers and suppliers have multiple sources of transactions, the price is fully market determined, and the cost of switching to new partners is low; an example is commodity markets; (ii) *Modular* chains in which suppliers produce to the specification of the buyers using generic technology; examples can be found in the electronics industry; (iii) *Relational* value chains in which interactions between buyers and sellers are mutually dependent, usually have sustained involvement over time, and are based on family or ethnic ties that tend to cement business relationships; an example is many apparel chains; (iv) *Captive* chains in which the lead firm controls a highly differentiated product, the key technologies, and/or product standards; suppliers have little incentive to move outside the production chain to work with the competitors; leading electronic firms such as Apple have these types of supplier relationships; (v) *Hierarchical* chains in which the buyer-supplier relationship is internal to the firm; auto companies have many suppliers that are internal to the firm; all intra-firm trade falls into this category.
2. Developed by the World Bank and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).
3. See, for example, the knowledge-sharing programme *Capturing the Gains* at www.capturingthegains.org/.
4. The International Trade Centre (ITC) has launched a review of voluntary standards. See: www.standardsmap.org.
5. See www.intracen.org.
6. The Abuja Declaration (2010) available at: www.hlcd-3a.org/.
7. www.unido.org/businesspartnerships.html.
8. www.3adi.org/haiti.
9. ITC has produced a guide providing an overview of financing issues from the perspective of small exporters, which discusses the financial instruments that are most suitable, which service providers are most relevant, and how to approach them.
10. Of the 89 lead firms that responded, 54 came from a total of 36 developing countries – with firms from Argentina, Barbados, Costa Rica, Guatemala, Mexico, Nigeria and Pakistan each submitting three or more responses. Of the 89 lead firms, 10 responded that their turnover is in excess of USD 1 billion per annum.
11. *UNWTO Tourism Highlights, 2012 Edition*, <http://mkt.unwto.org/en/publication/unwto-tourism-highlights-2012-edition>.
12. <http://icr.unwto.org/en/content/un-steering-committee-tourism-development-sctd>.
13. The OECD/WTO survey involved 96 respondents from a variety of developing and developed countries. Although it is a small sample, and results need to be treated with caution, it provides a useful indication of private sector sentiment in the transport and logistics value chain.

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