CHAPTER 4

Regional Development and Industrialization

Different models towards industrialization are implemented in Sub-Saharan Africa (SSA) countries in order to improve their position in the Global Value Chain and generate economic development. Special Economic Zones, Clusters, Open Incubators and Corridors presented in this chapter are able to generate together or separately structural transformation. Their impact on the current policies is limited for the moment, but in certain conditions proposed in the last chapter the situation could be improved for all stakeholders.

Introduction

Between 1990 and 2005, labour productivity fell by 1.3%. Some countries such as Ghana, Ethiopia and Malawi did experience positive structural transformation, but not enough to fundamentally generate economic development (De Vries et al. 2013; McMillan et al. 2014; UNECA/AU 2014).

When growth rebounded during the 1990s, we observe a rapid relocation of workers across sectors. The agricultural employment share fell from 61.6% in 1990 to 49.8% in 2010, but manufacturing employment share fell from 8.9% in 1990 to 8.3% in 2010 (deVries et al. 2013).

Page (2012) argues that deindustrialization after 1990 was characterized by a declining diversity and sophistication of the region's manufacturing

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sectors. Workers were absorbed in market services sectors, in particular distribution services (Rodrik 2013). The share of distribution services almost doubled to 20.1% in 2010. One-fifth of Africa's labour force is employed in the distribution sector (Jorgenson and Timmer 2011).

Few Sub-Saharan Africa (SSA) countries have managed to diversify their export structure away from unprocessed commodities (AfDB, OECD, UNDP 2015b). In eight countries, a single commodity accounts for over three-quarters of exports; in seven countries, only two commodities account for the same. Some countries still largely depend on exports of a single crop. The dominant commodity is oil. Ethiopia, Rwanda, Senegal and Uganda without sizeable mineral resources have managed to maintain growth by diversifying their exports. They have opened up sectors with greater added value, which contributes to their structural transformation (McMillan et al. 2014).

The changing international economic environment, increasing manufacturing costs in Asia, the shift from the manufacturing of end products to task-based production (UNIDO 2008), and the development of outsourcing and intra-firm trade (Dinh et al. 2012) open up, according to the World Bank (2009), opportunities for light manufacturing. It requires less capital and fewer technical and managerial skills and remains viable in fragile economies (AfDB/OECD/UNDP 2014).

Global Value Chains (GVCs)

GVCs offer an opportunity to integrate into the world economy, but the gains from GVC participation are not automatic. Draper and Lawrence (2013) argue that due to limited production capacity, import substitution is not an option for many countries. They therefore recommend integration into multinationals' (MNCs) value chains, which typically require building capacities in a limited range of specific tasks. Banga et al. (2015) use the concept of regional value chains (RVCs), which may focus on achieving interactive transformation between SSA economies.

GVC Types in SSA Countries

There is a significant degree of heterogeneity across SSA countries, with some countries having fared much better than others (IMF 2015a).

A majority of countries (24 out of 35) have made progress. The improvement is most widespread among non-oil commodity exporters, in countries such as Burkina Faso, Central African Republic, the Democratic Republic of the Congo (DRC), Ghana, Guinea, Niger, Sierra Leone and Zimbabwe.

Among the best performers, progress within the East African Community (EAC) has been particularly strong, in Kenya, Tanzania and Uganda (Drummond et al. 2015; Sutton 2012).

Five countries in particular stand out, having seen the share of foreign value added in their exports increase by 5% or more in the last two decades: Ethiopia, Kenya, the Seychelles, South Africa and Tanzania. In these countries, the sectors that have benefited the most from the deepening of integration include agriculture and agro-business, textiles, leather products, and tourism in Ethiopia and Tanzania.

The four types of proposed value chains include those focusing on:

- staple food products primarily orientated towards national and regional markets such as rice, maize and cassava
- traditional export products orientated towards international markets such as cocoa, coffee and cotton
- non-traditional products orientated to national, regional and international markets such as fisheries and fish products, and cotton-textile clothing (CTG)
- manufactured products for regional and international markets.

GVC and Oil

Nigeria's oil GVC accounts for 83% of exports and two-thirds of government revenues. Upstream (exploration and production) is dominated by MNCs. Downstream (crude oil processing and marketing) has some local firms and refineries. Nigeria gives priority to local operators in awarding oil field licences and supports skill upgrading and capacity development. Upstream activities implemented by local businesses include construction, support services such as maintenance, telecommunication and control systems (Oyejide and Adewuyi 2011). The downstream activities are limited and not efficient. The Nigerian National Petroleum Corporation has a refining capacity of 445,000 barrels per day against a production capacity of 2.5 million. Local refineries operate well below their capacity, undermining profitability.

Poor provision of infrastructure, corruption, security and poor access to finance are the main constraints to this value chain's development.

GVC and Leather—Textiles

Leather GVC started in 2009, when Xinxiang Kuroda Mingliang Leather Co (Jones 2013) signed a deal to open a US$27 million leather factory in Ethiopia based on local raw material, leather and low-cost manpower. Xinxiang Leather, in partnership with China Development Bank (CDB), formed a joint venture to finance the factory, with ownership split 55% to 45% between Xinxiang and CDB respectively.

The joint venture called China-Africa Overseas Leather Products opened in November 2010, an 80,000 square metre factory which has the capacity to produce 4.5 million pieces of processed leather. Ethiopia's leather industry also received an investment of US$2 billion from China Huajian International Shoe Company. The investment, in partnership with the China Africa Development Fund, started the establishment of a light manufacturing zone.

Textiles GVC has been initiated by Jiangsu Lianfa Textile Co. Ltd, a Chinese textile company involved in yarn spinning, dyeing, weaving, finishing, printing and garment manufacturing activities. The company announced a pre-investment assessment to build a US$500 million textile factory in Ethiopia (Abiye 2014).

Jiangsu Lianfa Textile Co, Ltd is engaged in the textile business in China with several branches in various countries, and sells woven fabric, apparel and textile exported to North America, the European Union (EU), Southeast Asia, South America and China. The company is based in Nantong, China. Factories outside Addis Ababa have been set up by Pittards Plc of the UK and Turkish textile manufacturer Ayka Tekstil.

Shaoxing Mina Textiles, a China-based company, has planned to set up a US$15 million textile and garment factory in the country (linkedin website 2015). The new textile and garment factory will come up in Sebeta, Oromia and would employ about 5000 people when fully operational.

Special Economic Zones (SEZ)

SEZ in China brought growth because they exploited advantages in natural and economic geographies (World Bank 2009: 254). Proximity to large urban agglomerations, coastal areas and good infrastructure allows for dynamic SEZs.

China supports a similar model in SSA countries based on exports to the EU and the United States utilizing existing trade preferences like the

EU's Everything but Arms (EBA) arrangement and the United States' African Growth and Opportunity Act (AGOA) (UNDP 2015).

Nigeria established its first SEZ in 1992, Zambia and Ethiopia in 2006 and 2007 respectively.

Nigeria

The Nigerian Export Processing Zones Authority (NEPZA) is the federal government agency that oversees the implementation of Free Economic Zone (FEZ) in Nigeria.

Lekki Free Zone (LFZ) and Lagos Free Trade Zone (LFTZ) are both located within the jurisdiction of Lagos State Government and are controlled by Lagos State Ministry of Commerce and Industry. Lagos State Government co-ordinates several large projects under development on the Lekki Peninsula:

- LFZ Project that is being run by a Chinese–Nigerian Consortium
- The LFTZ
- Lekki Port is owned by a Singaporean–Nigerian investor, Tolaram Group (World Bank 2011)
- An oil refinery and petrochemical production facility that is being developed by the Nigerian Dangote Group
- Lekki-Epe International Airport project is realized through a public–private partnership arrangement between the Lagos State Government and various private investors.

The LFZ and the LFTZ are already operational. The Lekki Port, Dangote's refinery and the Lekki-Epe Airport are expected to become operational by 2018.

LFZ

Lekki Free Zone Development Company FZC (LFZDC) is a Joint Venture incorporated in May 2006 between China-Africa Lekki Investment Ltd (CALI) as the majority shareholder (60%) and two Nigerian partners, the Lagos State Government (20%) for the land contribution and Lekki Worldwide Investment Ltd (20%) (en.calekki website).

LFZ benefits from the support of the oil refinery and hydrocarbon industrial park proposed by Dangote Industries, and the deep sea port at LFTZ.

Dangote Group is building a refinery with a processing capacity of 650,000 barrels of oil per day, a US$11 billion project.

LFZ attracted 21 enterprises with total invested capital of US$156 million. Another 79 companies are already registered in the zone.

The following are included in the 21 enterprises: Candel FZE—Agro Chemical formulation plant, Loving Home Furnishing FZE—office furniture manufacturing, Dabupum FZE—water pumps, Crownature Nigeria FZE—Garments factory have started their activities in the LFZ.

Lekki Zone Development Company (LZDC) builds its own gas-fired power plant that began its operations in May 2015. Compressed and liquefied natural gas is now sourced locally. Four GE Waukesha gas enginators were commissioned at the LFZ near Lagos, providing 12 megawatts (MW) of uninterrupted power supply to the first phase of the Lekki Development Zone.

LFTZ

The construction and development activities of LFTZ are being undertaken by Lagos Free Trade Zone Company, a company wholly owned by the Singaporean Tolaram Group. Established in 1948, Tolaram Group has since expanded operations in SSA countries to Ghana, Benin, Ivory Coast, Tanzania, Togo and DRC (Tolaram website).

The free trade zone project began in 2002 over 215 hectares of pristine land. In 2012, an additional 590 hectares of land have been acquired, marking the beginning of phase 2. Manufacturing interests span packaged foods, paper, floor coverings, textiles and personal care products.

Zambia

SEZs in Zambia are the initiative of Chinese companies (nse website) and the Zambian government. Three SEZs have been established: ZCCZ renewed of a former SEZ established in 2007, LS-MFEZ established in 2014 and CMFEZ, established in 2015.

Zambia-China Economic & Trade Cooperation Zone (ZCCZ)

ZCCZ is situated in the North East of Zambia close to the Republic Democratic of Congo (RDC) border and to Chambishi Copper Mine, which was obtained by the Chinese state-owned China Nonferrous Metal Mining Group (CNMC), through an international bid in 1998, for a term of 99 years. The mine's resources include 5 million tonnes of copper and 120,000 tonnes of cobalt, and involve a total investment of US$160 million.

ZCCZ is developed and managed by CNMC through its Zambian subsidiary ZCCZ Development Limited (CNMC 2015a).

CNMC is one of China's largest non-ferrous metal mining and processing companies, with international operations in Asia, Africa and Latin America and US$30 billion revenue in 2014.

The zone was initially established as the Chambishi MFEZ in 2007, and was extended in 2010 to include the Lusaka East MFEZ (MCTI 2015). The zone management offers one-stop shop services to its potential investors, including market research, legal advice, financing and visa, travel and accommodation arrangements.

The zone has approved 14 investment projects, and 50% are operational. The firms are in agro-processing, pharmaceuticals, beverages, new energy and logistics.

The Lusaka South Multi-Economic Zone (LS-MFEZ)

The Lusaka East MFEZ, is located adjacent to the Kenneth Kaunda International Airport, as an extension of the Chambishi MFEZ, and is focused on light manufacturing activities and services.

The construction of the LS-MFEZ Ltd office complex was completed in 2014.

The zone has approved 22 investment projects, out of which 12 have signed leasing agreements. The ratio of the foreign and local firms is 50:50. These firms are specialized in agro-processing, pharmaceuticals, motor assembly, plastics, beverages and service sectors (such as education, retail and finance). Two firms (NRB Pharma Zambia Ltd and Zambian Breweries Plc) have completed their factory and facilities and are in the testing stage. Three more have started or are ready to start construction. Zambian Fertiliser is setting up a new plant of US$2 million investment in LS-MFEZ.

These firms have generated over US$300 million (including committed) in total, with close to 1000 jobs (including the construction workers).

Chambishi Multi-Facility Economic Zone (CMFEZ)

Established in 2015 as a Chinese–Zambian co-operation, the zone has a Sino-Zambian Friendship Hospital, which offers comprehensive medical services to the zone staff and local citizens. The hospital has experienced doctors and quality medical facilities.

The CMFEZ has 48 firms operational, generating an accumulated investment of US$1.3 billion, and about 8211 jobs. The investors are mostly from mining, copper smelt, equipment assembling, construction, agro-processing and services (commerce, health and banking, etc.).

Herewith are some companies established in this SEZ:

Sino Metals Leach Zambia Limited, Chambishi Copper Smelter Limited, Fifteen MCC Africa Construction and Trade Limited, Reba Industrial Co-operation Limited, Zambia Non-ferrous Metals Exploration and Construction, Bolo Mining Investment, Tikto Industries Limited and JCHX Mining Construction Zambia Limited, CNMN Development Zambia Investment Company, Changesheng Mining Equipment Limited and Kilosail Corrosion-proof Technology.

Ethiopia

The Ethiopian Industrial Development Zones Corporation (EIZDC) is managing the FEZ.

Ethiopia aims to transform the economy via industrialization by attracting foreign investors to zones where key public services will be concentrated (Hamlin et al. 2014).

Ethiopia has made it a key priority to turn the country into a hub for light manufacturing. That strategy is bearing fruit: industrial output grew by 21.2% between 2013 and 2014, and now accounts for some 14% of GDP.

The Ethiopian government has set itself a target of $1 bn in textile exports by 2016. Between 2003 and Q3 2015, 11 of the 15 Ethiopian projects China has invested in have been in manufacturing.

Across Africa, the relationship with China has been one of the drivers of the establishment of SEZ (Klasa 2016).

Eastern Industrial Zone (EIZ)

EIZ, the first FEZ in Ethiopia, is located 35 km south east of Addis Ababa in the town of Dukem situated on the Addis Ababa–Djibouti highway and the Addis Ababa–Djibouti Port railway line, with its own railway station constructed by Export–Import Bank of China upon completion of the railway line constructions in 2016. The Djibouti Port handles most of Ethiopia's overseas trade and is located 730 km east of the zone.

EIZ is owned and managed by the Jiangsu Qiyuan Group (Qiyuan Group), a private Chinese investor. Initially the Jiangsu Yonggang Group (Yonggang Group) was selected by China's Ministry of Commerce through a competitive tender process in 2007 as the developer for the zone with the Qiyuan Group as a minority partner.

Due to financial difficulties caused by the global economic crisis, the Yonggang Group left the project in 2008, leaving the Qiyuan Group in charge of the zone's development and management (Brautigam and Tang 2011).

The Yonggang Group is among China's largest iron and steel producers with over 10,000 employees and an annual revenue of US$4.5 billion in 2010. The Qiyuan Group is a steel pipe and aluminium producer with approximately 1000 employees. The Group consists of 12 subsidiaries in China, two in the United States and five in Ethiopia.

Today, 27 Chinese companies have invested a total of US$205 million in the zone and created approximately 4500 jobs.

In 2010, the Zhongshun Cement Company, one of Qiyuan Group's subsidiaries operating in Ethiopia, was the first company to begin its operations in the EIZ. Since then, 26 other companies have joined, including producers of shoes, construction and packaging materials, steel products and garments, as well as companies focusing on automobile assembly and leather processing.

Huajian was initially unable to source its supplies fully from the local market. Today Huajian is able to source 80% of its raw materials from the local market.

Huajian's 3500 workers in Ethiopia produced 2 million pairs of shoes last year. Located in one of the country's first government-supported industrial zones, the factory began operating in January 2012, only three months after Zhang decided to invest. It became profitable in its first year and now earns $100,000 to $200,000 a month.

Bole Lemi Industrial Zone

The Bole Lemi Industrial Zone, established in 2012, is Ethiopia's first government-run SEZ. The zone is located about 10 km south east of Addis Ababa centre with direct access to the Addis Ababa International Airport and the Addis Ababa–Djibouti Port highway, which is Ethiopia's main import and export corridor.

To date 12 international shoes, textile and garment producing companies have invested in the zone, out of which five are in production, having created about 3000 jobs. The government of Ethiopia has invested US$113 million in the zone (Bole I).

In 2014, EIZDC decided to invest the $250 m World Bank loan into expanding the Bole Lemi SEZ outside Addis, the capital, as well as building an entirely new 'industrial hub' at Kilinito some 30 km south.

The Bole Lemi I and II sites are dedicated for industries engaged in textiles and leather, while the Kilinito site is for companies in the pharmaceuticals, food processing and construction areas, among others (welkessa website).

The International Labour Organisation (ILO) was launched in February 2016 (ILO 2016), a new project that aims at improving the development of a socially sustainable textile and garment industry in Ethiopia at the Arvind Lifestyle Apparel Manufacturing PLC located in the Bole Lemi Industrial Zone of Addis Ababa.

The new project, entitled 'Improving Industrial and Sustainable Development of Textile and Garment Industry in Ethiopia', is funded by Sweden, through Swedish International Development Cooperation Agency (SIDA), and H&M, and implemented by the ILO in collaboration with Ministry of Labour and Social Affairs (MOLSA), Ministry of Industry, Confederation of Ethiopian Trade Unions (CETU), Ethiopian Employers Federation (EEF) and other key stakeholders.

The role of the retailers, such as H&M, in this process supports the efforts to build a sustainable industry with a human face, where the rights of the workers are protected, that can deliver well-produced garments to the international market.

The ILO and H&M signed in September 2014 an agreement on sustainable global supply chains in the garment industry. The partnership is intended to establish a positive and innovative model for other brands and create a global alliance to promote the ILO's Decent Work Agenda in the supply chain of the global garment industry.

The main investments of international companies in textiles in Ethiopia in the period 2013–2014 (Ohno 2015) are as follows:

- The Mumbai-based ShriVallabh Pittie (SVP) group launched a US$550 million investment in Ethiopia in 2014 to set up a cotton mill that will produce cotton yarn fully for export (Fecade 2014).
- Hiroki Japan high-quality leather goods invested in leather jackets, shoes and other products. Shoes are contracted out to local producers (Fortune 2014).
- Jay Jay Mills from Tirupur, India specializes in apparel and home products for the age group of newborns, infants and toddlers.

Caters to reputed brands and retailers in the United States and the EU.
- Arvind India Denim Jeans export to the EU and the United States using tariff privileges and imported materials from Jay Jay Mills India.
- Shints ETP Garment Korea Garment Outer & Sports Wear (for US market using AGOA). Plans to hire 4800 employees. Occupies five sheds in Bole Lemi I and II.
- George Shoe Taiwan Leather shoes OEM Footwear for US and Chinese markets Employs 800 persons (2013).
- H&M Sweden Apparel for Western markets. Opened in 2012. Has production contracts with local factories.
- Huajian China Footwear OEM Footwear exporting to EU and North America. Employs 3500 people (2012).

Corridors

Corridors aim to build industrial and social facilities along with soft and physical transport infrastructure to develop adjacent regions (Byiers 2015*)*.

A key driver of corridors is the high transaction costs of trade and exchange. Exports of mining and agricultural products are behind the investment in transportation, energy, water and ports projects. Those investments are a preliminary condition to economic development. Corridors plan to help in regional integration.

Fraser and Notteboom (2014) classify corridors around ports according to trade type: domestic, transit (transporting the cargo of other countries), foreign (transporting primarily imports and exports of a country) and hybrids, depending on service catchment area.

One of the key features of the corridor approach is the linkage between regional trade policy and investments in infrastructure (Byiers and Lui 2013).

The concept of African Agricultural Growth Corridors was first proposed by the Norwegian fertilizer concern Yara International, at the 2008 United Nations General Assembly, and was subsequently expanded at World Economic Forums in Switzerland and Tanzania (africastrictlybusiness.com website). It involves converting underdeveloped arable land to commercial agriculture, served by an efficient logistics infrastructure of roads, railways, irrigation, storage, processing and ports. The concept was supported by Monsanto, Unilever and Syngenta.

Belgium, Canada, Denmark, Finland, the Netherlands, Sweden, the United States and the United Kingdom have pooled their support and established a single non-profit organization working across the EAC to further its integration agenda. Japan is involved separately under the Japan International Cooperation Agency (JICA) umbrella.

The development of a north–south international corridor linking these east–west international corridors will create wider, regional, efficient logistics networks integrating the five countries of Malawi, Mozambique, Tanzania, Zambia and Zimbabwe.

Major investments along the corridor are concentrated in agri-business and mining (World Bank 2013c).

TradeMark East Africa (TMEA) is an East African not-for-profit Company Limited by Guarantee established in 2010 to support the Northern Corridor Integration Projects (trademarkea website). TMEA is focused on ensuring that gains from trade result in tangible gains for East Africans. Its budget is US$650 million over 2011–2017. TMEA+ works in the five EAC countries and South Sudan to reduce trade costs on major transport corridors and improve the business environment for trade and investment.

The North–South Corridor

The North–South Corridor links Dar es Salaam in Tanzania to Durban in South Africa, through Zambia, Zimbabwe and Botswana. The Sena Corridor (from Blantyre to Beira Port) forms a part of the north–south international axis.

Along the corridor are concentrated mining, agriculture and manufacturing as follows (JICA 2013):

- Zambia: copper, grains, coffee, sugar and tobacco in the Copperbelt, Central and South Provinces. Manufacturing and agro-processing in Lusaka Province
- Botswana: copper and nickel, livestock and meat (beef) industry in northeastern Botswana
- Zimbabwe: soybeans, coffee, tobacco and cotton in central and eastern regions; fertilizer and chemical manufacturing industry in Harare and Bulawayo; pharmaceuticals in and around Harare
- South Africa: platinum, chrome and iron; manufacturing including automobiles and general machinery near Durban; horticultural

and floricultural products in the Free State and in Mpumalanga and Gauteng Provinces.

Major Recent Investments

- Nchanga and Konkola Copper Mine (KCM)—Zambia: KCM, a leading copper producer in Zambia, owns the mine. KCM directly employs 8671 and indirectly contracts 13,087.
- Dukwe Copper Project—Botswana: African Copper through its subsidiary, Messina Copper—Botswana, manages the Dukwe Copper Project comprising two mines: the Mowana open pit and the Thakadu mine.
- Tati Nickel Project—Botswana: Russian Norilsk Nickel has become a major player in the Botswana nickel–copper market through the Tati Nickel Project.
- Debswana Diamonds—Botswana: A joint venture between De Beers and the government of Botswana; is a key player in the national economy of Botswana, producing 70% of Botswana's export earnings, 30% of GDP and 50% of government revenue.
- Hernic Ferrochrome Pty Ltd, South Africa is the world's fourth largest integrated ferrochrome producer. Mitsubishi Corporation acquired shares and co-operates with the German company ELG Haniel GmbH to export to Asia and Europe.
- Assmang Ltd, South Africa produces iron ore, manganese ore, chrome ore, manganese ferroalloys and chrome ferroalloys. Sumitomo Corporation acquired equity stakes in mining.

The 8599 km of North–South Corridor roads have been refurbished or are planned to be renewed within the foreseeable future. The Witbank to Maputo road was rehabilitated as a 30-year concession and the first public–private partnership in Southern Africa (Soderbaum and Taylor 2008).

According to Raballand et al. (2012), there is a need to combat collusive practices between the private sector and public authorities in terms of reducing dwell times. Engel and Jouanjean (2015) cite a study by Keyser (2012) that states that traders need to pay 40 different fees in the course of travelling from Ghana to Nigeria, leading to the conclusion that national governments should prioritize the removal of cartels through active enforcement of competition policy in the region.

Many of the region's ports are dominated by a small number of operators. Five out of eight key port concessions in the region encompassing

Côte d'Ivoire, Ghana, Togo and Benin are operated by the French company Bolloré Africa Logistics, in conjunction with APM Terminals (a subsidiary of Maersk) in Abidjan, Cotonou and Tema, serving the hinterlands of Nigeria, as well as Niger and Burkina Faso (saana consulting 2015).

The Bolloré Group or one of its subsidiaries is reportedly present in all of the 18 ports in the region, while also operating several railway lines and dry ports.

APM Terminals are also part of plans to build a dry port at Ferkessédougou and to run the Ouagadougou container terminal, again with Bolloré Africa Logistics.

The awarding of a second container terminal concession to Bolloré in Abidjan port led to complaints that were passed to the UEMOA competition commission.

The North–South Corridor links the copper belts in Zambia and the DRC, via Botswana, Zimbabwe and Malawi, with ports in Mozambique, Tanzania and South Africa. The corridor seeks to achieve both physical infrastructure improvements in roads, railways and energy supply and streamlining and harmonization of the regulatory environment through trade facilitation measures at the various borders.

In September 2012, the Accelerated Programme for Economic Integration (APEI) was launched by the five COMESA and SADC countries of Malawi, Mauritius, Mozambique, the Seychelles and Zambia in order to improve transport, and port activities.

Transport
A number of corridor road sections are in worse condition:

- Botswana: (Tlokweng Border with South Africa–Kazungula; border with Zambia)
- Zambia: (Kapiri Mposhi–Kasambulesa [border with the DRC])
- Zimbabwe: Beitbridge–Harare–Chirundu and (Bulawayo–Victoria Falls [border with Zambia]); and
- Mozambique: Cuchamano (border with Zimbabwe)–Tete–Calomue [border with Malawi].

Major bottlenecks regarding corridor railways include:

- National Railways of Zimbabwe and Zambia. Railways Limited are almost not operational due to a lack of maintenance
- Missing link between Lion's Den and Kafue

– Missing link between West Nicholson and Beitbridge.

Port

Congestion at the Port of Durban remains a bottleneck. Major development issues include the expansion of the Port of Durban (included in the SADC Regional Infrastructure Master Plan).

The Tanzanian Southern Agricultural Growth Corridor (SAGCOT)

Launched at the WEF in May 2010 in Dar es Salaam, SAGCOT, North–South Corridor from Dar es Salaam to Zambia and the DRC, involves partnership with major international companies such as Yara, Monsanto, DuPont and Unilever on 350,000 hectares with $2.1 billion in potential investments hoped for over a 20-year period, with public sector grants and loans of $1.3 billion (SAGCOT 2011).

Six cluster developments have been identified along the southern corridor of Tanzania: Sumbawanga, maize, sorghum; Ihemi, forest; Kilombero, rice, sugar, buffalo; Mbarali, forest; Ludewa, forest, maize rice, sorghum; and Rufiji, prawns.

SAGCOT intends to support small-farm holders through risk-sharing mechanisms using a fund of $50 million for start-up agri-businesses incorporating smallholders; 'patient capital' to finance the cost of 'last mile infrastructures' such as farm roads and irrigation connections; and loan guarantees and currency risk instruments to leverage capital from the banking sector (sagcot.com website).

Lamu Port (Kenya)—South Sudan–Ethiopia Transport Corridor (LAPSSET)

LAPSSET Corridor is planned to link from the East to West coast, the deep-water port on Manda Bay, in the Lamu Archipelago, on Kenya's northeast coast, to Mombasa (Kenya), Addis Ababa (Ethiopian), Juba (South Sudan) to Douala (Cameroon). For the moment the Addis Ababa–Lamu part is in the process of realization (vision 2030 website).

The project comprises seven major components—a port in Lamu, an oil pipeline from Juba, South Sudan to Lamu, oil refineries in Lamu and Isiolo, a railway link to South Sudan and Ethiopia, three resort cities and airports at Lamu, Isiolo and Lokichogio, and a High Grand Falls along the River Tana for hydropower generation (Sena 2014).

The port on Lamu Island is part of the 24-billion-US-dollar planned investment in order to create Kenya's second transport corridor to Mombasa, boosting economic development and regional integration in the East African region and beyond (Hellenic shipping news website and Shanghai daily).

The Lamu port deal was signed by the Kenya Ports Authority and China Communications Construction Company in 2014, and is expected to be completed in three years.

Lamu port will allow Kenya to earn more revenue from its northern landlocked neighbours (BBC 2012). Ethiopia will have an alternative sea port to Djibouti and another export route if oil is discovered in its Ogaden region, which borders Somalia and where oil exploration is currently under way. For South Sudan, it offers a solution to its dependence on Sudan from which it split last July—six years after the end of a bitter civil war.

The project will also open up development to the northern parts of Kenya. The northeast of Kenya hosts the world's largest refugee camp, Dadaab, home to more than 450,000 Somalis.

The discovery of oil in Turkana Kenya could affect the implementation status of the LAPSSET Corridor project. While the initial focus was Kenya providing the needed infrastructure to transport South Sudan's oil to the Indian Ocean, the new focus could be on Kenya's oil. This new development might lead to instability in the area.

Before appealing to private investors, the government itself financed the launch of the first phase of the construction of the port, investing $306 m. Kenya, Ethiopia and South Sudan signed an agreement in 2012, under which South Sudan will finance part of the oil pipeline and Ethiopia will participate in the construction of the rail link.

To attract FDI, Kenya has also been using the IMF's formula of public–private partnership (PPP) (Miraftab 2004), where the state supervises private sector investors in the creation of infrastructure and provision of public services (Osborne and Gaebler 1993).

Lamu Port will accommodate large ships from supertankers to Post-Panamax vessels. Once completed, it will handle 23 m tonnes of goods a year. It will also be linked to other infrastructure: a 2250-km oil pipeline from South Sudan to Lamu, with branches to Ethiopia, Uganda and the DRC; an oil refinery that will process 120,000 barrels a day; an international standard gauge railway that will link Lamu to Douala, Cameroon; 3500 km of high-speed roads that will connect Lamu to the capitals of

Ethiopia (Addis Ababa), South Sudan (Juba) and Kenya (Nairobi); and a fibre optic network for communications. Lamu is also intended to attract tourists, with international airports and beach resorts.

Trade between Eastern and Central Africa today is dependent on the great Kenyan port of Mombasa. Mombasa is a barometer of East Africa's economic vitality: between 2007 and 2011, traffic increased by 23% and in 2011 the port handled 770,000 TEU (20-foot container equivalent units) of freight, though it was built for only 250,000. But a recent US International Trade Commission report (US International Trade Commission 2012) found that, on average, a container takes more than two weeks to transit Mombasa, from unloading to despatch.

The $2 bn coal-fired plant by Amu Power is set to be constructed at the small village of Kwasasi in Lamu County (Langat 2016). Amu Power Limited is a Centum Investment-Gulf Energy consortium whose vision is to anchor long-term national economic growth and aspirations by provision of reliable, safe and affordable power (centum.co.ke website).

The consortium on September 1, 2014 was awarded a tender by the Kenyan government for the development of a 1050 MW coal-fired power plant, located in Lamu County. The plant will be the lowest-cost IPP and will therefore form an integral part of the country's base load power-generating capacity, and is estimated to cost approximately US$1.9 billion. This project will account for 32% of Kenya's generating capacity measured by today's current installed grid capacity. Only 23% of citizens today have access to electricity.

Power Construction Corporation of China won the construction bid and will start building the power plant by end September, 2016 over a period of two years (business dailyafrica.com website). The area's shady mangroves are home to fishermen, struggling for their subsistence. Building of the port and refinery will cause the fish to disappear. The locals have formed an association called Save Lamu, to demand the right to take part in decisions concerning the Lapsset Corridor.

Beira-Tete, Corridors

The Beira Corridor crosses countries from East to West Africa owing to development strategies based on access to ocean ports. Herewith are some of the investments along this corridor in agri-business and mining.

Agri-business

- Mafambisse Sugar Mill has invested US$20 million to expand the plantations, including sugarcane, and modernize the irrigation system in the area; 75% of the shares are held by the South African Tongaat Hulett Group.
- Principle Energy, a UK-based company, invested US$400 million in ethanol production from sugarcane on planned 20,000 irrigated hectares. The site is located in Dombe, Manica Province (Mozambique) and the biofuel is exported via the Port of Beira.
- Agriterra Group (UK) operates three companies in Mozambique including Mozbife, a vertically integrated cattle ranching and feedlot production business.
- DECA (Desenvolvimento e Comercialização Agrícola, Agricultural Development and Marketing Ltd) processes maize purchased from thousands of local smallholder farmers around Chimoio and Compagri. This company has a second agricultural buying and processing facility established in Tete.

Mining

- Vale (Brazil) invested nearly $2 billion at the Moatize mine and in the capacity of the Sena line in 2015 of projected $6 billion investments. $2 billion are for the extension of the mine and $4.5 billion for the railway and port (worldfolio website). The government possesses 5% of the shares through the 'Empresa Mocambicana de Exploracao Mineira' (EMEM). In partnerships with local universities, Vale trains railway engineers, security and port engineers. Vale seeks to invest in partnership with local institutions.
- Rio Tinto (Australia) holds a 65% share of the Benga coal mine in Tete Province, with a 35% share held by Tata Steel of India.
- Riversdale Mining (Australia) established itself in Mozambique in 2006 and obtained 26 exploration licences, including a 2500 km^{2}mining concession in Benga.
- Coal production from Revuboè Mine Project is a joint venture of Anglo American (South Africa), which agreed to buy a majority stake in the project from the Australian Talbot Group in 2012, Nippon Steel Group and POSCO, the largest Korean steel manufacturer. The objective is to produce and export coking and thermal coal.

The growth corridor as a whole is driven by mining investments, especially coal in Tete. Vale has a US$1.5 billion open-cast coal mine at Moatize, and Riversdale has a US$800 million coal development at Benga, near Tete (BAGC 2010: 10). Commercial agriculture typically follows mining and energy investments.

Mitsui has agreed to invest almost $1 bn in Vale's coal projects in Mozambique in a sign of Japan's burgeoning interest in Africa's natural resources (England and Pearson 2014).

Transport

Rehabilitation of the Mutar (Machipanda)–Harare and Beira–Vanduzi–Tete road is ongoing, financed by the African Development Bank (AfDB) and the Development Bank for Southern Africa (DBSA).

Bottlenecks along the corridor's railways include the Sena railway line, which has been rehabilitated, but current line capacity (for coal) of 6 Mtpa is insufficient for Tete coal; and a missing link at Chiromo, Malawi.

Development issues regarding the corridor's railways include upgrading of the Sena railway line to 18 Mtpa, and rehabilitation of the railway line linking Beira–Machipanda–Harare.

Port

Bottlenecks at the Port of Beira relate to capacity for coal handling and the shallow depth due to siltation. Major development issues at the port include expansion of capacity for coal handling to 18 Mtpa, and development of the Zambezi River for waterborne export of Tete coal.

Energy

Mozambique has sufficient power supply capacity, with Hidroeléctrica de Cahora Bassa (HCB) (2075 MW) in Tete Province mainly exporting to South Africa through high-voltage direct current (HVDC). The grid of the country is divided into two, one in the northern and central regions and connected to HCB, and the other in the southern region, where power is mainly imported from South Africa. Over the medium term, large-scale hydropower and coal thermal generation plants are planned: HCB North Bank Hydropower Plant, 1245 MW; Mphanda Nkuwa Hydropower Plant, 1500 MW; Benga Coal Thermal Power Plant, 600 MW; and Moatize Coal Thermal Power Plant, 300 MW.

Beira Agricultural Growth Corridor (BAGC)

Launched at the World Economic Forum at Davos in early 2009, BAGC (agdevco.com/ website) focuses on agricultural growth and related infrastructure.

The BAGC initiative is a partnership between the government of Mozambique, private investors, farmer organizations and international agencies (ACB 2015). It was launched in 2010 with the aim of promoting increased investments in commercial agriculture and agri-business in the Beira Corridor. Membership includes MINAG, CEPAGRI, AGRA, DFID, SNV, the World Bank, Standard Bank, Tongaat Hulett and Yara, as well as a number of banks and mining MNCs, UNAC and its provincial union in Manica, UCAMA and UGC.

AfDB and the World Bank will invest in road and rail facilities, Japan in port facilities in Beira and Yara in a fertilizer terminal at Beira for imports (BAGC 2010: 10).

The target for commercial production is 190,000 ha (BAGC 2010: 14). A third of this was aimed at smallholder farmers on irrigated plots (5–50 ha), with the balance reserved for large estates (over 10,000 ha) and medium-sized farms (300–3000 ha) (BAGC 2010: 18).

BAGC essentially has four production models (2010: 25):

- 10,000 ha of irrigated sugar on estates, with 25% to smallholders and 250 ha available for field crops under irrigation, with private capital owning and running the project
- 3000 ha under irrigated rice, with 66.6% to smallholders, with infrastructure built by private capital and leased to farmers and their associations
- 300 ha under mixed horticulture (fruit orchards) and field crops (wheat, soya, maize), on medium-sized farms with 50 ha for smallholders, with infrastructure built by private capital and leased to farmers and their associations; and
- 3000 ha of mixed farms (1000 ha to field crops of which 50% is to smallholders; plus 2000 ha which are for dry land cattle), with the potential addition of poultry and feed stock.

The major World Bank activity in the corridor is the large PROIRRI Sustainable Irrigation Development Project which focuses on supporting the growth of small-scale irrigation in Manica, Sofala and Zambezia, linked to commercial markets (World Bank 2014: 2).

Of the 25,700 ha that is farmed commercially, 22,000 ha is sugarcane (beiracorridor.com website). Apart from two large sugar plantations, survey data indicate that there is less than 4000 ha of commercial farmland in the three provinces of Tete, Manica and Sofala, of which only 1200 ha is under irrigation.

The main crops grown for domestic and international markets are babycorn, chillies, mangoes and banana. Commercial farmers have high irrigation costs, due to a reliance on expensive diesel generators for power supply, and high transportation costs from farm-gate to end markets.

There is a small dairy in Chimoio with approximately 1000 head of cattle and a poultry operation, also in Chimoio, which has 200,000 layers and produces 70,000 broilers a week.

Semoc was the only seed company operating in Mozambique until 1999, after which the sector was liberalized. When it was first established in 1978, Semoc had a processing capacity of 18,000 tonnes of seed and was able to produce 2000 tonnes of seed annually, during the late 1980s. This figure rose to 9000 tonnes in 1994. Maize seed constituted 70% of seed production and 64% of sales. Semoc struggled to establish its own distribution networks after the relief programmes were phased out (Wulf and Torp 2005: 18). In the mid-2000s, national production of certified seed reached approximate figures of only 1000 tonnes/year (Wulf and Torp 2005: 23), indicating the low uptake of technology.

In mid-2013 there were 41 registered seed companies in Mozambique (MINAG 2012). Pannar and Semoc are the two main companies at the moment with several other regional and MNC corporations, as well as domestic seed enterprises including farmer collectives. In the year 2000 Pannar, then a South African company, began operating in Mozambique, first as a seed importer and later establishing a production facility in Chimoio. Pannar produces hybrid seeds and its portfolio includes maize, cowpeas, sorghum, beans, sunflowers and vegetables (Wulf and Torp 2005: 23). In 2012 Pannar was acquired by US MNC Pioneer Hi-Bred but still operates under the Pannar brand.

Semoc was partially privatized in 1997 with a 51% shareholding going to Seed Co, but was repurchased by the state at the beginning of 2014. The reasons could be related to Seed Co having been acquired by Monsanto and Groupe Limagrain.

Government remains the main buyer of certified seed, which it distributes to small-scale farmers through the subsidy programme and in emergency situations.

Besides Semoc and Pannar, a number of other regional or MNC companies operate in Mozambique. Hygrotech, another South African company, started operations in Mozambique in 2000, mainly in the southern provinces. It focuses on vegetable seed and agricultural input supplies. More recently, Syngenta has opened offices in Maputo. It is allied to NAFSN, has started registering seeds and has initiated activities in Nampula (Marapusse et al. 2014: 31).

Phoenix Seeds, the largest domestic seed producer in Mozambique, is based in Vanduzi just outside Chimoio. It is managed by Kevin Gifford, a relocated Zimbabwean farmer, and focuses on commercial grain (hybrid and OPV maize) and pulse seed production for distribution to smallholder farmers, in the Beira Corridor and nationally.

Nacala Corridor

Nacala is Eastern Africa's deepest port, and is also the terminus of a rail corridor coming from the mining areas of Tete Province, through Malawi and some of the most productive agricultural areas in Mozambique. The new Nacala Airport is operational from 2016 (umhambi.blogspot.co.il/2015/11 website).

The Nacala growth pole in the Nacala Corridor is a SEZ covering the municipality of Nacala and the district of Nacala-a-Velha in Nampula Province. It is targeted at light manufacturing and logistics (World Bank 2013a, b, c). There are 53 approved investments of which a few agro-processing firms have already started operations.

Herewith are the latest investment and business deals in Nacala Corridor.

Mining-Infrastructure

Two big investments in the Nacala Corridor are being carried out by Vale that operates the Moatize coal mine in Tete One. Investment aims to rehabilitate the export terminal port in Nacala and the railway that runs from Nacala to Tete, passing through Malawi. Vale has the concession to operate both the railway and the associated coal export terminal at the deep-water seaport of Nacala-à-Velha.

Rolling Stock Deal (zitamar website)

A joint venture between South African logistics firm Grindrod and the Pembani Remgro Infrastructure Fund (PRIF) plans to transport grain for the Malawian arm of Bakhresa Milling Group, which provides grain and flour across East and Southern Africa. Bakhresa Malawi owns a grain terminal in Nacala and a milling and packing facility in Malawi. Bakhresa's main port logistics operation is at Dar es Salaam where it has a 10,000 m^2 yard and an inland container terminal.

Port Tender Phase 2

Phase 1, funded by Japanese development finance agency JICA, was only for Japanese bidders. Phase 2 bid is open to anyone. Phase 2 includes the building of a new container wharf and yard, an accompanying by-pass road and a rail container terminal at the port.

New Railway

New railway between the border of Mozambique and Malawi and Nkaya junction close to Liownde, Malawi's capital: 145.1 km long (mota-engil website). Mota-Engil (Portugal) is the contractor. The cost is US$706 million and the deadline is 27 months. The project directly employs 3500 workers, with an expatriation rate amounting to 500 workers, out of which 300 are Portuguese. However, another 200 workers within seven different countries are indirectly affected.

ProSavana Project

ProSavana will span14 million hectares of land currently cultivated by peasant farmers serving local markets in this area into massive farming operations run by foreign companies to produce cheap agricultural commodities for export. ProSavana is a triangular partnership between Mozambique, Brazil and Japan.

The partners will help Mozambique upgrade its infrastructure, including rail links, a port and a 350-km road. Vale started construction on its $4.4 bn freight corridor, linking mines in the land-locked Tete Province to Nacala Port.

The masterplan for the corridor will create zones for the production of corn, cotton, soya, cashew, coffee and rice. Local producers are supposed to be integrated in the value chain as commercial investors via contract farming and co-operatives. The Nacala Fund includes a social share class used to finance smallholder farmers. The medium and large investors will give a guarantee to the small farmers for technical assistance, and a guarantee to buy the produce of the small farmers.

The ProSavana Development Initiative has provided technical and financial support to companies which integrate small-scale producers into their value chains such as Lozane Farms, Ikuro, Orwera Seed Company, Matharia Empreendimentos and Santos Agricola, which all operate across the Nampula and Zambezia regions.

Pinesso Group, the Brazilian producer, recently started operations in the country and sugarcane processor Tereos also runs mills there. Farm producer SLC Agricola announced that it was targeting the Nacala Corridor for its first investment outside of Brazil. Olam, the Singapore-listed agri-business, buys cotton, cashew, sesame and peanuts direct from 70,000 smallholder farmers in the country.

Olam in 2011 invested $35 m in rice production, supporting the country's efforts to become a net exporter of the foodstuff, and it is currently building a vegetable oil processing plant as well.

Mozambique's National Peasants Union (UNAC) has been leading a campaign to raise awareness about the situation in the Nacala Corridor and to oppose ProSavana, which, in the long run, will expropriate small growers (GRAIN 2015).

Lúrio River Basin Project
In January 2014, high-level government officials and businessmen gathered for the presentation of a new development project in the Lúrio River Basin. The development involves a massive farm project along the Lúrio River, at the intersection of the provinces of Niassa, Nampula and Cabo Delgado.

The $4.2 billion project is being overseen by a company called Companhia de Desenvolvimento do Vale do Rio Lúrio run by TurConsult Ltda. TurConsult is owned by Rui Monteiro, an influential businessman in Mozambique's hotel and tourism industry, and Agricane, a South African company that has provided consulting and management services to many large-scale agri-business projects in Africa, especially in the sugar industry. The company's plan is to construct two hydroelectric dams of 40 MW and 15 MW on the Lúrio River and to create an irrigation scheme covering 160,000 ha, as well as the development of around another 140,000 ha for rain-fed agriculture, contract farming and livestock production.

The project will focus on the export production of cotton, maize, cereals and cattle, as well as sugarcane for biofuel ethanol; 500,000 people living in the area will be affected by the project. The Strategic Plan is funded by JICA—the Japanese company Mitsui is a major investor in the Moatiza coal mine, the railway and the port of Nacala, as well as being a potential investor in agricultural production in the area. Herewith are the recent developments in this project:

The Mozambique Agricultural Corporation (Mozaco) was established in June 2013 by Rioforte Investments and João Ferreira dos Santos (JFS Holding). Mozaco says it acquired 2389 ha near the village of Natuto in the Malema District of Nampula Province in June 2013, where it plans to cultivate soybeans and cotton. The company's objective is to expand it up to 20,000 hectares. It also intends to pursue contract production with 116–170 local farmers on 83 ha, building on a programme developed with the US NGO Technoserve.

Alfa Agricultura Lda (South Africa), which provides drilling and water services around the Nacala, intends to establish a large poultry operation, and has started by acquiring land to produce soybeans for feed and for export. Its farming operations are supported by a 2.6 million meticais grant [$77,000] from USAID and the Mozambican government, under their joint FIN Agro project.

A project for integrated grain cluster is planned to be implemented in the Majune district. This project would demand 60,000 hectares in the Gúruè (usually in the Lioma region) and Lichinga districts, producing mainly soya. The companies involved in this project are Hoyo Hoyo (Portugal), Africa Century Agriculture (registered in Mauritius and based in London), Rei do Agro (the United States) and Agromoz, a partnership between Grupo Pinesso (Brazil), Grupo Américo Amorin (Portugal) and Intelec Holdings, owned by the Mozambican president, Armando Guebuza (Hanlon and Smart 2012).

New Horizons Africa LLC is owned by the Ron Cameron family of Arkansas, which also owns Mountaire Corp, the sixth largest poultry company in the United States in 2011. The Center Fresh Group—the second largest egg producer in the United States, with around 25 million hens in their farms enter to the partnership and create the joint venture called Mozambique Fresh Eggs, with New Horizons and Eggs for Africa.

Aslan, through its Mozambican subsidiary Rei Do Agro, acquired 2500 ha from the Mozambican government in Gurúè, Zambezia, about 130 km west of the New Horizons poultry operations, as well as a 42,000 ha cattle ranch in Morogoro, Tanzania. Both areas are epicentres of land conflicts between foreign investors and local people. Aslan Global

Management is financed by about 50 Americans who have each invested around $100,000 in the company.

Maputo Development Corridor (MDC)—Mozambique

The MDC initially included the toll road from Witbank to Maputo, the upgrading of the railway line from Ressano Garcia to Maputo (Byiers and Vanheukelom 2014), the upgrading of the port, the dredging of the harbour and the upgrading of the telecommunications network between South Africa and Mozambique.

The Mozal aluminium smelter plant will benefit from those improvements in the infrastructure financed by African and European public and private organizations. MDC attracted $5 billion of private funding between 1996 and 2005 (Office of the Premier 2008).

The US$2.8 billion aluminium smelter projects Mozal I and II in the Matola District are a joint venture between South 32 (South Africa), 47.1%, Mitsubishi Corporation (MC), 25% (South 32 website), the Industrial Development Corporation of South Africa, 24% and the government of Mozambique, 3.9%.

It employs 1190 people directly and a further 1500 indirectly, and has an annual turnover of about US$1.1 billion. The company uses mainly imported intermediates (alumina from Australia, coke from the United States and electricity from South Africa), but it has involved domestic SMEs in upstream activities, namely construction, maintenance, expansion and engineering services. Their engagement was boosted by SME empowerment initiatives supported by the International Finance Corporation. Until 2013, Mozal exported all its aluminium ingots, since it signed an agreement with Midalunder, which is setting up a factory to produce aluminium cables using 50,000 tonnes of Mozal's ingots (Sutton 2014).

The Beluluane Industrial Park/Matola Industrial Zone was established in the region, which has attracted 22 businesses employing some 1000 workers and has generated US$20 million in investment.

More recently, a US$50 million steel tube factory—a joint venture of South African, Chinese and Mozambican companies—was established.

Sasol Natural Gas Pipeline Project, US$2.1 billion project, was undertaken by Sasol (South Africa), in a joint venture with Empresa Nacional de Hidrocarbonetos (ENH), a wholly owned company of the government of Mozambique and the government of South Africa. It extracts natural gas from the Temeane and Pande gas fields in Mozambique and transports the gas via a pipeline to Sasol's facilities in Secunda. The natural gas production started in 2004.

The Russian company Norilsk Nickel acquired a 50% interest in the Nkomati joint venture in 2007. Nkomati is located in Mpumalanga Province and is the only primary nickel producer in South Africa. The extracted ore is processed at its own concentrator using the traditional sulfide flotation technology.

Less than 0.5% increase in Gross National Income is the result of Motzal investment in 2015. Currently 1200 people are directly employed by Mozal, of which over 80% are Mozambicans, and indirectly employment is upwards of 10,000. Mozal created a joint programme with government and development agencies—MozLink—to promote connections between the project and Mozambican suppliers, which achieved some success.

The recent discoveries of large-scale natural gas reserves that allow for the construction of a multibillion dollar LNG plant, together with the extensive coal basins already being exploited, have opened the possibility of developing value-added products locally, such as iron, steel, power and a diversity of downstream hydrocarbon-related industries. The agricultural sector also presents good opportunities for agro-processing, in particular the more developed crops of cashew, cotton and tobacco.

Transport

Development issues regarding the corridor's roads include countermeasures for the congestion and the development of a dry port at the Lebombo–Ressano Garcia border crossing (a medium-term project in the SADC regional infrastructure master plan).

Port

Concerning the Port of Maputo, congestion of the access road to the port creates a bottleneck. Development issues include a port master plan for expansion to maintain competitiveness vis-à-vis the Port of Richards Bay, and development of a new port at Techobanine.

West African Corridors

Accelerating Trade in West Africa (ATWA) is funded by the Danish International Development Agency (Danida). Working alongside regional Commissions, national governments and the private sector, the scoping and design phase work was to be undertaken by ATWA between January 2015 to October 2016.

West African corridors can be divided into two categories: transit corridors and intra-regional corridors (Saana consulting 2015). Transit corridors link a port with a landlocked country, running from North to South, while intra-regional trade corridors link multiple countries from East to West.

Transit Corridors

Lagos–Kano–Jibiya (LAKAJI): This is not strictly speaking a transit corridor, although it serves markets in Niger and beyond. The port-city interface is very congested, and it is expensive to move containers out of the port. The corridor costs are high compared to other countries in the region, and levels of road harassment are the highest in the region. There are also significant security concerns in Northern Nigeria.

Cotonou–Niamey: The Cotonou–Niamey Corridor is the busiest West African transit corridor (2.2Mt). However, much of the goods carried on this corridor are destined for Northern Nigeria, competing with the more expensive LAKAJI corridor described above. It is the least costly corridor in the region.

Lomé–Ouagadougou: This is the most important transit corridor for Burkina Faso. Costs are lower and it has the lowest truck turn-around time (11.6 days).

Tema–Ouagadougou: The Port of Tema complains that it has lost importance as a transit port (transit to Burkina Faso has dropped to 358,000t) because Ghana has been implementing axle load control regulations.

Abidjan–Ouagadougou/Abidjan-Bamako: Abidjan-Ouagadougou has both a road and a rail corridor. With road and rail combined, this is the second most important corridor for Burkina Faso (848,000t) and will probably grow if the railway is upgraded and extended to Niamey and Cotonou, as planned. Abidjan–Dakar is the second most important corridor for Bamako (700,000t).

Dakar–Bamako: Dakar–Bamako, like Abidjan–Bamako, has both a road and a rail corridor, but the rail corridor is dilapidated. The company Transrail obtained a concession for the railway in 2003 but has not invested in the line.

Intra-Regional Corridors

Bamako–Ouaga and Ouaga–Niamey: These corridors are part of the Trans–Sahelian Highway (TAH 5) from Dakar to N'djamena in Chad. The Bamako–Ouagadougou corridor is similar in performance to transit corridors.

The Abidjan–Lagos Corridor: Is part of the Trans–Coast Highway from Dakar to Lagos. The Abidjan–Lagos corridor connects the major urban centres in West Africa—with a total combined population of 37 million. It carries much local cargo traffic, and international traffic is dominated by passenger traffic.

The ATWA programme starts with the group of corridors and associated countries that presents the most potential for quick results, lowest levels of risks, opportunities for partnership and building on an existing momentum for reform.

The corridors/countries that best fit this description are Côte d'Ivoire, Burkina Faso and Ghana. In order to capture most of the transit trade to Burkina Faso, the Lomé–Ouagadougou Corridor has been added to the focused corridors. Specifically then, ATWA will cover the following trade routes: Abidjan–Ouagadougou, Tema–Ouagadougou, Lomé–Ouagadougou.

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