



Trade Hot Topics

Infrastructure for Trade Development

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Background

One of the biggest infrastructure projects in Africa in recent years has been the construction of a bitumen road Corridor linking landlocked Addis Ababa in Ethiopia to the Kenyan port of Mombasa. The Corridor will help reduce transport and shipping costs between Kenya and Ethiopia and increase the volume of Ethiopian goods transiting through the Mombasa Port. There is wide recognition today that international trade and the effective participation of countries in the global economy is influenced by a host of factors besides level of tariffs and quantitative trade restrictions. These other factors include prominently the availability and quality of infrastructure. In essence, infrastructure investment that reduces trade costs promotes competitiveness and facilitates regional economic integration. Numerous studies have shown the importance of the provision of adequate quality infrastructure in determining trade performance of developing countries.¹

This issue of *Commonwealth Trade Hot Topics* provides a snapshot of the linkages between trade and infrastructure from the perspective of developing countries, highlighting the lack of adequate and quality infrastructure as a barrier to trade.

Different types of infrastructure needs

The major difficulty in analysing issues on trade and infrastructure involves identifying the infrastructure that has a direct effect on trade. This is a challenge as the concept of infrastructure is generally very wide and all-encompassing to include the indirect effect on trade. In fact all types of infrastructure affect trade directly or indirectly.

One way of going around this definitional problem, according to the 2012 Global Enabling Trade Report, involves looking at the factors which enable trade through identifying sets of indicators, including domestic and foreign market access, efficiency of customs administration, efficiency of import-export procedures, transparency of border administration, availability and quality of transport infrastructure, availability and quality of transport services, availability and use of information and communication technologies (ICTs), regulatory environment, including access to trade finance, and physical security. While it is difficult to measure the

¹ Limao, N and Venables, A J (2001), Infrastructure, Geographical Disadvantage, Transport Costs, and Trade, *World Bank Economic Review*, 15 (3), p.451-479; Behar, A and Venables, A J (2010), Transport Costs and International Trade, http://works.bepress.com/alberto_behar/17/

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quality of infrastructure, it is possible to measure its availability, for instance through using data on the percentage of paved roads out of total roads, the number of fixed and mobile telephone subscribers, the number of telephone mainlines, freight of air transport, etc.

There is, however, a general agreement on the dearth of data on trade-related infrastructure in least developed countries (LDCs), small vulnerable economies (SVEs) and Sub-Saharan Africa (SSA) making it difficult to have a clear picture of the adequacy of infrastructure and assess its impact on trade.

Customs and other border procedures related infrastructure

Customs related matters have received a lot of attention recently due to the growing recognition of customs' key role in facilitating trade. It is the interface between importers and exporters and other business operators. In fact, Customs' role extends much beyond the strict confines of international trade *per se* as it has a socio-economic importance for a country – it controls the flow of goods across a country's borders, hence protecting the country from illicit traffic and undeclared goods, ensuring compliance with standards, health and safety regulations and intellectual property of a country among others, acting as a protecting agent for its citizens. Due to this very role, the capacity of a country to effectively trade with its partners is very much dependent on the efficiency of its customs authorities and the customs related infrastructure in place – rapidity in releasing/clearing of goods, valuation, and ensuring compliance with import and export procedures.

Recent studies have focused to a large extent on the benefits of trade facilitation which includes customs related measures and infrastructure. Analysis by the World Bank suggests that raising global capacity in trade facilitation (port efficiency, customs, regulatory transparency, and information technology used in trade transactions) halfway to the global average would increase world trade by US\$377 billion.² The analysis also found that the scope and benefit of unilateral trade facilitation reforms are very large and that the gains fall disproportionately on exports. On the other hand, the Organisation for Economic Co-operation and Development (OECD) 2013 Trade Facilitation Indicators estimate that comprehensive implementation of all measures currently being negotiated in the World Trade Organization's (WTO) Doha Development Round would reduce total trade

costs by 10 per cent in advanced economies and by 13 to 15.5 per cent in developing countries. Reducing global trade costs by 1 per cent would increase worldwide income by more than US\$40 billion, most of which would accrue in developing countries, according to the OECD.

Yet developing countries face several challenges, particularly in terms of the necessary infrastructure to ensure customs efficiency. For example, the burden of customs procedures for SSA, LDCs and small states in Table 1 shows to be inefficient, and has arguably been sliding down towards extreme inefficiency between 2010 and 2012 compared to the world's that has remained constant over the same period. This is partly because resources needed to implement trade facilitation measures were considered onerous for many of them.

The recently concluded WTO Trade Facilitation Agreement (TFA) not only provides binding commitments across WTO members to expedite cross-border movement of goods and services through streamlining customs procedures and improved co-operation among WTO members on the simplification and harmonisation of international trade procedures, but also provides for measures to help developing countries fully implement trade facilitation measures. WTO developed countries agreed to provide assistance and support to developing countries and LDCs, including to their private sector trade facilitation reform activities to help in the effective implementation of the TFA in these countries. It is hoped that the agreement will increase customs efficiency and effective collection of revenue, and help small businesses access new export opportunities through such measures like transparency in customs practices, reduction of documentary requirements, and processing of documents before goods arrive.

Transport infrastructure and services

Transportation costs can represent a greater barrier to trade than policy induced obstacles, such as tariffs, particularly to a number of developing Commonwealth member states, some of which are small, island countries, remote from markets and others landlocked. However, it is generally accepted that closing the transport infrastructure gap in LDCs, SVEs and SSA will contribute to economic prosperity and sustainable development. The rehabilitation of

² Wilson, J.S, Mann K L and Otsuki, T (2005). 'Assessing the Benefits of Trade Facilitation: A Global Perspective', World Bank Policy Research Working Paper 3224.

existing transport infrastructure and the development of new infrastructure will facilitate domestic trade, increase regional and international trade, particularly through reduced costs of doing business and enhancing competitiveness in domestic, regional and global markets. This will also, in turn act as a catalyst to economic transformation and diversification through industrialisation and value-added processing. In the case of road construction, for instance, land along the road will become more valuable, attracting outside investors and jobseekers. But most LDCs, SVEs and SSA countries have inadequate transport infrastructure with much of it remaining underdeveloped and not up to international standard in terms of both quality and quantity, thereby constraining competitiveness. For example, much of the infrastructure in SSA was developed during the colonial era, designed to enhance the extraction of resources for export to the industrialised world. Some countries have had their infrastructures destroyed because of a prolonged period of civil war, which ineffectively had considerable impact on the productive sector. Such transport infrastructure provisions fall short in meeting the demands for growing economies as they are a key constraint to doing business on the continent.

On the other hand the quality of transport infrastructure in LDCs, SVEs and SSA is of lower standard. Table 1 shows that the quality of port

infrastructure in SSA, small states and LDCs is still underdeveloped and not very efficient by international standards.

One of the major reasons for the poor quality is poorly maintenance because of limited financial resources. Moreover, transport infrastructure projects are very expensive and a number of countries cannot afford to fund high quality projects. For example, the African Development Bank estimated that Africa will have to invest US\$93 billion annually, until 2020, to close its infrastructure deficit. The Development Bank of Southern Africa finds most infrastructure projects, especially transnational development corridors, not ready for finance or 'bankable', largely because the costs for project preparation are unaffordable. However, despite the prohibitive costs involved, there are efforts to improve on the transport infrastructure and its quality. This is in recognition of the importance of transport to the development of developing countries' economies – national or regional – and the need to try and close transport deficits and contribute to increased trade flow and sustainable development.

ICTs and e-commerce infrastructure

Information and communication technology plays a critical role in trade development, especially in today's world where efficiency and rapidity of reaction are

Table 1: Quality of port infrastructure and burden of customs procedures

Region	Indicator Name	2010	2011	2012
World	Quality of port infrastructure, (World Economic Forum, WEF) (1=extremely underdeveloped to 7=well developed and efficient by international standards)	4.3	4.3	4.3
	Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient)	4.2	4.1	4.1
Sub-Saharan Africa (all income levels)	Quality of port infrastructure, WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards)	3.8	3.8	3.8
	Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient)	3.9	3.9	3.8
Small states	Quality of port infrastructure, WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards)	4.3	4.2	4.2
	Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient)	4.0	3.9	3.9
Least developed countries: UN classification	Quality of port infrastructure, WEF (1=extremely underdeveloped to 7=well developed and efficient by international standards)	3.5	3.4	3.5
	Burden of customs procedure, WEF (1=extremely inefficient to 7=extremely efficient)	3.9	3.7	3.6

Source: World Bank

central in accessing markets, responding to customers and channelling goods and services across borders. The boom of e-commerce and e-trade has made it almost inevitable for business operators to embrace technological development offered by ICT – contact with potential customers, advertisement, communication of sales documents and so on are the areas requiring ICTs. Effective telecommunications provide a low-cost channel for searching, gathering and exchanging information which, in turn, is a key input in all economic activities. Hardly any business today can operate without telecommunications facilities. For many industries, the telephone is the primary point of selling and interaction with buyers and sellers, and the internet is an increasingly important channel for marketing, and for sales for some industries. The importance of telecommunications in services trade is even more pronounced as it can be more easily traded online.

Essentially, however, the effective functioning of telecommunications depends on the enabling infrastructure. In fact, telecommunications networks provide the supporting infrastructure for such information flows and for internet access. For example, the East African Submarine Cable System, which is a fibre-optic cable, delivers 3.84 terabits per second to 18 countries, providing affordable high speed information download. In addition, for these to be efficient and be able to bring a significant contribution to operators, a country requires infrastructure which provides good access to telephony, rapid broadband connections, information technology products and satellite communications. Poor telecommunications infrastructure leads to high telecommunications costs and delays in entering into and enforcing contracts. Many countries which have developed the telecommunications infrastructure find themselves leading the development of certain sectors, especially related to services trade which are increasingly taking place across borders, thanks to technological advancement. For many developing countries, telecommunications have created new industrial niches such as the establishment of call centres and favoured the creation of new Cyber cities (e.g. Ebene Cyber City in Mauritius).

According to Internet World Stats, in 2012 Africa had the world's lowest internet population penetration rate of 15.6 per cent and the Caribbean 32.4 per cent. There is need for improved penetration if countries in these regions are to tap from such infrastructure facilitating trade. This is because the internet has expanded the scope of what is considered as

tradeable. Many products traditionally traded as goods across borders are now being negotiated in digitalised format (e.g. books, gaming and entertainment). A typical example is the ordering and delivery of a book through digital form which, due to the medium selected circumvents border measures, like duties or taxes. This can be compared with a book which is physically delivered and subject to the rules governing the WTO, that is, application of the requisite tariffs that inevitably increase the cost of the item. There are varied views on the effect which e-commerce has on different aspects of development. For some, digital trade is believed to create an improvement in the country's terms of trade, thereby improving economic welfare.

Further, the internet has become a medium of providing many back-office services, such as electronic publishing, website design and management, customer call centres, medical records management, hotel reservations, credit card authorisations, remote secretarial services, mailing list management, technical online support, among others.

Therefore, goods can be pre-purchased and purchased online and subsequently delivered in physical form. This is a core element of e-commerce, as the ability to purchase even without electronic delivery, stands to greatly expand trade in physically delivered goods. Such trading structure (where purchase is electronic while delivery is physical) is impacted by having the requisite infrastructure (access, security, data protection) in place to facilitate both purchase and delivery. While taking this structure into account, more emphasis is placed on goods and services which benefit from the three stages of pre-purchase, purchase and delivery via the internet. Pre-purchase and online purchase is just beginning in a number of developing countries. For example DealDay is an initial online trading venture which has become a top-grossing commerce site in Nigeria offering Groupon-style deals.

The advantages offered by ICT and e-commerce are particularly significant for small states and LDCs which have special characteristics such as distance from market, small domestic markets, poor transport infrastructure and the prevalence of micro, small and medium sized enterprises and producers. Bridging geographic distances, facilitating access to remote areas/markets, access to a wide range of services and small business development are some of the potential gains from e-commerce and the development of a viable

telecommunications infrastructure. There is an indication of an increase in the usage of internet in SSA, LDCs and small states. For instance, the average number of internet users rose from 1 in 100 in 2001 to 6 in 100 in 2011 for LDCs, 4 in 100 to 20 in 100 for small states and 1 in 100 to 13 in 100 in SSA over the same period. However, this rise in usage is low compared to that in high income OECD countries, which rose from 38 in 100 in 2001 to 77 in 100 in 2011. The technology on computers emerging with mobile phones is in its infant stage in SSA, LDCs and SVEs, but already there are already 84 million internet-enabled mobiles in Africa. In 2012, there were approximately 52 million Facebook users in Africa and 7 million in the Caribbean, including companies. There are therefore tremendous merits in investing in ICT in small states, LDCs and SSA in order to explore the full potential telecommunications and e-commerce can offer for the socio-economic development of these groups of countries and ensuring their integration into the global market place.

However, e-commerce has wide-ranging implications which need to be thoroughly studied such as access, tax and revenue implications and intellectual property rights. Also, there is an enormous technology, infrastructural and regulatory (policy) gap to fill in many countries to unleash the full potential of e-commerce in these countries.

Regulatory environment and underdeveloped institutions

As defined above, infrastructure also refers not only to the physical infrastructure such as transport systems but soft infrastructure, such as regulatory environments, policies, enforceable legal provisions and transparent and predictable government procedures and underdeveloped institutions. The regulatory environment in a country clearly helps its operators to do business and trade and forms an undeniable aspect of trade infrastructure. The Doing Business Report 2013 highlighted regulations affecting 11 areas of the life of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, and employing workers. There is, therefore, need to have an understanding of the benefits of changing infrastructure regulatory frameworks as necessary adjustment required to stimulate both regional and international trade. A few examples suffice, as elaborated below.

The introduction of Single Windows, for instance, has been seen to be powerful tools to facilitate trade. To this effect, the WTO Agreement on Trade Facilitation highlights the need for WTO members to endeavour to establish a single window or maintain one to enable traders to submit documentation through a single entry point. Single windows involve a number of improvements in the trading environment, which include harmonising and standardising documents, procedure and requirements and provide an electronic facility that co-ordinates the exchange of trade related information between traders and government agencies. This allows the trader to submit all required information and data through a single electronic interface instead of having to deal with a number of government authorising agencies. This is a far cry from previous arrangements in which the trader had to handle numerous documents to meet rules and regulations guiding international trade and transport. This old procedure meant that traders had to wait for long processing times and meet high transaction costs, including transport costs, customs clearance and warehousing costs. But under the single window, all these problems are alleviated, with significant impact on the economy. El Salvador, though not Commonwealth, gives an example where the estimated saving on time through a single window is estimated at 1.4 per cent of GDP.³ The development of a regional single window will also go a long way in facilitating regional trade as traders will have access to information on requirements for trade in various regional destinations.

On the other hand given the importance of transport to trade and development, Africa came up with the Sub-Saharan Africa Transport Policy Programme (SSATP), a well-established partnership aimed at facilitating policy formulation and development and transport related capacity-building. SSATP has been seen as a transport policy development forum in SSA that brings together key decision-makers and stakeholders to formulate and develop transport policy, and at the same time develop networks comprising specialists in most transport related fields in SSA. Linked to transport policy is the issue of customs regulations and laws, the facilities in place to ease and facilitate the clearance of goods such as the 'one stop shop'. Administrative procedures at customs are crucial, including rationalisation of the customs transit system in order to reduce inspection time and simplify declarations and the

² Link Africa (2013). 'A powerful tool to facilitate trade', *Link Africa*, Number 1, March–April, p.6.

documentation process. In some cases, it can also mean the construction and rehabilitation of border posts and provision of equipment to strengthen customs processing capacity and other modernisation equipment.

Given the importance of trade finance as a lubricant that powers trade as an engine for growth, there arises the need to improve market structures to permit better regulations, better information including statistical data and better capacity of SVEs, LDCs and SSA countries to participate in trade finance markets. This will help reduce the sensitivity of trade finance to market failures in other segments of financial markets. Producers and traders, particularly small and medium-sized enterprises (SMEs) in SVEs, LDCs and SSA face structural problems including weak creditor rights and poor judicial enforcement mechanisms and infrastructure weakness in accessing affordable trade finance. Many SVEs, LDCs and SSA countries have underdeveloped domestic banking systems. Domestically, therefore, the availability of trade finance has been scarce and where available it has tended to be at high costs. This creates a trade finance gap, which arises as a result of the supply of trade finance being inadequate to clear markets. The trade finance gap creates a formidable barrier to trade as funds needed at all stages of export processing are unavailable resulting in a failed export transaction. Because of the unreliable domestic supply of trade finance, SSA, SVEs and LDCs have, for example, largely been dependent on international trade finance banks. But these have also been unreliable, especially during financial crises when banks cut on credit lines to developing countries as they seek to build up their balance sheets in response to market pressures. For example, 2008–2009 saw the tightening of credit conditions in the global financial markets and consequently constraining trade finance in general, particularly for those developing countries dependent on external finance. Moreover, besides being hit hard by the crisis in terms of declining capital flows, the G20 trade finance package that was mooted to support trade finance and offer additional capacity to traders and bankers until 2010 did not benefit much exporters from SSA, SVEs and LDCs. This raises the need for developing trade finance infrastructure that supports trade finance in developing countries during crisis and non-crisis periods and keeps trade finance markets under watch.

Conclusion

Infrastructure development and its quality definitely impacts positively on trade. It is therefore essential that more attention be given to infrastructure for trade development strategies. A trade policy without the right accompanying trade-related infrastructure might not deliver on the expected results. It provides the enabling environment, both physical and institutional, which helps generate export response. However, investing in quality infrastructure is onerous.

Given the amount of resources involved in developing quality infrastructure, SSA, SVEs and LDCs should fully utilise all forms of assistance available to them – both from bilateral and multilateral sources. Specifically, Aid for Trade (Aft) provides a critical instrument that could be used to fill in the trade-related infrastructure gaps in developing countries as it is targeted towards helping developing countries in overcoming their supply-side constraints, build their economic infrastructure and increase competitiveness. The initiative is about mobilising funding, policy coherence and getting developing countries to use trade in the service of their development objectives. It is in this realisation that the 2013 WTO Bali Ministerial Conference decided on the desirability of the new Aft Work Programme to be framed by the post-2015 development agenda. There is no doubt also that aid for trade resources will need to flow increasingly towards developing countries so that they can be integrated into the global economy.

International Trade & Regional Co-operation Section at the Commonwealth Secretariat

This Trade Hot Topic is brought out by the International Trade and Regional Co-operation (ITRC) Section of the Economic Affairs Division (EAD) of the Commonwealth Secretariat, which is the main intergovernmental agency of the Commonwealth – an association of 53 independent states, comprising large and small, developed and developing, landlocked and island economies – facilitating consultation and co-operation among member governments and countries in the common interest of their peoples and in the promotion of international consensus-building.

ITRC is entrusted with the responsibilities of undertaking policy-oriented research and analysis on trade and development issues and providing informed inputs into the related discourses involving Commonwealth members. The ITRC approach is to scan the trade and development landscape for areas where orthodox approaches are ineffective or where there are public policy failures or gaps, and to seek heterodox approaches to address those. Its work plan is flexible to enable quick response to emerging issues in the international trading environment that impact particularly on two highly vulnerable Commonwealth constituencies – least developed countries (LDCs) and small states.

Scope of ITRC Work

ITRC undertakes activities principally in three broad areas:

- It supports Commonwealth developing members in their negotiation of multilateral and regional trade agreements that promote development friendly outcomes, notably their economic growth through expanded trade.
- It conducts policy research and consultations increase understanding of the changing of the international trading environment and of policy options for successful adaptation.
- It contributes to the processes involving the multilateral and bilateral trade regimes that advance the more beneficial participation of Commonwealth developing country members, particularly small states and LDCs.

ITRC Recent Activities

ITRC's most recent activities focus on assisting member states in the WTO Doha Round and the Economic Partnership Agreement (EPA) negotiations involving the African, Caribbean and Pacific countries (ACP) the European Union (EU), undertaking analytical research on a range of trade policy and development issues, and supporting workshops/dialogues for facilitating consensus-building on issues of Commonwealth members' interest, exchange of ideas, and disseminating results from informed analysis.

Selected Recent Meetings/Workshops supported by ITRC

10-11 December 2013: Regional Workshop on South-South Trade and Regional Value Chains in Sub Saharan Africa held in Nairobi, Kenya

5 December 2013: WTO 9th Ministerial event: Panel Session on Integrating Trade Issues in Post-2015 International Development Framework held in Bali, Indonesia

4 December 2013: WTO 9th Ministerial event: Discussion Session on the Future of Aid for Trade held in Bali, Indonesia

3 December 2013: WTO 9th Ministerial event: Reflections on Global Trade: From Doha to Bali and Beyond held in Bali, Indonesia

25-27 October 2013: International Conference on Upcoming Ninth WTO Ministerial in Bali: Securing the LDCs Deliverables held in Dhaka, Bangladesh

25-26 September 2013: ACP Brainstorming Meeting on the 9th WTO Ministerial Conference and the Post-Bali Framework held in Geneva, Switzerland

2-4 September 2013: 6th South Asia Economic Summit (VI SAES) held in Colombo, Sri Lanka

2-3 July 2013: Regional Consultation Conference on the Road to Bali held in Colombo, Sri Lanka

25-26 June 2013: Commonwealth Workshop on Multilateral Trade Issues: Development perspectives for Small Vulnerable Economies (SVEs) and Least Developed Countries (LDCs) held in Geneva, Switzerland

6-7 June 2013: Regional Consultation: Promoting Regional Supply Chains in Sub-Saharan Africa: Leather and Leather Products held in Addis Ababa, Ethiopia

2-3 May 2013: International Conference on Regional Trade and Economic Cooperation in South Asia: Trends, Challenges and Prospects held in Delhi, India



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