Building a Resilient Africa:
Enhanced Role of India

Working Paper No: 110

India Exim Bank

EXPORT-IMPORT BANK OF INDIA

WORKING PAPER NO. 110

BUILDING A RESILIENT AFRICA: ENHANCED ROLE OF INDIA

India Exim Bank's Working Paper Series is an attempt to disseminate the findings of research studies carried out in the Bank. The results of research studies can interest exporters, policy makers, industrialists, export promotion agencies as well as researchers. However, views expressed do not necessarily reflect those of the Bank. While reasonable care has been taken to ensure authenticity of information and data, India Exim Bank accepts no responsibility for authenticity, accuracy or completeness of such items.

March 2022

CONTENTS

Project Team:

Mr. David Sinate, Chief General Manager

Ms. Sara Joy, Chief Manager

Ms. Srejita Nandy, Deputy Manager

LIST OF TABLES

LIST OF CHARTS

LIST OF EXHIBITS

LIST OF BOXES

LIST OF ANNEXURES

EXECUTIVE SUMMARY

A transitioning continent with huge trade and investment potential, Africa has made remarkable progress in a range of economic and development areas over the past two decades. With an estimated collective GDP of US$ 2.7 trillion in 2021, Africa is expected to cross US$ 2.9 trillion GDP by 2022. Africa is the second largest and the second-most populous continent in the world, with a population of 1.3 billion people. Africa's population is expected to be at 1.4 billion people in 2023. The continent accounts for 12 percent of world's oil reserves, 42 percent of gold, 80-90 percent of reserves of precious metals like chromium and platinum, and 60 percent of the arable land. Accordingly, Africa offers a great market potential in the coming years.

Despite these, the COVID-19 pandemic has severely tested the resilience of Africa, with the continent witnessing its first recession in the last thirty years in 2020**.** According to the International Monetary Fund (IMF)'s World Economic Outlook (WEO) database, Africa's economy contracted by 1.6 percent in 2020, after growing at 3.3 percent in 2019. Prior to the pandemic, Africa was already facing challenges including a global economic slowdown, increasing protectionism and tariff wars among large economies, and evolving contours of international trade involving global value chains (GVCs) and development of disruptive labour-saving technologies.

A sustained growth recovery is necessary for Africa to rebound to its earlier high growth trajectory. Driven by a global recovery in trade and rising commodity prices, the continent is set to emerge from the recession and is estimated to grow at 6.9 percent in 2021, followed by a modest growth of 3.9 percent in 2022. The geo-political tensions including the Russia-Ukraine conflict are also expected to impact African economies through a series of direct and indirect channels, including direct trade linkages; commodity prices; higher food, fuel, and headline inflation; tightening of global financial conditions; and reduced foreign financing flows into the region.

Africa's GDP is dominated by its commodity dependent regions, largest being North Africa, followed by West Africa and Southern Africa. Among countries, Nigeria, South Africa, and Egypt are the largest economies in Africa, accounting for 48.1 percent of the region's GDP in 2021. Other large economies in Africa include Algeria (6.1 percent of GDP in 2021), Morocco (4.7 percent), and Kenya (4.1 percent).

Tourism is a source of foreign exchange earnings for many African economies. According to the United Nations World Tourism Organisation, tourist arrivals in Africa remained 68 percent lower in 2020 and 73 percent lower in 2021 as compared to 2019 levels. Fast-tracking vaccination programs in Africa could help countries ease travel restrictions and increase tourism revenue.

According to the latest United Nations Conference on Trade and Development (UNCTAD) report on the State of Commodity Dependence 2021, commodity exports accounted for more than 75 percent of Africa's merchandise exports and out of the 55 countries, 45 were commodity dependent countries. Among these 45 countries, 17 countries relied on agricultural and allied products exports, 16 on mining exports, and 12 on fuel exports.

Africa's population is growing at 2.5 percent a year, which is more than twice as fast as South Asia (1.2 percent) and Latin America (0.9 percent). If it continues at its current growth rate, Africa's population is expected to double by 2050 (approximately 2.5 billion), driven by falling mortality rates and growing fertility rates due to improving healthcare facilities. This growth is also expected to be aligned with the growth of the middle class and household consumption in the region.

Africa's Foreign Trade

As African exports are primarily raw materials and resource intensive products; it has been negatively impacted by decreased demand from major emerging and developed economies in recent years. Africa's total merchandise exports declined by 17.3 percent to US$ 394.6 billion, whereas its imports contracted by 12.1 percent to US$ 505.2 billion, in 2020. This led to widening of the trade deficit to US$ 110.6 billion in 2020, compared to US$ 97.5 billion in the previous year. The continent's recovery is dependent on the recovery of production and trade in its major partners, like China and the European Union.

Mineral fuels, oils and its products continue to be the largest export item from Africa, accounting for as much as 28.5 percent of Africa's total exports in 2020, reflecting the significant share of petroleum crude exports from Africa. However, the share has shrunk

in 2020 as compared to 2019 due to falling oil prices during the first half of 2020. Other major items of exports from Africa during the same year include pearls and precious stones (17 percent), ores and slag (6 percent), copper and its articles (5 percent), vehicles other than railway and tramway, and electrical equipment (3 percent each). Within mineral fuel, oil and its products, Africa majorly exports crude oil (HS 2709). Nigeria, Angola, Algeria, and Libya are among the leading global exporters of crude oil, with a combined share of 4.8 percent of the global crude petroleum exports (and 69.6 percent of Africa's crude petroleum exports) in 2020.

Africa's import basket is relatively diversified compared to its exports, with majority of its consumer and capital goods being imported. Minerals fuels, mainly dominated by petroleum oils, not crude (with a share of 11.5 percent of Africa's imports in 2020) and machinery and mechanical appliances (11.2 percent of Africa's imports in 2020) are the two largest import items, followed by electronic and electrical equipment (8 percent), vehicles other than railway and tramway (7 percent), cereals (5 percent), and plastics and its articles (4 percent). In 2020, Africa was a net importer of machinery and equipment (with a deficit of US$ 49.5 billion), electrical machinery and equipment (US$ 26.3 billion), vehicles (US$ 23.6 billion), cereals (US$ 20.9 billion), pharmaceutical products (US$ 17.1 billion), and plastic and its articles (US$ 16.4 billion).

South Africa, being the major industrialised economy, is the largest exporter among African economies accounting for a share of 21.7 percent of Africa's exports in 2020. During 2020, major exporters like Nigeria (-37.8 percent), Egypt (-12.5 percent), Angola (-32.0 percent), Algeria (-41.3 percent), and Ghana (-16.0 percent) witnessed double digit contraction in exports. South Africa is also the largest importer of the continent. The top five importers, South Africa, Egypt, Nigeria, Morocco, and Algeria accounted for more than 50 percent of imports by Africa during 2020.

The pandemic induced low productivity, and disruptions in key value chains in the United States, as well as in Asia and Europe, compounded by a slump in the international price of primary commodities, have led to a contraction in the value and quantities demanded of exports from Africa. Africa's exports to all its major export destination contracted in 2020 except for UAE and Switzerland. In 2020, China was the largest market for Africa's exports, accounting for 14.2 percent of Africa's total exports. The UAE has replaced India as the second largest export destination for Africa during 2020 as India's imports of petroleum oil declined during the same period. In the recent years Africa's exports have reoriented from OECD markets to emerging and fast-growing economies of the South, especially China and India.

As regards imports, the share of traditional markets such as France, USA, Germany, and Italy, as Africa's key import sources has been declining during the recent years. China was the largest source for Africa's imports, accounting for 19.7 percent of Africa's total imports in 2020. However, Africa's share in China's global exports have declined from 4 percent in 2019 to 3.8 percent in 2020. Although Africa's imports from India declined during 2020 by 15.3 percent, India's share increased from 9.4 percent in Africa's global imports in 2019 to 9.5 percent in 2020.

According to the preliminary estimates by the International Trade Centre (ITC), Africa's total merchandise exports increased by 30.7 percent to US$ 513.5 billion in 2021, while imports increased by 15 percent to US$ 586.4 billion. Supported by large growth in exports compared to imports, the continent's trade deficit has narrowed to US$ 72.9 billion in 2021.

Africa's Foreign Direct Investment Flows

Foreign Direct Investment (FDI) inflows to Africa declined in 2020 by 15.6 percent to US$ 39.8 billion, the lowest during the last decade, due to the pandemic related trade restrictions and lower oil prices. FDI inflows in Africa remained lower than the developing country average as the continent witnessed its first recession in last 30 years during 2020. Similarly, FDI outflows from African countries in 2020 dropped by 67.7 percent to nearly US$ 1.6 billion. The FDI downturn in 2020 was particularly severe in resource-dependent economies due to low prices of and dampened demand for energy commodities. This led to contraction of total FDI inflows as oil exporters accounted for 21 percent of FDI inflows to the region, while other resource intensive countries accounted for 44 percent and non-resource incentive countries accounted for 35 percent of the total inflows during 2020. According to the UNCTAD estimates, FDI inflows to Africa increased by 147 percent during 2021 as compared to 2020 amounting to US$ 97 billion. While North African region witnessed a contraction of 13 percent in FDI inflows to US$ 9 billion, Sub-Saharan Africa recorded a 200 percent rise to US$ 88 billion in 2021.

Africa's Quest for Regional Integration

Trade performance of African countries has been declining in recent years as they remain highly sensitive to international commodity price movements. Even though the continent has positioned itself as a key partner in the global arena, its share in global trade has been declining from 3.2 percent in 2011 to 2.5 percent in 2020. Africa's exports accounted for 2.2 percent of global exports in 2020, while its imports accounted for 2.9 percent of global

imports. The marginalisation of Africa in global trade is the consequence of the continued reliance on the exports of primary commodities and natural resources at a time when global trade is increasingly dominated by manufactured goods with high technological content.

Intra-regional trade (average of exports and imports) in Africa stood at 16.2 percent in 2020 increasing from a share of 14.2 percent in 2010. The European Union accounted for the highest intra-regional trade share of 60.3 percent in 2020, followed by the United States-Mexico-Canada (USMCA) Agreement at 40.3 percent, and Association of South East Asian Nations (ASEAN) at 20.9 percent. Africa's share of intra-regional trade remains at the second lowest only after Latin American Integration Association (LAIA). However, the positive aspect is that Africa's intra-regional trade has been witnessing an increase in last 10 years as compared to the other regions which have witnessed a decline, except for the EU. The lower intra-continental trade in Africa underscores the extent of the revenue foregone and the scope for improvement in African countries. This is particularly critical for Africa, considering that 16 of the 55 countries are landlocked. This gap also highlights the immense benefits that the African economies may reap by working towards a successful implementation of the African Continental Free Trade Area (AfCFTA).

At country level, it may be noted that 91.5 percent of Eswatini's exports are to Africa, particularly South Africa, mainly under SADC grouping. Among the larger exporters of the continent, the share of Africa in South Africa's global exports was 23.1 percent in 2020, followed by Nigeria (19 percent), Morocco (8.1 percent), Egypt (14.2 percent), and Angola (0.7 percent). Many African countries including DR Congo, Niger, Rwanda, Mali, and Ghana, among others, have witnessed a decline in share of their intra-African exports during 2020 as compared to 2019.

African Continental Free Trade Area Agreement

The African Continental Free Trade Area (AfCFTA) agreement, signed in Kigali, Rwanda, on March 21, 2018, presently has 54 African States (except Eritrea) as signatories. On April 29, 2019, Sierra Leone and the Sahrawi Republic ratified the AfCFTA, and with this ratification the threshold of 22 ratifying states for the free trade area to formally exist was reached. As a result, the AfCFTA came into force on May 30, 2019, for the 24 countries which had deposited their instruments of ratification with the African Union Commission (AUC). The operational phase of the AfCFTA was launched during the 12th Extraordinary Session of the Assembly of the Union on the AfCFTA in Niamey, Niger on July 7, 2019. Trading under the AfCFTA Agreement began on January 1, 2021.

As on March 2022, 42 of the 54 signatories (76 percent) have deposited their instruments of the AfCFTA ratification - Ghana, Kenya, Rwanda, Niger, Chad, Eswatini, Guinea, Côte d'Ivoire, Mali, Namibia, South Africa, Congo Republic, Djibouti, Mauritania, Uganda, Senegal, Togo, Egypt, Ethiopia, Gambia, Sahrawi Republic, Sierra Leone, Zimbabwe, Burkina Faso, São Tomé & Príncipe, Equatorial Guinea, Gabon, Mauritius, Central African Republic, Angola, Lesotho, Tunisia, Cameroon, Nigeria, Malawi, Zambia, Algeria, Burundi, Seychelles, Tanzania, Cabo Verde, and DR Congo. However, confirmation of Parliamentary/Cabinet approval for Somalia remains pending. Rules of Origin have been agreed on 87.7 percent of total tariff lines and the operationalisation of the Pan-African Payments and Settlements System (PAPSS) has been officially launched.

According to a study by the ITC, in a scenario without the AfCFTA, Africa has an untapped intra-regional export potential of US$ 21.9 billion. Out of this, US$ 8.6 billion could be tapped by engaging actively in efforts to identify and address current market constraints for intra-African trade. The remaining US$ 13.3 billion in untapped export potential is driven by GDP and population growth, which are expected to translate into increased supply and demand. The vehicles sector has the highest untapped export potential (US$ 1.4 billion), followed by sugar and sugar confectionery (US$ 1.3 billion). Other top sectors include fish and crustaceans (US$ 1.1 billion), plastics (US$ 931 million), essential oils, perfumery, and cosmetics (US$ 877 million), and copper and its articles (US$ 867 million).

The share of untapped export potential of Africa varies strongly between exporters. For some exporters like South Sudan, Cabo Verde, Equatorial Guinea, and the Gambia, more than 80 percent of total export potential remains untapped. For others like Zambia, Ethiopia, and Guinea-Bissau, untapped export potential represents less than 30 percent of their total export potential to Africa. In absolute terms, South Africa is by far the exporter with the largest untapped export potential to Africa (US$ 7.9 billion), followed by Egypt (US$ 3.3 billion), Morocco (US$ 1.3 billion), Côte d'Ivoire (US$ 1.1 billion), and Tunisia (US$ 1 billion).

Under the scenario of the AfCFTA being implemented and considering differential liberalization by LDC status and Regional Economic Communities (RECs), and assuming that all countries liberalise tariffs on all products equally, intra-African export potential would increase to US$ 31.1 billion, an additional US$ 9.2 billion over the pre-AfCFTA scenario. Vehicles continue to remain the sector with highest export potential of almost US$ 2 billion, followed by sugar and sugar confectionery (US$ 463 million); soap, washing preparations; and fish and crustaceans; with export potential ranging between US$ 350 million and US$ 375 million, due to their relatively high initial trade-weighted average tariff rates. On the other hand,

other sectors with high export potential, including plastics and electrical machinery and equipment have comparably lower initial tariff rates. Unlike the pre-AfCFTA scenario, edible fruits and nuts and coffee, tea, and spices were found to witness a large, expected increase of export potential through partial tariff liberalization due to high current intra-African tariff rates.

According to the UNCTAD, the simple average applied intra-African bilateral tariff rate stood at 5.25 percent in 2019. The intra-African applied tariff rate was 4.93 percent on primary commodities, 3.76 percent on intermediate goods, 8.9 percent on consumer goods, and 3.4 percent on capital goods. While East Asia and Latin America show a lower trade weighted average of intra-regional applied tariffs, at 1.56 percent and 1.16 percent, respectively, as compared to Africa at 2.4 percent indicating considerable scope for tariff liberalization between countries in Africa. Intra-regional trade in South Asia on average remains more restrictive, with a trade weighted average of 7.33 percent.

The Pan-African Payment and Settlement System (PAPSS) is a centralised payment and settlement infrastructure for intra-African trade and commerce payments, jointly developed by the African Union and the African Export-Import Bank. It will facilitate payments as well as formalise some of the unrecorded trade due to prevalence of informal cross-border trade in Africa. It will also provide alternative to current high-cost and lengthy correspondent banking relationships to facilitate trade and other economic activities among African countries through a simple, low-cost and risk-controlled payment clearing and settlement system, which could result in Africa saving more than US$ 5 billion annually in payment of transaction costs. All countries in Africa have signed the agreement for PAPSS, except Eritrea.

Africa is a highly fragmented continent, with its economies at varying stages of development. It would thus be a challenge to ensure an easy and quick facilitation of movement of goods and people within the continent. The AfCFTA's success depends on Africa's ability to overcome several challenges, such as limitations in infrastructure, resources, political climate, and existing regional trade agreements.

India's Trade and Investment Relations with Africa

Africa is a dynamic continent, with unlimited commercial and development opportunities. The recent years have witnessed tremendous increase and deepening of economic and cultural exchanges and cooperation between India and Africa. The COVID-19 pandemic has further strengthened the existing developmental partnership guided by the Kampala Principles.

With a view to facilitate and further enhance bilateral trade and commercial relations with countries in Africa, India has put in place important policy measures as also institutional frameworks to create an enabling trade and business environment. Major policy initiatives and institutional frameworks include, among others, Focus Africa Programme, India's Duty-Free Tariff Preference (DFTP-LDC) Scheme for Least Developed Countries, Pan- African E-Network: India and Pan-African Countries Initiative (renamed as e-VidyaBharati and e-AarogyaBharati (e-VBAB) Network Project), IBSA Initiative, Interbank Cooperation Mechanism among BRICS members, and India-Africa Forum Summit.

Trends in India-Africa Bilateral Trade

The synergy that exists between India and Africa can be gauged from the robust trends in India-Africa trade relations. India's bilateral trade with Africa has remained above US$ 60 billion except during the commodity price slowdown of 2016 and later due to the pandemic in 2020. India's Trade Complementarity Index with Africa remained above 68 during the last four years indicating high complementarity between the two regions.

India's exports to Africa have increased from US$ 23.3 billion in 2011 to US$ 26 billion in 2020, thereby accounting for 9.5 percent share in India's total exports. India's imports from Africa, at the same time, decreased from US$ 39.8 billion in 2011 to US$ 27.5 billion in 2020, accounting for 7.5 percent share in India's total imports. India's trade deficit with Africa significantly narrowed during 2020 to US$ 1.4 billion as compared to the pre-pandemic level.

India and Africa remain key trading partners. India's exports to Africa accounted for 5.2 percent of Africa's global imports whereas India's imports accounted for 7 percent in Africa's global exports during 2020. However, scope remains to utilise the untapped potential for trade between the two regions.

In 2020, South Africa remained the leading destination for India's exports to Africa, accounting for 13.4 percent of India's exports to the region. Other major export destinations include Nigeria, Egypt, Kenya, Mozambique, and Tanzania. In 2020, India's exports to most of the countries in the region have decreased as a result of the pandemic, except for Kenya (increased exports of petroleum oils) and Togo (increased exports of cereals, pharmaceutical products, and articles of iron and steel and machinery, among others).

As regards India's imports from Africa, South Africa replaced Nigeria as the major import source for India during 2020, accounting for a share of 24.3 percent of India's imports from Africa, reflecting higher imports of ships, boats and floating structure, and copper and

articles. Nigeria was the second-largest import source with a share of 23 percent during 2020, followed by Angola, Egypt, and Morocco. Nigeria's share has declined from 27.4 percent in 2019 to 23 percent in 2020 due to reduced import of mineral fuels (mainly crude). Nigeria was India's fourth largest global source for mineral fuels during 2020. Apart from South Africa, India's imports have also increased from Morocco (driven by increased imports of fertilisers), and Guinea (increased imports of gold) during the same period.

Petroleum products are the largest items in India's export basket to Africa, contributing 16 percent of India's total exports to Africa during 2020. All major export items to Africa have undergone a decline in share except for pharmaceutical products and cereals.

Mineral fuels, mineral oils, and its products (mainly crude) accounted for more than half of India's total imports from Africa during 2019 and 2020. However, during 2020, the share of fuel imports from Africa declined as a result of increased imports of natural or cultured pearls, precious or semiprecious stones, inorganic chemicals, copper articles, and edible fruit and nuts. During 2020, imports of copper and articles and edible fruits and nuts have increased relative to previous year.

As per the preliminary estimates by the ITC, India's total trade with Africa stood at US$ 82.5 billion in 2021, recording the highest ever level witnessed by both regions. India's exports to Africa in 2021 was US$ 37.9 billion, increasing by around 45 percent over the previous year. India's imports were to the tune of US$ 44.6 billion in 2021 increasing by around 62 percent over 2020. While India's exports to Africa accounted for 9.6 percent share in India's total exports in 2021, India's imports from Africa accounted for 7.8 percent share in India's total imports. India's trade deficit with the region widened to US$ 6.8 billion in 2021.

Potential for Enhancing Exports to Africa

Using an export potential assessment methodology developed by the International Trade Centre, the study assesses Africa-India trade products with the highest export potential. The analysis is based on the decomposition of a country's potential exports of a product to a given target market, considering three factors such as supply, demand, and ease of trading. The Export Potential Indicator identifies products in which both Africa and India have proven to be internationally competitive, and which have good prospects of export success in each other's markets. Product categories with above US$ 100 million exports by India have been considered for this analysis. Based on the export potential, taking into account the proven ability to export and products that have good prospects for export, the bilateral trade potential between India and Africa is expected to be around US$ 48 billion.

India's export potential to Africa remains at US$ 36 billion with US$ 19.6 billion of untapped export potential. An examination of the products with the greatest export potential to Africa based on India's proven ability to be internationally competitive and those products that have good prospects for export success reveals that the 28 products with the greatest export potential amounts to U$ 33.6 billion. The product with the greatest export potential is rice, followed by pharmaceutical products, machinery, motor vehicles and parts, and chemicals.

An examination of the products with the greatest export potential to India based on Africa's proven ability to compete internationally reveals that the top 20 products with greatest export potential amounts to US$ 11.5 billion. The products with the greatest export potential are nuts (cashew nuts), followed by chemicals (phosphoric acid and polyphosphoric acid), metals (except ferrous and precious), fertilisers, jewellery & precious metal articles, pulses, and woods. Southern Africa has the highest untapped export potential for India, followed by Western Africa.

Indian Investments in Africa

According to data from the Ministry of Finance, Government of India, and the Reserve Bank of India (RBI), approved cumulative India's investments in Africa during April 1996 to March 2022 amounted to US$ 73.9 billion. Mauritius, Mozambique, Sudan, Egypt, and South Africa were the top destinations of India's investments in the African region. India's investments in Africa have largely been concentrated in Mauritius, mainly due to the Double Taxation Avoidance Convention.

Setting up a Wholly Owned Subsidiary (WOS) is the most preferred route of investment for Indian investors in Africa, with nearly 81.6 percent of the total approved investments during April 2010- March 2022. Joint Ventures accounted for 18.4 percent of the total approved investments during the same period. Africa's manufacturing sector attracted the highest Indian investments during April 2010-March 2022. Other major sectors attracting Indian investments include financial, insurance, real estate and business services, agriculture and allied sectors, transport, storage, and communication services.

India's Development Cooperation Mechanism with Africa

India and Africa share a unique relationship that is strategic, reliable, and time-tested on one hand, and is based on historical, cultural and ties of kinship on the other. The relationship

has been further strengthened by the close engagement between the leadership and strong people to people ties. Over the years, India's engagement with Africa has evolved into a multifaceted relationship encompassing cooperation in key priority areas including people-oriented development partnership, defence and maritime cooperation, trade and commercial ties, capacity building through scholarships, Indian Technical and Economic Cooperation Programme (ITEC), cultural cooperation, etc. Developmental cooperation has been one of the strongest pillars of India's bilateral relations with Africa. Africa views India as a partner of preference in meeting its developmental and national priority goals.

India's partnership with Africa is based on a consultative model of cooperation and sharing of development experiences and is focused on addressing the priorities and needs of the African countries. In recent years, India has substantially expanded the scope and spread of its development programmes in various countries in Africa which includes grant assistance, concessional Lines of Credit (LOC), technical consultancy, disaster relief, humanitarian aid, educational scholarships, and a range of capacity-building programmes, including short-term civilian and military training courses.

As on March 31, 2022, a total of 204 LOCs amounting to US$ 12.37 billion have been extended by the Government of India (GOI) to 42 African countries (including ECOWAS Bank for Investment and Development (EBID)) in varied sectors such as power plants, hydroelectricity, power transmission and distribution networks, dams, roads, railways, ports, agriculture and irrigation, industrial units, skills development, civil construction etc. New sectors such as telecommunication, defence and solar power have also been included under LOCs to Africa in the last few years. Africa currently accounts for over 40 percent by value and over 65 percent by number of GOI-supported LOCs.

Debt Service Waiver: Because of the unprecedented impact of COVID-19 pandemic on several developing countries, the G20 Finance Ministers and Central Bank Governors, at a meeting held on April 15, 2020, agreed on the issue of suspension of debt service payment by official bilateral creditors for the requiring countries that request forbearance. In accordance with the G20 Debt Service Suspension Initiative (G20 DSSI), India, as a member of G20, agreed to a time bound suspension of debt service payment to the GOI-supported LOC Borrower Governments as per the standard template of G20 DSSI. Accordingly, the Government of India has approved the request for debt service suspension by several African countries viz. Burkina Faso, Cameroon, Comoros, DR Congo, Djibouti, Ethiopia, Lesotho, Malawi, Mozambique, Republic of Congo, Senegal, Sierra Leone, Tanzania, Togo, and Zambia.

As part of India's commitment towards South-South Cooperation, India is also extending developmental assistance by way of taking up grant assistance projects aimed at economic cooperation and capacity building keeping in view the local requirements. Several Centres of Excellence in IT (CEITs) are at various stages of implementation in partner countries around the world including African countries viz. Namibia, Egypt, etc; along with Vocational Training Centre (VTC) in Zanzibar. India is also undertaking several grant-in-aid projects such as supply of Midi Buses; ambulances; medical equipment, and CT scan machines to various African countries.

As the flagship capacity building programme of the Government of India, the ITEC programme has a footprint in 161 countries, including African countries and has contributed to the capacity enhancement of more than 2,00,000 professionals since its inception in 1964. Another important element of the strategy to enhance Indo-African cooperation in the 21st century is the Pan African E-Network Project that is funded entirely by India. The Pan-African E-Network Project seeks to cover the cost of supply, installation, testing and commissioning of hardware and software, end-to-end connectivity, satellite bandwidth, operational and maintenance (O&M) support, and providing tele-education and tele-medicine services to 53 African countries. On September 10, 2018, the Pan-Africa E-Network project has been succeeded by e-VidyaBharati and e-AarogyaBharati (e-VBAB) Network Project, which would be a digital bridge of knowledge and health between India and Africa. India and Africa are also collaborating on two major multilateral initiatives launched by India, the International Solar Alliance, and the Coalition for Disaster Resilient Infrastructure.

The three India-Africa Forum Summits [IAFS I, II & III] in 2008, 2011 and 2015 have further reinforced the development partnership with the continent. These relations between India and Africa remained vibrant even during economic crises and the recent pandemic, especially it has been reinforced by the close cooperation in the face of common challenges arising from the COVID-19 pandemic. India is further expanding its diplomatic footprint in Africa by opening new resident missions in various countries.

Africa's Need for Infrastructure Investment and India's Capabilities

The development of infrastructure in Africa is critical for fostering economic growth as it contributes significantly to human development, poverty reduction, and the attainment of the Sustainable Development Goals (SDGs). According to the African Development Bank (AfDB), investment in infrastructure accounts for over half of the improvements in economic

growth in Africa witnessed over the last decade and has the potential to contribute much more, given a conducive environment.

Infrastructure Deficit in Africa

In order to ensure Africa's long term economic sustainability, it is imperative to use infrastructure as a tool to build resilience and facilitate growth. For Africa, the need for adequate infrastructure including secure energy, efficient transport, reliable communication systems, safe drinking water and sanitation remains critical. According to the Programme for Infrastructure Development in Africa (PIDA), infrastructure constraints are impeding Africa's growth by 2 percent every year.

In 2018, the AfDB estimated that the continent's infrastructure needs, including power and water systems as well as new roads and railways – amounted to between US$ 130 billion and US$ 170 billion a year, with a financing gap in the range of US$ 67.6 billion to US$ 107.5 billion. The COVID-19 pandemic is likely to have reduced infrastructure spending massively as African government revenues have collapsed due to pandemic induced lockdowns and restrictions, and institutions have become far more concerned about day-to-day spending than fixed investment. Thus, it is expected that the financing gap in the region have mushroomed, creating enormous opportunities for private sector investors.

According to the AfDB's latest Africa Infrastructure Development Index (AIDI) 2020, which is based on four major components: transport, electricity, ICT, and water & sanitation; North Africa emerged as the best-performing subregion (index value of 75.19), followed by Southern Africa (36.25), with both these regions recording index values more than the African average (29.63). Concomitantly, West Africa, East Africa and Central Africa recorded index values lower than the African average in 2020.

– **Transport**

  According to a KPMG report, poor infrastructure leads to 50-175 percent higher cost of transport in Africa than other parts of the world. Sub-Saharan Africa ranks the lowest among all regions in the World Bank's Logistic Performance Index - Quality of trade and transport related infrastructure (1=low to 5=high) with a score of 2.2 as compared to the world average of 2.7 in 2018. According to the World Bank Enterprise Survey, around 24.2 percent of the manufacturing firms in the Sub-Saharan Africa region identified transportation as a major constraint. In order for the AfCFTA to operate at its fullest potential, Africa requires efficient road and railway network.

– **Electricity**

Around 70 percent of the global population (nearly 600 million) without access to electricity is based in Sub-Saharan Africa. Africa's demand for electricity is expected to grow four-folds between 2010 and 2040. There also exists great disparity between the North African countries vis-à-vis the other African countries in terms of access to electricity. Population in Egypt, Morocco, Tunisia, and Algeria have access to electricity close to 100 percent in 2020, with exceptions being Libya (69.7 percent) and Mauritania (47.3 percent). Other Sub-Saharan African countries like Mauritius (99.7 percent), Cabo Verde (94.2 percent), Gabon (91.6 percent), Comoros (86.7 percent), Ghana (85.9 percent), and South Africa (84.4 percent) are also exceptions as compared to the African average of 55.6 percent and Sub-Saharan African average of 48.4 percent. More than 77 percent of the firms in Sub-Saharan Africa experience electrical outages as compared to an average of 51.5 percent in the world as identified in the World Bank's Enterprise Survey.

– **Information and Communication Technology**

Africa is considered as a success story when it comes to information and communication technology ICT. However, the region continues to face a lingering digital divide as compared to the rest of the world. In fact, to achieve universal broadband internet access in Africa, an estimated US$ 100 billion in investment is needed over the next decade, with a third of it in ICT infrastructure. All major ICT indicators including fixed-telephone subscriptions, broadband subscriptions, mobile cellular subscriptions, and individuals using internet, among others remain at much lower levels when compared to the world average.

– **Water and Sanitation**

While climate is an important factor driving water stress in Africa and around the world, poor management of water resources and services remain the biggest challenge. As climate change makes rainfall more erratic and increases the risks of floods and droughts, investing in better water management and infrastructure is becoming even more important. These investments can strengthen economies by alleviating poverty, supporting jobs and growth, and reducing vulnerability to climate change. Sub-Saharan Africa recorded the highest mortality rate attributed to unsafe water, sanitation and lack of hygiene when compared to other regions of the world. This is owing to lower access to basic drinking water and sanitation facilities. Securing safe drinking water, sanitation, and hygiene for all in Sub-Saharan Africa would require US$ 35 billion per year.

Infrastructure Financing

Infrastructure investment remains an important element to drive economic rebound in medium term to long term. According to the Infrastructure Consortium of Africa (ICA), in 2018, total commitment for African infrastructure amounted to US$ 100.8 billion, an increase of 24 percent over the total commitments reported for 2017 at US$ 81.6 billion. African governments committed US$ 37.5 billion (37 percent), the largest share of 2018 financing, followed by China (US$ 25.7 billion or 26 percent), and ICA members (US$ 20.2 billion, or 20 percent). The energy sector received the largest investment commitment at US$ 43.8 billion, followed by transport (US$ 32.5 billion), water (US$ 13.3 billion), ICT (US$ 7.1 billion) and multi-sector (US$ 4.1 billion).

India committed US$ 762 million in 2018 mainly into the water and sanitation sector (US$ 600 million) and transport (US$ 162 million). India's overall commitment in 2018 was slightly higher than the US$ 700 million committed in 2017, but lower than US$ 1.2 billion committed in 2016. China's commitments on the other hand have increased from US$ 6.4 billion in 2016 and US$ 19.4 billion in 2017 to US$ 25.7 billion in 2018. The largest share of Chinese financing was for the energy sector (71 percent), followed by the transport sector which accounted for 26 percent of the total commitment.

According to the World Bank data, private participation in Infrastructure (PPI) investment commitments declined globally by more than half during 2020 as compared to pre-pandemic levels and stood at US$ 45.7 billion across 252 projects in emerging market and developing economies (EMDEs). This is the lowest investment commitment registered after 2004 when investments totalled at US$ 31.3 billion. PPI investments declined across all regions except Sub-Saharan Africa and Middle East and North Africa. Sub-Saharan Africa received US$ 6.3 billion across 24 projects, a 7 percent increase in investment levels from 2019 and a 14 percent increase from the five-year average of US$ 5.5 billion. Nigeria, Côte d'Ivoire, and Kenya accounted for the majority share of investment commitments in the region. Majority of the projects are fully financed by the Development and Export Finance Institutions (DEFI), indicating DEFI financing as one of the region's few and major options for large-scale projects. During 2011 to 2020, cumulative private participation investment commitments amounted to US$ 950.8 billion, with Sub-Saharan Africa accounting for 6 percent of global commitments.

The cumulative PPI investments in Africa for 42 countries stood at approximately US$ 78 billion during 2011 to 2020. South Africa, Morocco, Egypt, and Nigeria accounted for 60 percent of the continent's PPI investment commitments during 2011 and 2020. Around 89 percent of these investments were in greenfield projects, followed by 8 percent in brownfield

projects. Electricity sector received the largest share of private participation in infrastructure investment during 2011 to 2020, with access to electricity increasing from 43.8 percent of total population of Africa in 2011 to 55.6 percent in 2020. Ports and railways remained the second largest sector receiving investments within the transport category, followed by ICT.

Government Debt Profile in Africa

Africa's government debt remains exacerbated after the pandemic, as government spending increased to mitigate the health and economic impact of COVID-19. General government gross debt (including both domestic and external debt) across Africa increased as compared to the pre-pandemic level, in both low-income countries (LICs) as well as Market Access Countries (MAC). Out of the 55 African countries, 29 countries are classified as at high risk of debt distress and 7 countries remain in debt distress as on March 31, 2022.

Infrastructure debt default rates are the lowest in Africa as compared to other regions of the world. However, the sample size of projects for the regions are small, and the projects analysed may have more guarantees that significantly offset high risks. Political and regulatory risks are higher in emerging markets and developing economies like Africa, and these risks are the leading causes of defaults in EMDEs. The policy, legal and regulatory environment in African countries need to be made conducive for encouraging private sector to participate in infrastructure investments through PPP framework. Risk remains a critical constraint for investment in infrastructure in Africa.

According to a report by McKinsey & Company, Africa's track record in moving projects to financial closure remains poor as 80 percent of infrastructure projects fail at the feasibility and business-plan stage. Therefore, financial instruments need to be devised which could provide partial risk and partial credit guarantees to project exports in Africa. Indian companies have been active in African markets especially in sectors like energy, transport, and water and sanitation projects funded by the Multilateral Development Banks (MDBs) like the World Bank and the African Development Bank.

Project Exports in Africa

Project exports from a nation reflects its technological and industrial capabilities and acts as a foreign exchange earner in the long term. Project exports comprise overseas projects contracted in civil construction projects; turnkey projects including engineering, procurement and construction (from concept to commissioning) and essentially includes

civil work/construction and all supplies specific to these turnkey projects; process and engineering consultancy services; project construction items (excluding steel and cement), construction engineering products (fittings and fixtures/ materials), construction equipment and accessories, and other project goods. India's project exports are mainly characterised by process and construction engineering. Most of the projects executed by the Indian companies have been those funded by the multilateral funding agencies, i.e., the World Bank, the Asian Development Bank, and the African Development Bank, among others. In order to understand geographical and sectoral distribution of India's project exports to Africa, contracts awarded by the MDBs like the AfDB, and the World Bank have been considered as these represent a significant part of the total project exports undertaken by Indian project exporters in various African countries.

– **African Development Bank Funded Projects (2016-2021)**

African Development Bank contracts are characterised by contracts for goods, works, consulting services and others (including operating costs, food crisis expenses, and personnel costs). In case of the AfDB funded projects, majority of the contracts in value terms were accorded to non-regional members. China accounted for US$ 5.6 billion worth of contracts during 2016 to 2021, followed by France (US$ 1 billion), and India (US$ 0.8 billion). China, France, and India collectively accounted for 44 percent share in total value of contracts awarded by the AfDB during 2016-2021, with China alone accounting for 33 percent share in total value of International Competitive Bidding (ICB) contracts. Among regional members, Morocco, Tunisia, Kenya, and Senegal were the top countries in terms of value of overall contracts secured during the period under consideration.

During 2016-2021, India accounted for US$ 831.7 million worth of the AfDB awarded contracts. Multi-national/country projects accounted for the majority of the contracts secured by Indian companies under the AfDB financed projects during 2016-2021, accounting for 41 percent of the total contracts secured by Indian companies during the period. After multi-national projects, Tanzania accounted for the highest share in total contracts secured by Indian companies (16 percent) in the AfDB funded projects. Other major project countries for Indian companies in the AfDB funded projects included Morocco (14 percent), Ethiopia (7 percent), Uganda (5 percent), and Kenya (4 percent). In terms of the number of contracts, Indian companies secured 164 contracts spreading across multiple destinations across Africa (32 percent of the total number of contracts), followed by 8 percent in Zambia, and major East African countries like Tanzania, Rwanda, and Uganda during 2016-2021.

The power sector accounted for majority of the contracts in terms of value awarded to Indian companies in the AfDB funded projects, accounting for 82 percent of total value of contracts secured during 2016-2021, followed by transport (13 percent), agriculture (3 percent), and water and sanitation (1 percent). In terms of number of contracts secured by the Indian companies in the AfDB funded projects, power sector again accounted for the maximum number of contracts (45 percent), followed by agriculture (18 percent), and transport (11 percent), among others.

– **World Bank Funded Projects (2016-2021)**

During 2016-2021, the World Bank Funded projects in Africa amounted to US$ 29.97 billion, covering 53,608 contracts. China accounted for the largest share (21 percent) in the total value of overall contracts awarded in the World Bank funded projects in Africa during 2016-2021, followed by Nigeria (5 percent), and India (4 percent). The major sectors for projects funded by the World Bank in Africa during 2016 to 2021 were transportation (17 percent), energy and extractives (14 percent), public administration (13 percent), and water, sanitation, and waste management (12 percent), among others.

During 2016 to 2021, overall value of contracts secured by Indian project exporters in the World Bank funded projects in Africa stood at US$ 1.3 billion and number of contracts stood at 285. Egypt, with a share of 16 percent was the major recipient of contracts secured by Indian companies in Africa by value, followed by Ethiopia (15 percent), Nigeria (10 percent), and South Africa (7 percent).

In terms of the sectors, India secured the largest value of African contracts in the World Bank funded projects during 2016-2021 in energy and extractives sector (56 percent), followed by transportation (12 percent), industry, trade, and services (9 percent), and ICT (7 percent), among others.

Strategies to Enhance India's Role in Building a Resilient Africa

Africa has been receiving considerable investments during the past decade due to its abundant resources and growing markets besides enormous development needs. The total amount of global envisaged capital investments in Africa stood at US$ 715.2 billion between 2011 to 2020. The major sectors where foreign capital expenditure has been announced during 2011 to 2020 in Africa are coal, oil and gas (25 percent), real estate (12 percent), renewable energy (9 percent), metals (8 percent), and communications (8 percent).

Establishing Value Chains for Utilisation of AfCFTA

Africa's large working-age population, its growing middle class, and the significant share of services are all conducive factors for enhancing India's trade and investments in the region. Consumer-driven goods related to agribusiness, apparel and clothing, pharmaceuticals, and automotive components are opportunities for India's foreign direct investment, where Africa, through the AfCFTA is putting in place appropriate rules of origin and eliminating tariff barriers. The AfCFTA Agreement, which is already operational, aims to enhance the development of value chains and industrialization across the region to boost the levels of trade and investment. The AfCFTA will provide a unified continental market that Indian firms can easily access and potentially increase the scope and level of India's engagement with Africa. Increased FDI in the manufacturing sector by Indian companies could catalyze the development of value chains by providing foreign capital and technical know-how. India's envisaged capital investment in Africa between 2011 to 2020 stood at US$ 26.5 billion, with major investing sectors being coal, oil and gas (37 percent), communications (10 percent), metals and food and beverages (8 percent each), plastic, automotive and OEMs, and textiles (5 percent each) and renewable energy and chemicals (3 percent each), among others. India's strategy to enhance its trade and investment relations with African countries would entail an integrated approach comprising, inter alia, integrating Africa to the GVCs, strengthening Africa's infrastructure and connectivity, and facilitating trade finance in Africa, among others.

Agriculture and Food-processing

According to the OECD, in 2020, nearly two-thirds of African countries were net importers of basic food items. India has an untapped export potential for rice of US$ 2.9 billion to Africa, besides untapped potential of meat at US$ 100 million and food products at US$ 300 million. Increasing Indian exports to the region could meet Africa's demand and boost India's supply capacity. However, in the long run, building the capacity to produce food locally would help African countries to lower their vulnerability towards natural calamities and foreign exchange shocks. Food and beverages accounted for 8 percent share in envisaged capital expenditure by India to Africa during 2011-2020 which is double the share of global envisaged capital expenditure in the sector for the region.

The bottlenecks in Africa in terms of inadequate agricultural infrastructure, and average productivity in spite of the availability of land and natural resources provide an opportunity for India to add the much-needed vigour to the region's agriculture sector. These interventions could be achieved through supply of tractors and agricultural equipment, investments in tractor manufacturing or agro-based implements, providing technology-based support for

irrigation including solar operated pumps, and joint creation of institutions focusing on marketing and finance that can help the sector to grow, amongst others.

Healthcare

Healthcare infrastructure in Africa may be explored through two broad routes, either under the GOI-supported Lines of Credit that help India build a better relationship with the African nations or through the PPP model. Here, constructions of primary and secondary healthcare centres and hospitals can be under the LOC route, whereas constructions of tertiary healthcare centres and hospitals, can be through the PPP route. Indian hospital majors, who have gained significant experience in running hospitals under the PPP framework, could be ideal partners for Africa's healthcare infrastructure needs. PPPs could prove to be an efficient solution that reduces the investment risks, improves efficiency, and could lead to more inclusive outcomes. Twinning India's expertise in the construction and administration of hospitals could be a focused, win-win approach for Africa-India bilateral relations.

Pharmaceutical Value Chain

Africa is critically dependent on imported medicinal and pharmaceutical products. Many Indian companies have already established local manufacturing units or joint ventures in Africa for supplying quality medicines at concessional rates for major diseases like HIV/AIDS, TB, malaria, and cardiovascular related diseases. Further opportunities exist in setting up pharmaceutical manufacturing units with upgraded technology, where the growing number of hospitals and other healthcare facilities create higher demand for the supply of pharmaceuticals. The PPP model could be explored for the development of the pharmaceutical value chain (for research and development, production, procurement, storage, and distribution). Large scale regional pharmaceutical or vaccine manufacturing plants and joint facilities could be established, which could also be utilised for research and cold storage.

Maritime and Defence Cooperation

Among the Indian Ocean littoral countries (IOLC), 9 are in Africa - Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, and Tanzania. The presence of large coastlines in the Eastern and Southern African countries underlines the potential for cooperation in the maritime domain. A major shipping link for India, Indian Ocean remains the common factor for these countries, which is pivotal in terms of both security and commerce for India and Africa.

According to the SIPRI International Arms Transfer Database, India was the 23rd largest defence exporter during the period of 2017 to 2021. Within Africa, Mauritius accounted for 6.6 percent of India's arms exports during 2017-2021, followed by Mozambique (5 percent) and Seychelles (2.3 percent), during the period under consideration.

Some of the significant export items by the defence public sector units (DPSU's) include the export of an offshore patrol vessel (OPV) to Mauritius in 2014 by the Garden Reach Shipbuilders and Engineers Ltd (GRSE Ltd). The Hindustan Aeronautics Limited (HAL) has exported helicopters to Mauritius, Seychelles, and Namibia. Increased cooperation in areas of aerospace, defence and maritime equipment and vessels can ensure security and enhance technological capacity of Africa and at the same time accelerate India's defence export target of achieving US$ 5 billion by 2025.

Financing for Clean Energy

Africa accounts for only 3.8 percent of global greenhouse gas emissions, in contrast to 23 percent in China, 19 percent in the US, and 13 percent in the European Union. The India led International Solar Alliance (ISA) could play a major role in providing solar energy solutions to African countries. A significant portion of Africa currently uses solar energy to meet relatively basic needs like lighting, charging mobile phones, and powering low-capacity appliances. The biggest options for solar power generation in Africa are photovoltaic (PV) and concentrated solar power (CSP), as well as small-scale PV systems suitable for off-grid power generation. Both PV and CSP technologies are crucial for rural communities in Africa given their diverse potential uses ranging from energy generation to agriculture, food processing, waste treatment, and water supply. However, installed capacity in African countries remain much low compared to the potential.

India, through the International Solar Alliance, is supporting the implementation of off-grid solar energy projects in Africa. ISA has also partnered with the AfDB to develop 10,000 MW of solar power systems across the Sahel region aimed at providing electricity to approximately half of the 600 million Africans who remain off-grid.

The Government of India has earmarked concessional Lines of Credit worth US$ 2 billion for solar projects in Africa out of its US$ 10 billion concessional LOCs committed for Africa during India-Africa Forum Summit (IAFS). However, the uptake of solar projects under these LOCs in partner countries in Africa have remained relatively low. This is partially due to the lack of domestic manufacturing capacities for supply of solar panels to fulfill the minimum mandatory Indian content requirement under the LOC program (goods and services for

minimum 75 percent of the value of the contracts covered under these loans must be sourced from India). Solar modules account for about 65 percent of the overall cost of setting up a solar power project. Presently, India's domestic production accounts for 20 percent of the annual requirements of solar modules, with rest being imported mainly from China. The prices of imported Mono PERC PV modules in India have risen by over 35 percent from around 20 cents/watt in August 2020 to around 28 cents/watt in March 2022. This is primarily because of an increase in the polysilicon prices, which is a key input for PV modules. Therefore, boosting domestic manufacturing of modules and setting up fully integrated supply chains remain crucial to reduce import dependence and increasing cost competitiveness of domestic solar energy sector.

Exploring Alternate Solutions for Infrastructure Financing

Infrastructure financing accounts for substantial amount of Africa's public debt and these loans are mainly financed by foreign creditors leading to burgeoning public external debt in the region. It poses financial risk to investors especially in countries with high political risks or countries vulnerable to foreign exchange risks. Focusing on alternative solutions like local currency financing or countertrade arrangements to finance project exports could be explored, especially in case of resource intensive countries to ensure future repayments and assist low-income countries to achieve their development goals.

India and Africa can also jointly explore the potential for tripartite cooperation initiatives with third countries in critical areas such as transfer of skills, transfer of technology, and technical assistance. The North African countries being part of the Middle East and North Africa (MENA) region are strategically closer to the GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates). India could collaborate with the sovereign wealth funds of GCC countries for high-end infrastructure projects in these African countries. The trilateral partnership initiatives could be given further impetus by setting up a dedicated fund or agreements involving the development financial institutions of the respective countries for investing in infrastructure projects in Africa.

The Asia-Africa Growth Corridor (AAGC), a megaregional initiative by India and Japan aimed at improving ties between Asia and Africa, gives priority to development projects in health and pharmaceuticals, agriculture and agro-processing, disaster management and skill enhancement in Africa. The connectivity aspects of the AAGC will be supplemented with quality infrastructure.

The involvement of DFIs has a multiplier effect on private investment as the presence of DFIs ensure serious due diligence, and the risk mitigation instruments in place and can help improve the credit rating of the borrower. Therefore, greater collaboration between local development finance institutions and development financial institutions of the partner countries should be promoted. Africa's huge infrastructure deficit has proliferating adverse impacts on transaction costs for traders and investors alike, forming part of the non-tariff barriers that restrict trade within Africa and between its regions and other parts of the world. Exporters need access to local markets for their products, which requires adequate and well-functioning infrastructure, including road and other transport systems, export and storage facilities, and energy and water supply. According to a World Bank report, around US$ 100 billion will be needed to achieve universal access to broadband connectivity in Africa by 2030. Therefore, investment in digital infrastructure also needs to be increased to harness innovation in digital technologies.

Access to Trade Finance in Africa

According to the estimates from the AfDB and Afreximbank, the estimated value of unmet demand for trade finance in Africa was US$ 81.8 billion in 2019 and has averaged US$ 91 billion over the past decade. This is evident from the fact that 40 percent of Africa's trade remains bank intermediated as compared to 80 percent globally. Challenges with confirming banks is one of the major constraints for domestic banks engaged in trade finance in Africa.

According to SWIFT transactions data, Africa has undergone a decline of 18.6 percent decline in correspondent bank relationship between 2011 and 2017 compared to an average of 17.9 percent for all regions over the same period. As observed by the AfDB research, during 2011 to 2019, the major correspondent banks in Africa saw significant decline in their trade finance confirmation activities in Africa. Regulatory restrictions and higher compliance costs have been the major constraints cited for the retreat of international confirming banks from Africa.

Increasing tightening of global financial conditions in the aftermath of the COVID-19 has resulted in central banks across the world consolidating their balance sheet. As a result, Africa might see capital outflows which in turn will lead to exacerbated liquidity constraints and undermine the capacity of banks to finance African trade especially for SMEs. In order to fill this gap, development finance institutions could develop financial instruments like risk participation and transaction guarantee agreements to support non-traditional confirming banks from emerging markets, including Africa.

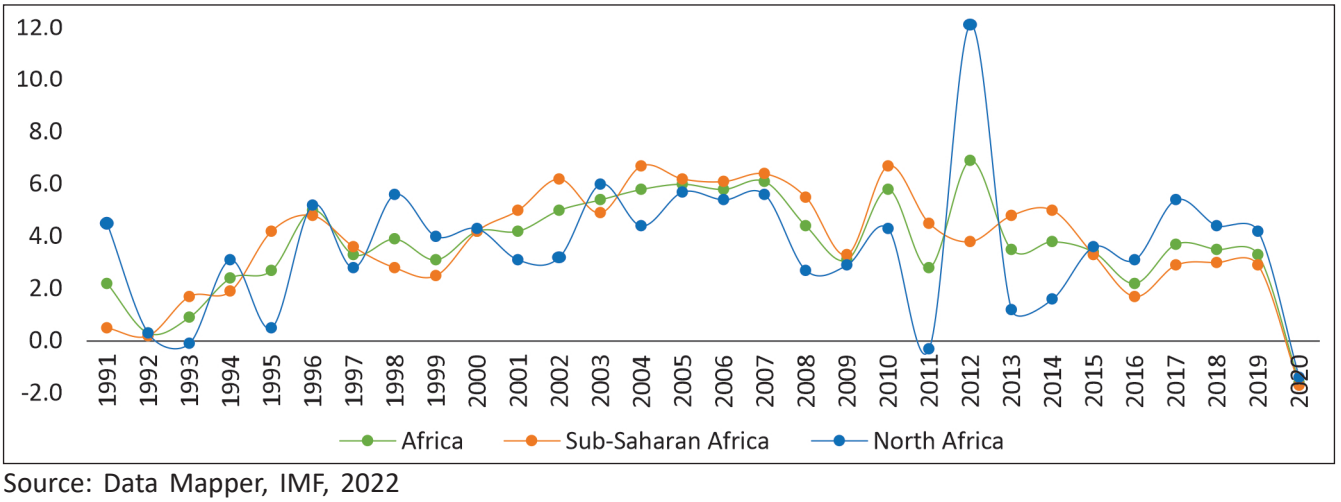
Chapter

1

AFRICA: THE RESILIENT CONTINENT

A transitioning continent with huge trade and investment potential, Africa has made remarkable progress in a range of economic and development areas over the past two decades. Though the socio-economic and development performance of African economies varied, the progress achieved by the region in the recent years, made many African economies more resilient and better placed to cope with harsh external conditions than before. With an estimated collective GDP of US$ 2.7 trillion in 2021, Africa is expected to cross US$ 2.9 trillion GDP by 2022. Africa is the second largest and the second-most populous continent in the world, with a population of 1.3 billion people. It is estimated that Africa's population is expected to be at 1.4 billion people in 2023. Africa offers a great market potential in the coming years. The continent accounts for 12 percent of world's oil reserves, 42 percent of gold, 80-90 percent of reserves of precious metals like chromium and platinum, and 60 percent of the arable land[1]. Over the years, there has been a shift in focus from investment for the extraction and export of natural resources to people based and manufacturing-based investments such as telecommunications, retail, and services.

Chart 1.1: Real GDP growth (Annual Percent Change), 1991-2020



Source: Data Mapper, IMF, 2022

[1] African Union

Despite these, the COVID-19 pandemic has severely tested the resilience of Africa, with the continent witnessing its first recession in the last thirty years **(Chart 1.1).** According to the IMF's World Economic Outlook (WEO), Africa's economy contracted by 1.6 percent in 2020, after growing at 3.3 percent in 2019. Prior to the pandemic, Africa was already facing challenges including a global economic slowdown, increasing protectionism and tariff wars among large economies, and evolving contours of international trade involving global value chains (GVCs) and development of disruptive labour-saving technologies.

The pandemic exposed the fragility of global supply chain networks and healthcare systems across countries. Since the onset of the COVID-19 pandemic, African governments have taken decisive measures to control the spread of the virus and mitigate its social and economic impacts. These include rolling out ambitious public health measures, expanding social safety nets and carrying out monetary and fiscal interventions on an unprecedented scale. Despite being able to contain the spread of virus to a great extent, the socio-economic costs of the pandemic on African economies were high, which aggravated inequality and vulnerability across the continent. The pandemic has also resulted in doubling of fiscal deficits and sharp rise in indebtedness of African countries, affecting investor's appetite. Elevated public debt levels in African countries in the recent years are also limiting the capacity of countries to boost spending on developmental needs.

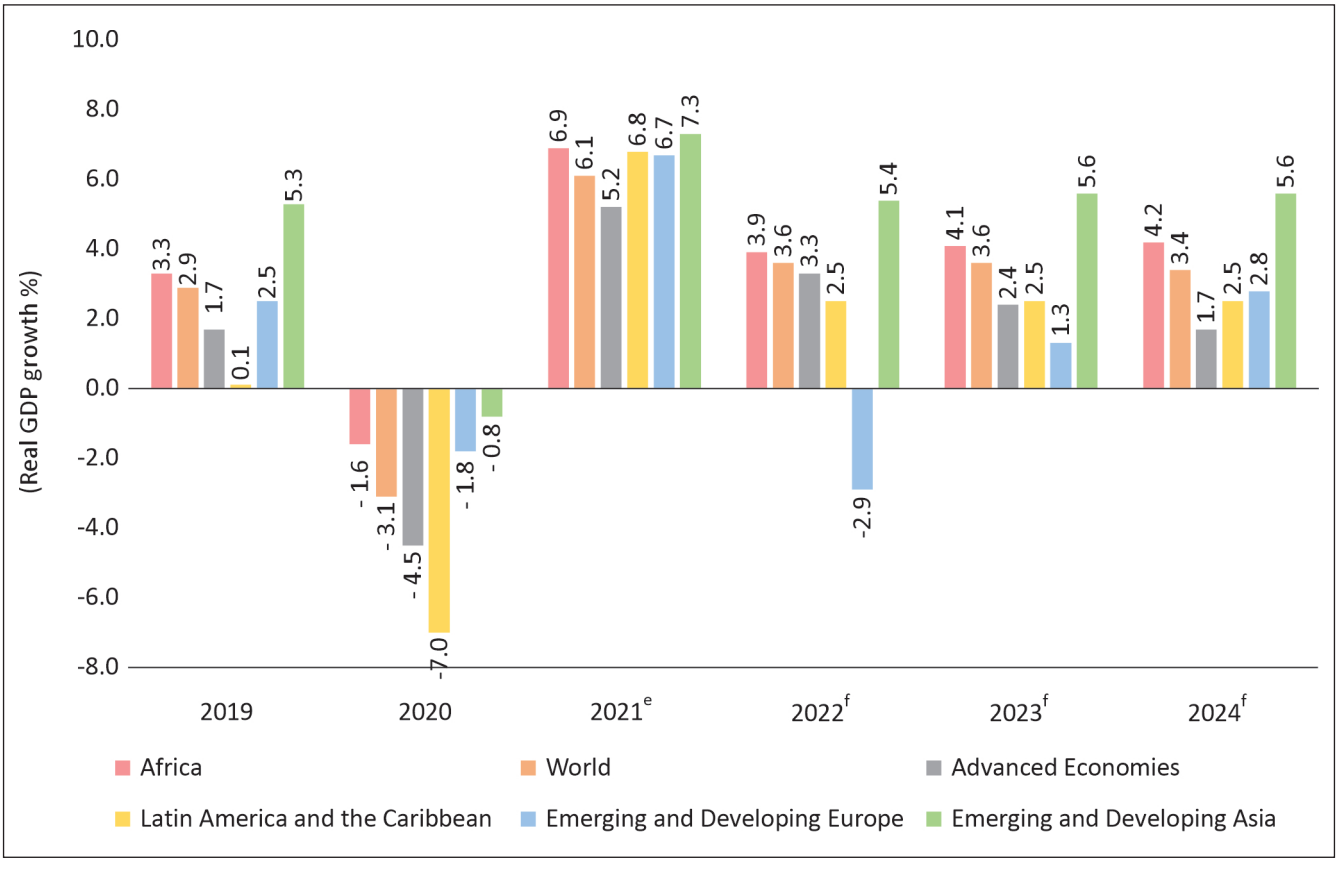
Financing needs were mostly covered by international emergency support, including the IMF, the World Bank and bilateral assistance, and debt service relief from the G20 Debt Service Suspension Initiative and the IMF Catastrophe Containment and Relief Trust. While majority of the African countries received financial assistance from the IMF in some form in 2020 and 2021, around 20 African countries are covered by multi-year IMF arrangements, supporting recovery and the return to meaningful income convergence. The IMF's Special Drawing Rights allocation of approximately US$ 650 billion to African countries in August 2021 has boosted Africa's reserves. The new repo market (Liquidity and Sustainability Facility) launched by the United Nations Economic Commission for Africa in November 2021 is expected to save an estimated US$ 11 billion on government borrowing costs over the next five years.

A sustained growth recovery is necessary for Africa to rebound to its earlier high growth trajectory. Driven by a global recovery in trade and rising commodity prices, the continent is set to emerge from the recession and is estimated to grow at 6.9 percent in 2021, followed by a modest growth of 3.9 percent in 2022 (**Chart 1.2**). The Russia-Ukraine conflict is also expected to impact African economies through a series of direct and indirect channels,

including direct trade linkages; commodity prices; higher food, fuel, and headline inflation; tightening of global financial conditions; and reduced foreign financing flows into the region[2].

Inflation dynamics also differ considerably across countries, with Angola, Ethiopia, Guinea, Nigeria, Sierra Leone, Sudan, Zambia, and Zimbabwe seeing the highest average consumer price inflation. Food prices have been behind rising price pressures in many countries, followed by fuel inflation.

Chart 1.2: Africa's Growth Outlook



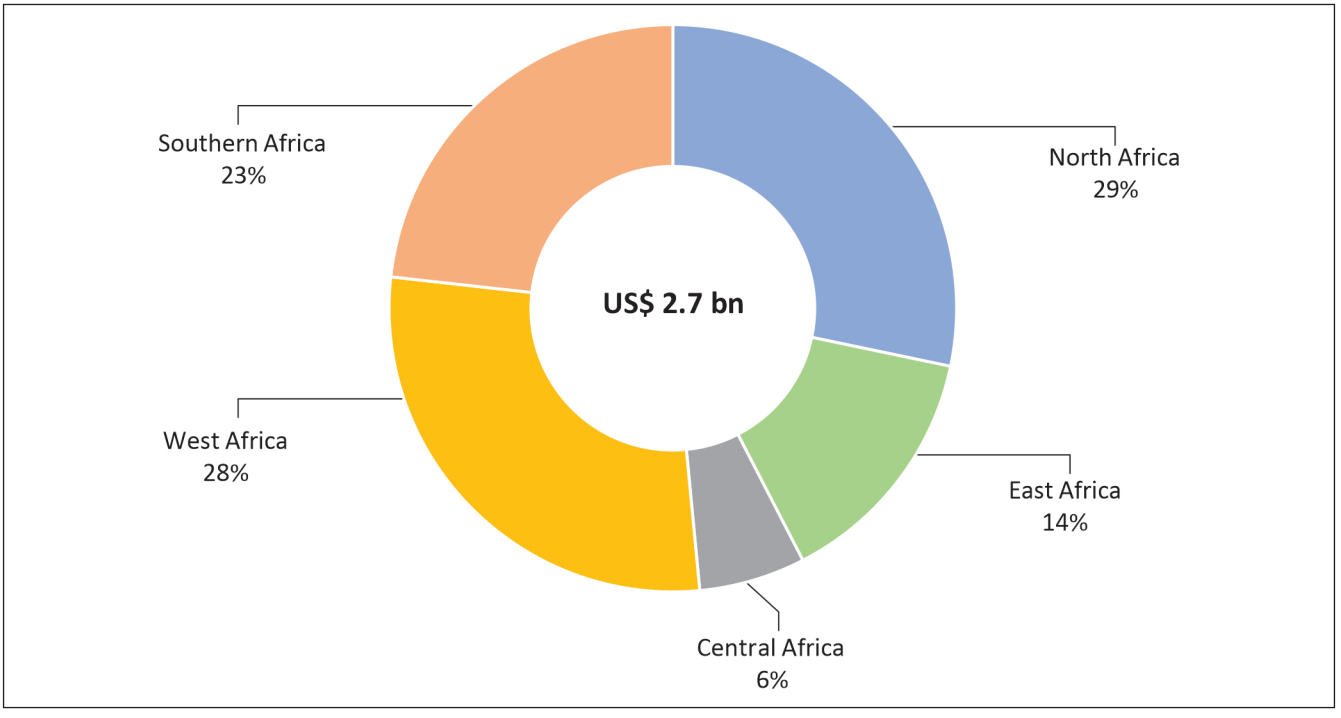
Note: The figures are subject to downside risks due to the evolving geo-political developments.
e–estimate, f–forecast

Source: Data Mapper, IMF, 2022 and India Exim Bank Analysis

Africa's GDP is dominated by its commodity dependent regions, largest being North Africa, followed by West Africa and Southern Africa (**Chart 1.3**). Among countries, Nigeria, South Africa, and Egypt are the largest economies in Africa, accounting for 48.1 percent of the region's GDP in 2021. Other large economies in Africa include Algeria (6.1 percent of GDP in 2021), Morocco (4.7 percent), and Kenya (4.1 percent) (**Annexure I**).

[2] Africa's Pulse, World Bank, 2022

Chart 1.3: Africa's Regional Nominal GDP Size in 2021



Note: Regional classification based on African Development Bank's Classification are as follows: North Africa: Algeria, Egypt, Libya, Morocco, Mauritania, and Tunisia; East Africa: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania, Uganda; West Africa: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo; Central Africa: Cameroon, Central African Republic, Chad, DR Congo, Equatorial Guinea, Gabon, Republic of Congo; Southern Africa: Angola, Botswana, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, São Tomé and Príncipe, Zambia and Zimbabwe.

Source: IMF, WEO; and India Exim Bank Analysis

Tourism is a source of foreign exchange earnings for many African economies like Cabo Verde, where the sector accounts for more than 50 percent of its exports[3]. Other countries which are sensitive to international tourism include São Tomé and Príncipe (33 percent), Gambia (30 percent), Seychelles (22 percent), Guinea (19 percent), Mauritius (17 percent), Comoros (14 percent), Uganda (13 percent), Rwanda and Morocco (12 percent each). Though international travel has recovered from its April 2020 low, it has stabilized far below pre-pandemic levels as uncertainty regarding the spread of the virus persist. According to the United Nations World Tourism Organisation, tourist arrivals in Africa remained 68 percent lower in 2020 and 73 percent lower in 2021 as compared to 2019 levels. Fast-tracking vaccination programs in Africa could help countries ease travel restrictions and increase tourism revenue.

[3] Exports from international tourism are composed of travel (receipts in destination) and passenger transport items in the balance of Payments. Total exports include both goods and service.

Africa, as a region, remains heavily commodity dependent. A country is commodity export dependent when more than 60 percent of its total merchandise exports are composed of commodities. According to the latest UNCTAD report[4], commodity exports accounted for more than 75 percent of the region's merchandise exports and out of the 55 countries, 45 were commodity dependent countries. Among these 45 countries, 17 countries relied on agricultural and allied products exports, 16 on mining exports and 12 on fuel exports **(Table 1.1)**.

Table 1.1: Commodity Dependence of Africa's Exports

Agriculture & allied products	Minerals, ores, and metals	Fuel
Benin, Cabo Verde, Côte d'Ivoire, Djibouti, Ethiopia, Gambia, Guinea-Bissau, Kenya, Madagascar, Malawi, Senegal, Seychelles, São Tomé and Príncipe, Somalia, Sudan, Uganda, Tanzania	Botswana, Burkina Faso, Burundi, DR Congo, Eritrea, Ghana, Guinea, Liberia, Mali, Mauritania, Namibia, Niger, Rwanda, Sierra Leone, Zambia, Zimbabwe	Algeria, Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, Libya, Mozambique, Nigeria, South Sudan, Togo

Source: UNCTAD and India Exim Bank Analysis

African economies were badly hit by the pandemic and subsequent slowdown of the global economy, leading to decline in manufacturing output, trade and investment volumes, tourism etc. However, several African economies seized the opportunity of the crisis to embark on various macroeconomic and structural reforms, which are crucial for ensuring an inclusive growth over the long run. Some of these reforms include the unification of the Sudanese Pound exchange rate to allow for the determination of currency exchange rates without interference from the Central Bank of Sudan; fuel subsidy removal reforms in Nigeria, etc., among others.

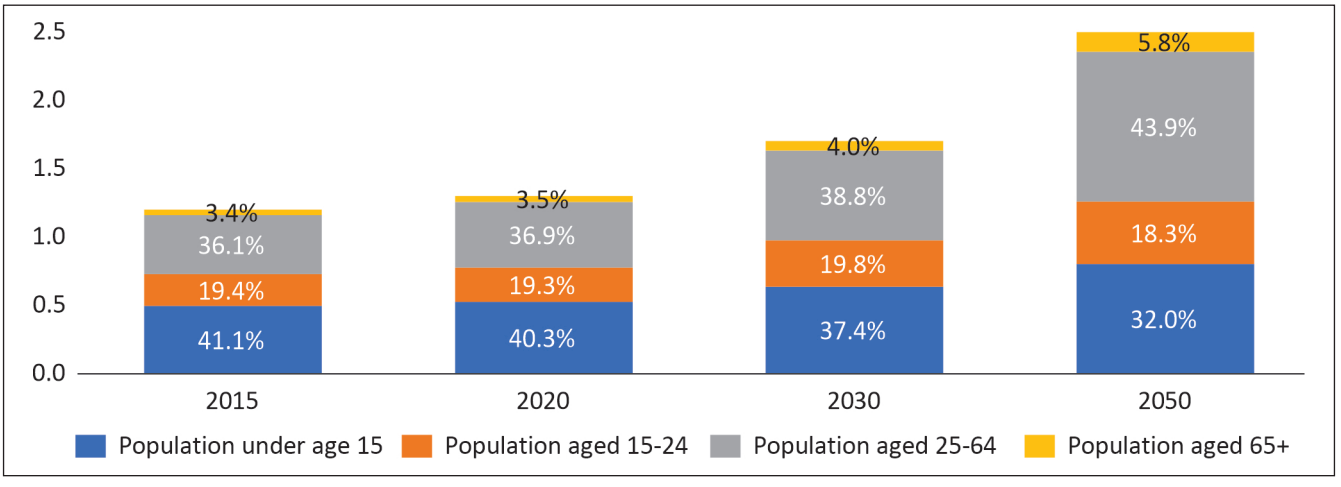
Demography of Africa

Africa's population is growing at 2.5 percent a year, which is more than twice as fast as South Asia (1.2 percent) and Latin America (0.9 percent). If it continues at its current growth rate, Africa's population is expected to double by 2050 (approximately 2.5 billion)[5] driven by falling mortality rates and growing fertility rates due to improving healthcare facilities. This growth is also expected to be aligned with the growth of the middle class and household consumption. Thus, quality healthcare has the potential to transform the risks of demographic

[4] UNCTAD State of Commodity Dependence 2021
[5] United Nations, World Population Prospects 2019, Volume II: Demographic Profiles

and disease burdens into a demographic dividend. According to the Organization for Economic Co-operation and Development (OECD), Africa has the fastest urban growth rate in the world.[6] **Chart 1.4** shows the changes in the share of population across age categories over the coming years. Africa is going through a demographic transition, with an increasing share of population moving into the age category of 25-64 and above 65.

Chart 1.4: Demographic Profile of Africa (Percent Share)



Source: World Population Prospects 2019, United Nations and India Exim Bank Analysis

Africa witnessed a decline in per capita income since the commodity price downturn of 2014, from US$ 2,275.8 in 2014 to US$ 1,840.6 in 2017. Though it started picking up from 2017 and stood at US$ 1,922.5 in 2019, due to the COVID-19 pandemic, it is estimated to have declined further to US$ 1,812.9 in 2020. Africa is also witnessing an urban transition with more than 41 percent of its population living in cities in 2015. The share is further expected to increase up to 60 percent by 2050.

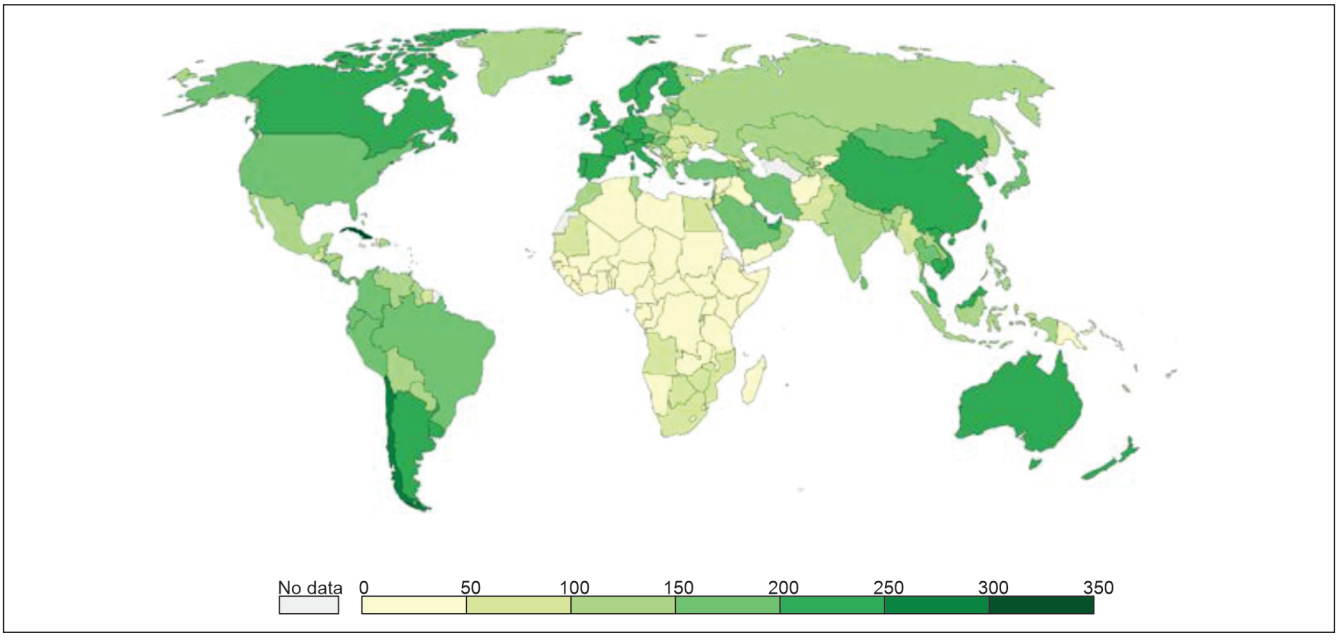
Vaccination Trends in Africa

The COVID-19 pandemic has exposed Africa's vulnerabilities in ensuring access to vital drugs, vaccines, and health technologies. Economic cost of vaccination delay has been estimated to be huge. A recent study by the Economist[7], estimated that delayed vaccination timelines will cost the global economy GDP losses of US$ 2.3 trillion in 2022-2025. Emerging countries are expected to shoulder around two-thirds of these losses, and as a share of GDP, countries in Sub-Saharan Africa would register the highest losses, totalling 3 percent of the region's GDP in 2022-25.

[6] OECD, Africa's Urbanization Dynamics 2020: Africapolis, Mapping a New Urban Geography, 2020
[7] How much will vaccine inequity cost?, The Economist, August 2021

Exhibit 1.1 shows the COVID-19 vaccine doses administered per 100 people within a given population. The world average remains at 140 doses per 100 people whereas for Africa it stood at 32 doses per 100 people as on March 15, 2022. These include booster doses as well. Within Africa, only Morocco (145) and Tunisia (109) have administered more than 100 doses per 100 people. India has administered 130 doses per 100 people during the same time.

Exhibit 1.1: COVID-19 Vaccine Doses Administered per 100 People, March 15, 2022



Note: All doses, including boosters, are counted individually
Source: ourworldindata.org, University of Oxford accessed on March 29, 2022

As on March 15, 2022, Africa's vaccination rate stood at 19.9 percent (14.7 percent fully vaccinated whereas 5.2 percent partially vaccinated) of its population as against the global average of 64 percent (57 percent fully vaccinated whereas 7 percent partially vaccinated). During the same period, India has vaccinated 70 percent of its population (59 percent fully vaccinated whereas 11 percent partially vaccinated). Highest vaccinated population were in Seychelles (85 percent), Mauritius (79 percent), Rwanda and Morocco (67 percent each), Cabo Verde (63 percent), Botswana and Tunisia (60 percent each). Less than 10 percent of population is vaccinated in Niger, Senegal, Malawi, Tanzania, Mali, Cameroon, South Sudan, Madagascar, Chad, DR Congo, and Burundi **(Annexure II)**. According to the IMF, a funding gap of roughly US$ 23 billion remains to be filled to provide all countries with the necessary vaccines, tests, treatments, and personal protective equipment[8]. This requires African countries to eliminate trade restrictions on vaccine exports and on critical vaccine inputs, which would permit far greater manufacturing of COVID-19 vaccines within Africa.

[8] Africa's Path to Recovery in an Uncertain World, IMF, December 16, 2021

The following exhibit shows the economic vulnerability of African countries as mapped by a study of the European Investment Bank in 2020[9]. This index considers the following parameters:

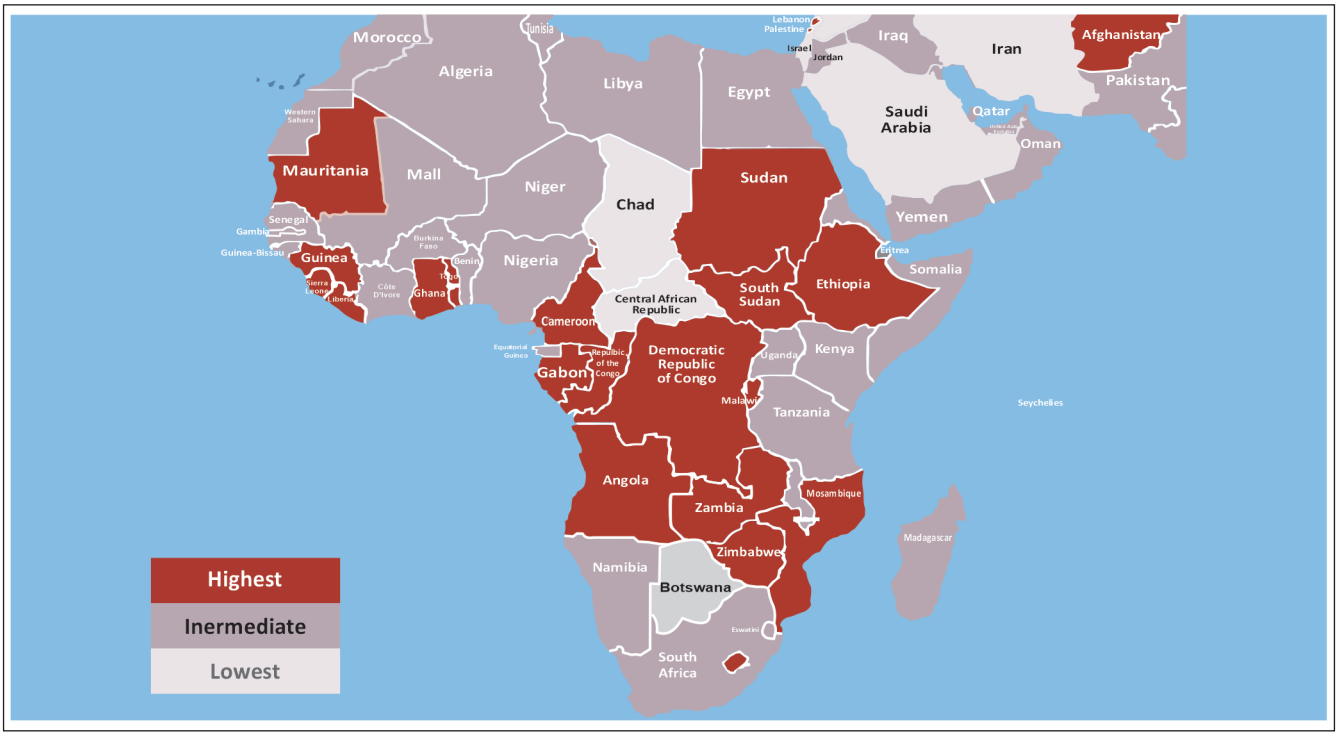
(i) Quality of healthcare and age of the population

(ii) Structure of the economy – This includes level of integration into global value chains, dependence on commodity exports, tourism, and remittances

(iii) Exposure and ability to respond to shocks – The shocks include reversal of capital flows, ability of countries to implement countercyclical fiscal policies, strength of the banking sector and capacity to support recovery from the crisis.

According to the European Investment Bank, the need to address the healthcare and economic impacts of the COVID-19 had driven up expenses in African countries, while a slowing economy and reduced global demand led to falling commodity prices in 2020, thus leading to decline in revenues. The level of economic vulnerability was found to be high among majority of the African countries (**Exhibit 1.2**). The study found Sub-Saharan Africa to be the most economically vulnerable region due to exposure to commodities, remittance, and tourism.

Exhibit 1.2: Economic Vulnerability due to COVID-19



Source: Adapted from The EIB COVID-19 Economic Vulnerability Index, European Investment Bank, August 2020

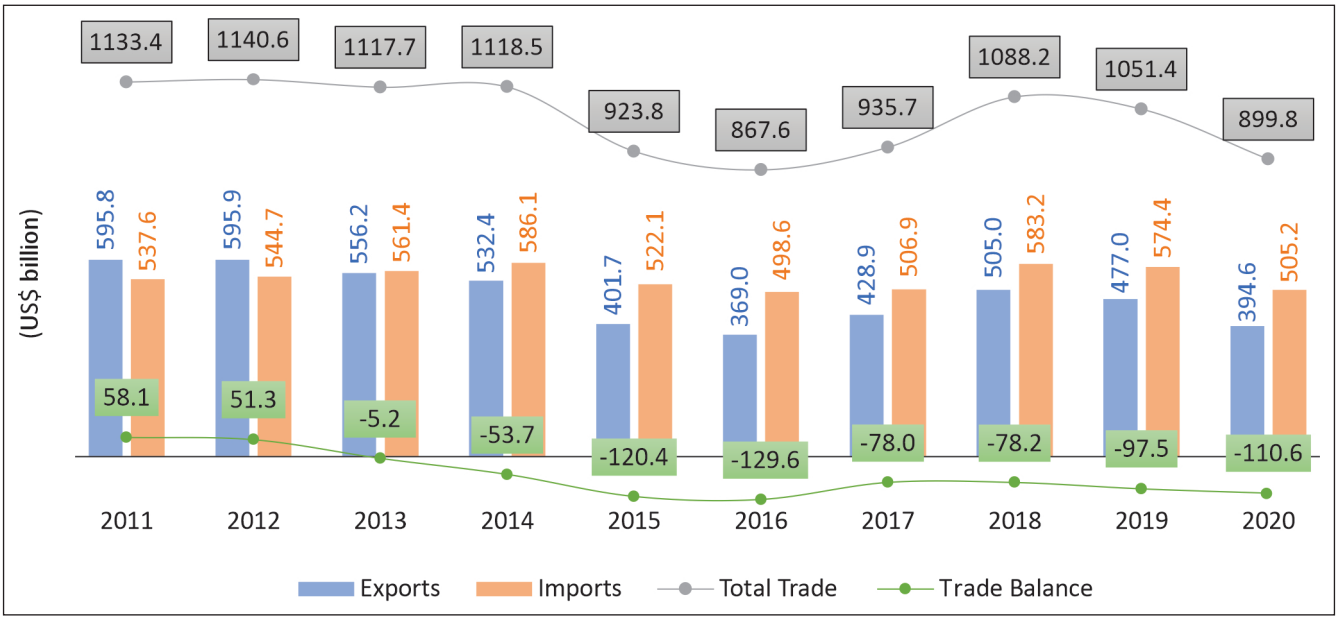
[9] The EIB COVID-19 Economic Vulnerability Index, European Investment Bank, August 2020

Trends in Africa's Foreign Trade

Africa's trade remains dependent on the external events of the global economy. African exports dipped sharply during 2012-16 as oil prices and trade in mineral products dropped. After touching a peak of US$ 1.1 trillion in 2012, Africa's trade witnessed a decline, reaching a low of US$ 867.6 billion in 2016, thereafter, it had started recovering. It recovered to US$ 935.7 billion in 2017, and crossed US$ 1 trillion by 2018, with positive trends in both exports and imports (**Chart 1.5**). Africa's trade recovery is largely driven by a recovery in its oil-exporting countries and expanding trade with emerging economies, especially intra-African trade. However, as a result of the pandemic trade declined to US$ 899.8 billion in 2020.

As African exports are primarily raw materials and resource intensive products; it has been negatively impacted by decreased demand from major emerging and developed economies. Africa's total merchandise exports declined by 17.3 percent to US$ 394.6 billion, whereas its imports contracted by 12.1 percent to US$ 505.2 billion, in 2020. This led to widening of the trade deficit to US$ 110.6 billion in 2020, compared to US$ 97.5 billion in the previous year. The continent's recovery is dependent on the recovery of production and trade in its major partners, like China and the European Union. In 2020, intra-African merchandise trade accounted for 16.2 percent of total merchandise trade of Africa, lowest among the regions after Latin America and Oceania.

Chart 1.5: Africa's Foreign Trade, 2011-2020



Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

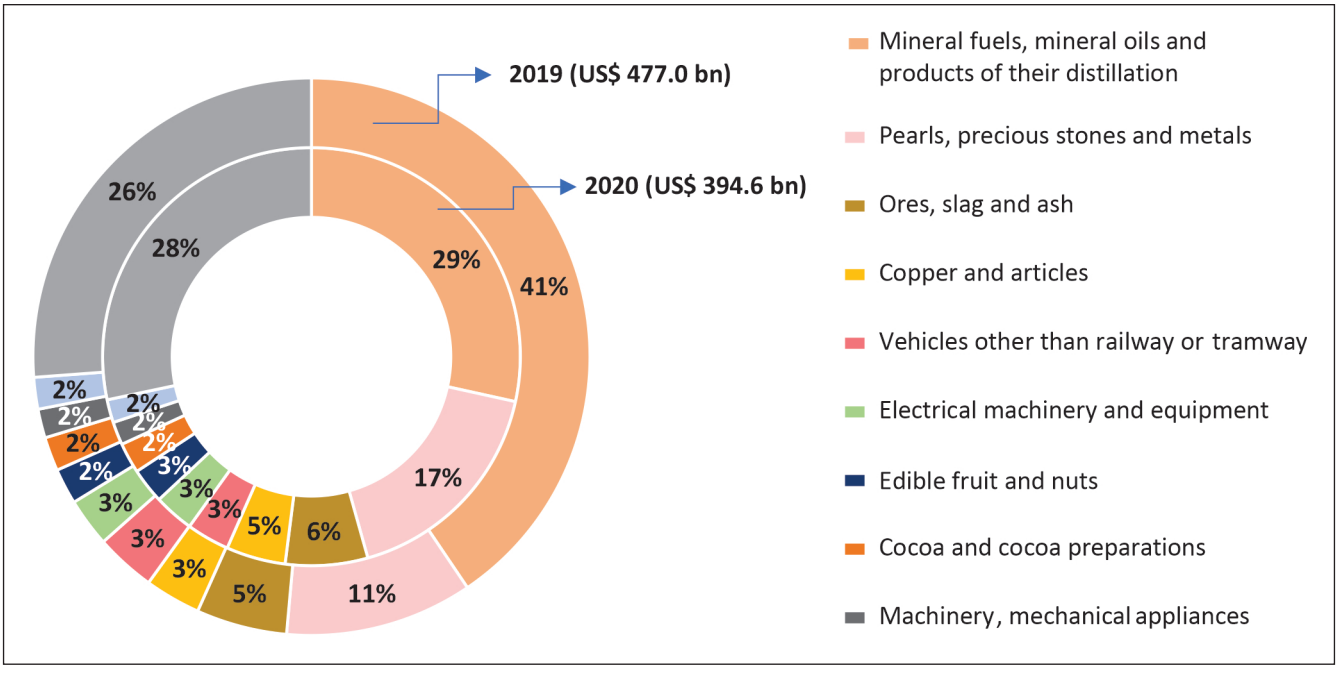
Africa - Major Export Items

Mineral fuels, oils and its products continue to be the largest export item from Africa, accounting for as much as 28.5 percent of Africa's total exports in 2020, reflecting the significant share of petroleum crude exports from Africa. However, the share has shrunk in 2020 as compared to 2019 due to falling oil prices during the first half of 2020. Other major items of export from Africa during the same year include pearls and precious stones, ores and slag, copper and its articles, vehicles other than railway and tramway, and electrical equipment.

Within mineral fuel, oil and its products, Africa majorly exports crude oil (HS 2709). Nigeria, Angola, Algeria and Libya are among the leading global exporters of crude oil, with a combined share of 4.8 percent of the global crude petroleum exports (and 69.6 percent of Africa's crude petroleum exports) in 2020.

Africa's exports are skewed towards primary commodities, making the continent vulnerable to adverse price shocks. During 2020, the share of precious metals, ores, slag and ash, electrical equipment, edible fruit and nuts, and cocoa and cocoa preparations increased as compared to 2019 **(Chart 1.6).** A recent publication by the UNCTAD has estimated that primary commodities account for about 70 percent of extra-African exports, while manufactured

Chart 1.6: Commodity-wise Major Exports of Africa



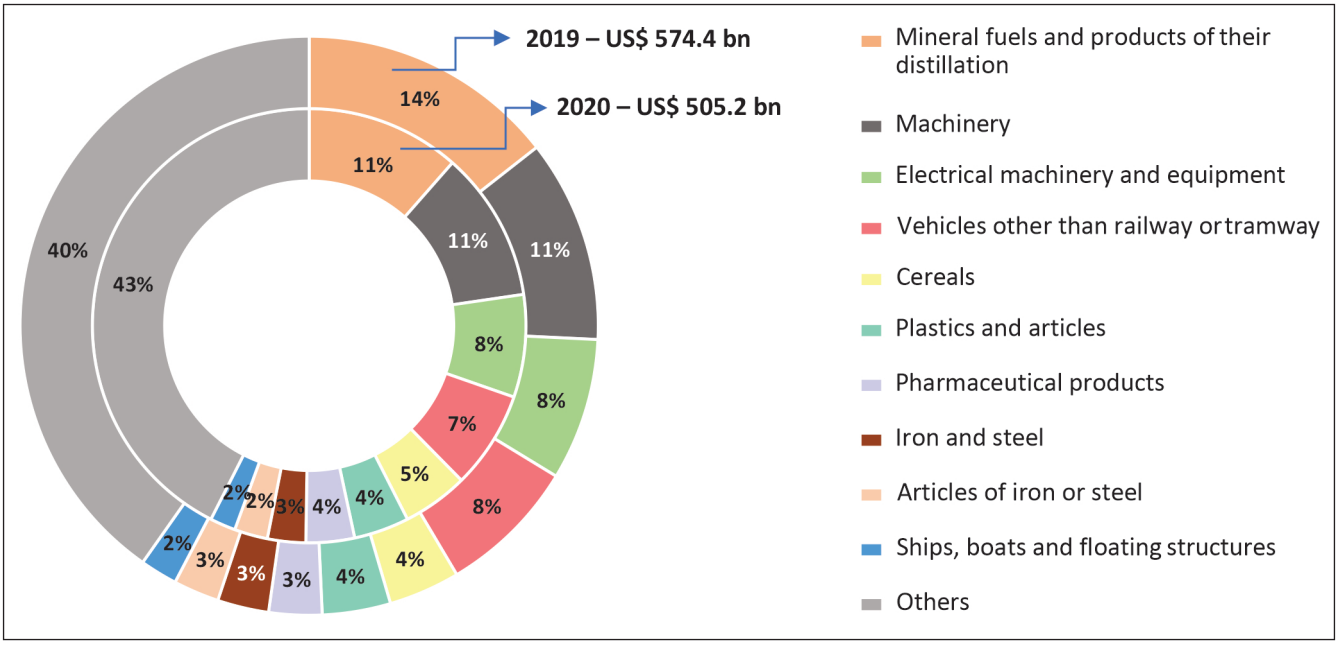
Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

products account for only 15 percent of extra-African exports. Fuel exports constitute more than half of all extra-African exports.[10] On the other hand, 61 percent of intra-African trade is comprised of semi-processed and processed goods.

Africa - Major Import Items

Africa's import basket is relatively diversified compared to its exports. Minerals fuels, mainly dominated by petroleum oils, not crude (11.5 percent of Africa's imports in 2020) and machinery and mechanical appliances (11.2 percent of Africa's imports in 2020) are the two largest import items, followed by electronic and electrical equipment, vehicles other than railway and tramway, cereals, and plastics and its articles (**Chart 1.7)**. This implies that most of Africa's consumer and capital goods are imported. Particularly, the share in import of cereals, plastic articles, and pharmaceutical products have increased in 2020 as compared to 2019.

Chart 1.7: Commodity-wise Major Imports of Africa



Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

In 2020, Africa was a net importer of machinery and equipment (with a deficit of US$ 49.5 billion), electrical machinery and equipment (US$ 26.3 billion), vehicles (US$ 23.6 billion), cereals (US$ 20.9 billion), pharmaceutical products (US$ 17.1 billion), and plastic and its articles (US$ 16.4 billion).

[10] Reaping the Potential Benefits of the African Continental Free Trade Area for Inclusive Growth, UNCTAD, 2021

Africa – Major Exporters and Importers

All African countries except DR Congo witnessed a decline in exports in 2020. South Africa, being the major industrialised economy, is the largest exporter among African economies. During 2020, major exporters like Nigeria (-37.8 percent), Egypt (-12.5 percent), Angola (-32.0 percent), Algeria (-41.3 percent), and Ghana (-16.0 percent) witnessed double digit contraction in exports. The largest exporting economies are presented in **Table 1.2.** Exports from DR Congo increased due to increased exports of copper and articles and other base metals during 2020.

Table 1.2: Africa – Major Exporters

Region/ Country	2019			2020		
	Exports (US$ bn)	Share in Africa's Exports (%)	Share in Global Exports (%)	Exports (US$ bn)	Share in Africa's Exports (%)	Share in Global Exports (%)
Africa	**477.0**	**100.0**	**2.5**	**394.6**	**100.0**	**2.3**
South Africa	90.4	19.0	0.5	85.7	21.7	0.5
Nigeria	53.6	11.2	0.3	33.4	8.5	0.2
Morocco	29.6	6.2	0.2	27.7	7.0	0.2
Egypt	30.6	6.4	0.2	26.8	6.8	0.2
Angola	34.8	7.3	0.2	23.7	6.0	0.1
Algeria	36.8	7.7	0.2	21.6	5.5	0.1
Tunisia	14.9	3.1	0.1	14.2	3.6	0.1
DR Congo	13.4	2.8	0.1	14.1	3.6	0.1
Ghana	16.8	3.5	0.1	14.1	3.6	0.1
Côte d'Ivoire	12.9	2.7	0.1	12.5	3.2	0.1

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

South Africa is also the largest importer of the continent **(Table 1.3).** The top five importers, South Africa, Egypt, Nigeria, Morocco, and Algeria accounted for more than 50 percent of imports by Africa during 2020. Imports by major economies within the region contracted during 2020 except for Nigeria, where imports increased by 11.9 percent (due to increased imports of machinery, mineral fuels, pharmaceutical products, and plastic articles) and Ghana by 60.5 percent (import of machinery, electrical equipment, mineral fuels, and plastic articles).

Table 1.3: Africa – Major Importers

Region/Country	2019			2020		
	Imports (US$ bn)	Share in Africa's Imports (%)	Share in Global Imports (%)	Exports (US$ bn)	Share in Africa's Imports (%)	Share in Global Imports (%)
Africa	**574.4**	**100.0**	**3.0**	**505.2**	**100.0**	**2.9**
South Africa	88.2	15.4	0.5	68.7	13.6	0.4
Egypt	78.7	13.7	0.4	60.3	11.9	0.3
Nigeria	47.4	8.2	0.2	53.0	10.5	0.3
Morocco	51.1	8.9	0.3	44.5	8.8	0.3
Algeria	42.6	7.4	0.2	34.2	6.8	0.2
Ghana	10.4	1.8	0.1	16.8	3.3	0.1
Tunisia	21.6	3.8	0.1	16.7	3.3	0.1
Kenya	17.2	3.0	0.1	15.4	3.1	0.1
Ethiopia	15.6	2.7	0.1	14.1	2.8	0.1
Liberia	12.3	2.1	0.1	12.5	2.5	0.1

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

Africa- Major Export Markets and Import Sources

The pandemic induced low productivity, and disruptions in key value chains in the United States, as well as in Asia and Europe, compounded by a slump in the international price of primary commodities, have led to a contraction in the value and quantities demanded of exports from Africa. Africa's exports to all its major export destination contracted in 2020 except for UAE (exports from Africa to UAE increased by 47.4 percent due to increased gold exports) and Switzerland (exports from Africa increased by 32 percent due to increased exports of gold and copper). In 2020, China was the largest market for Africa's exports (accounting for 14.2 percent of Africa's total exports). The UAE has replaced India as the second largest export destination for Africa during 2020 as India's imports of petroleum oil declined during the same period (**Table 1.4**). As a result, share of African exports in UAE's global imports increased by almost three times. In the recent years Africa's exports have reoriented from OECD markets to emerging and fast-growing economies of the South especially China and India.

Table 1.4: Africa's Major Export Destinations

Region/Country	2019			2020		
	Africa's Exports (US$ bn)	Share in Africa's Exports (%)	Share in the Country's Global Imports (%)	Africa's Exports (US$ bn)	Share in Africa's Exports (%)	Share in the Country's Global Imports (%)
Africa	**477.0**	**100.0**	**-**	**394.6**	**100.0**	**-**
China	68.2	14.3	3.3	56.0	14.2	2.7
UAE	19.2	4.0	7.2	28.3	7.2	11.5
India	38.8	8.1	8.1	27.5	7.0	7.5
France	26.3	5.5	4.1	20.5	5.2	3.6
Spain	28.4	6.0	7.6	19.9	5.1	6.0
USA	23.1	4.9	0.9	17.3	4.4	0.7
Switzerland	12.9	2.7	4.6	17.0	4.3	5.8
Germany	19.5	4.1	1.6	15.0	3.8	1.3
Italy	21.8	4.6	4.6	14.6	3.7	3.5
Netherlands	16.5	3.5	3.2	13.5	3.4	2.8

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

As regards imports, the share of traditional markets such as France, USA, Germany, and Italy, as Africa's key import sources has been declining during the recent years. China was the largest source for Africa's imports, accounting for 19.7 percent of Africa's total imports in 2020 **(Table 1.5).** However, Africa's share in China's global exports have declined from 2019 to 2020. Although Africa's imports from India declined during 2020 by 13.8 percent, India's share increased from 9.2 percent in Africa's global imports in 2019 to 9.4 percent in 2020.

According to the preliminary estimates by the ITC, Africa's total trade increased by around 22 percent in 2021 to US$ 1.1 trillion, driven by recovery in global commodity prices and external demand. While Africa's total merchandise exports increased by 30.7 percent to US$ 513.5 billion, imports increased by 15 percent to US$ 586.4 billion in 2021. Supported by large growth in exports compared to imports, the continent's trade deficit has narrowed to US$ 72.9 billion in 2021.

Table 1.5: Africa's Major Import Sources

Region/ Country	2019			2020		
	Africa's Imports (US$ bn)	Share in Africa's Imports (%)	Share in Country's Global Exports (%)	Africa's Imports (US$ bn)	Share in Africa's Imports (%)	Share in the Country's Global Exports (%)
Africa	**574.4**	**100.0**	-	**505.2**	**100.0**	-
China	100.2	17.5	4.0	99.3	19.7	3.8
India	29.6	5.2	9.2	26.0	5.2	9.4
France	30.5	5.3	5.5	25.8	5.1	5.4
USA	31.6	5.5	1.9	25.4	5.0	1.8
Germany	25.7	4.5	1.7	21.6	4.3	1.6
South Africa	22.7	4.0	25.2	20.3	4.0	23.7
UAE	22.5	3.9	7.1	18.0	3.6	5.4
Spain	19.6	3.4	5.8	16.9	3.3	5.4
Italy	20.4	3.6	3.8	16.8	3.3	3.4
Turkey	17.6	3.1	9.7	15.9	3.2	9.4

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

Mineral fuels continue to be the largest export item from Africa, accounting for 36.3 percent of Africa's total exports in 2021, reflecting the significant share of petroleum crude exports from Africa. Other major items of export from Africa during the same year include pearls and precious stones (12 percent), ores and slag (6.1 percent), copper and articles (3.9 percent), and vehicles other than railway and tramway (3.3 percent). Africa's import basket is relatively diversified compared to its exports. Minerals fuels, mainly dominated by petroleum oils, not crude (14.5 percent of Africa's imports) and machinery and mechanical appliances (10.2 percent of Africa's imports) were the two largest import items in 2021, followed by electrical machinery and equipment (7.2 percent), vehicles other than railway and tramway (4.9 percent), cereals (4.9 percent), plastics and articles (4.4 percent), and pharmaceutical products (4.4 percent).

South Africa, Nigeria, Egypt, Algeria, Morocco, and Angola are the largest exporters in Africa, together accounting for as much as 62.2 percent of Africa's total exports in 2021. As regards imports, South Africa, Egypt, Morocco, Nigeria, and Algeria are the leading importers in Africa, together accounting for 53.4 percent of Africa's total imports in 2021. China was

the major export destination for Africa, accounting for 14.0 percent of Africa's total exports in 2021. India was the second-largest export market for Africa in 2021, accounting for 6.5 percent of Africa's total exports. China emerged as the leading supplier to Africa, accounting for as much as 19.1 percent of Africa's total imports in 2021. India emerged as the second largest import source in 2021, accounting for 5.8 percent of Africa's global imports.

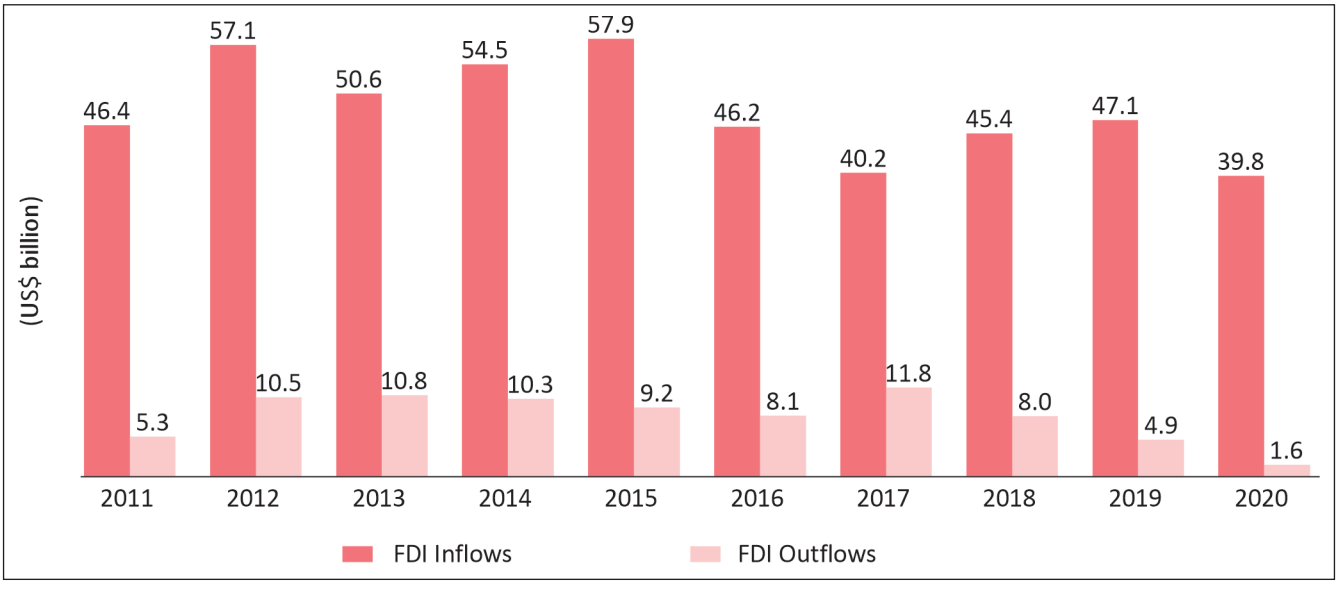
Foreign Direct Investment Flows in Africa

Foreign Direct Investment (FDI) inflows to Africa declined in 2020 by 15.6 percent to US$ 39.8 billion[11], lowest during the last decade, due to the pandemic related trade restrictions and lower oil prices (**Chart 1.8**). FDI inflows in Africa remained lower than the developing country average as the continent witnessed its first recession in last 30 years during 2020. Similarly, FDI outflows from African countries in 2020 dropped by 67.7 percent to nearly US$ 1.6 billion.

Greenfield project announcements, an indication of investor sentiment and future FDI trends, dropped by 62.1 percent to US$ 29 billion, while international project finance, especially relevant for large infrastructure projects plummeted by 74 percent to US$ 32 billion. Announcement of greenfield projects in Africa's primary sector declined by 50 percent to US$ 1.4 billion, manufacturing sector declined by 73.9 percent to US$ 8.5 billion, and services declined by 53.6 percent to US$ 19.1 billion in 2020. The FDI downturn in 2020 was particularly severe in resource-dependent economies due to low prices of and dampened demand for energy commodities. This led to contraction of total FDI inflows as oil exporters accounted for 21 percent of FDI inflows to the region, while other resource intensive countries accounted for 44 percent and non-resource intensive countries accounted for 35 percent of the total inflows during 2020. Amid the slow roll-out of vaccines and the emergence of new COVID strains, significant downside risks persist for foreign investment to Africa.

[11] Source: UNCTADstat and World Investment Report 2021, UNCTAD

Chart 1.8: Africa's Foreign Investment Flows, 2011-2020



Source: UNCTADstat; and India Exim Bank Analysis

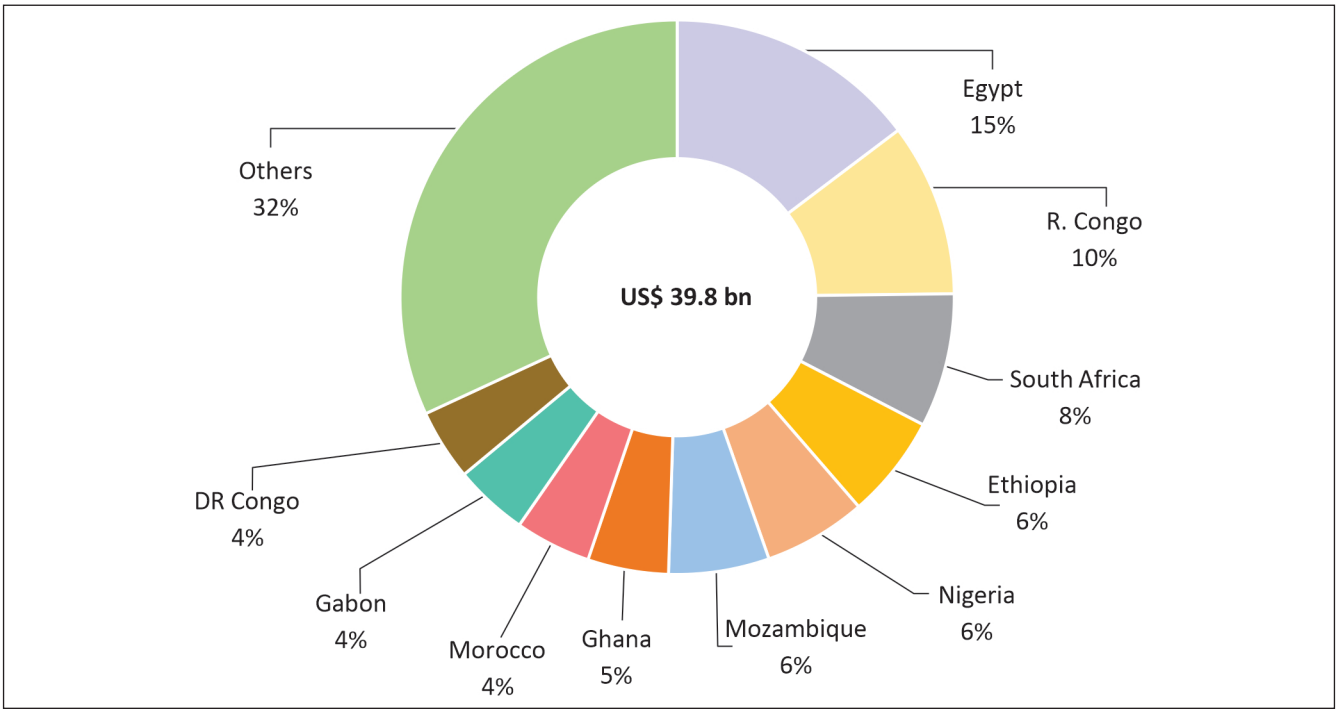
FDI inflows to North Africa decreased by 25 percent to US$ 10.1 billion in 2020. Egypt continued to be the largest FDI recipient in the region, however with declining inflows by 35 percent to US$ 5.9 billion in 2020. Foreign investment in Egypt continued to remain skewed towards the oil and gas industry in 2020, with increasing investment inflows in telecommunication, consumer goods and real estate. Morocco's FDI inflows remained constant with diversified industries including automotive, aerospace and textiles, among others. In June 2020, Algeria passed the Additional Finance Act which lifted restrictions that capped foreign ownership at 49 percent, thereby allowing foreign investors to set up 100 percent foreign-owned companies in Algeria except in retail and five strategic sectors – (i) mining resources, (ii) hydrocarbon and electrical energy, (iii) defence, (iv) railways, port and airports, and (v) the pharmaceutical industry, except for investments related to the manufacturing of "essential innovative, high value-added products, requiring complex and protected technology", intended for the domestic market or export[12].

FDI inflows to Sub-Saharan Africa decreased by 12 percent to US$ 30 billion in 2020. Despite the pandemic, the long-term policy FDI diversification sustained FDI inflows to Nigeria to US$ 2.4 billion in 2020 as compared to US$ 2.3 billion in 2019. Inflows in Republic of Congo increased by 19 percent in 2020 mainly into offshore oil fields after the completion of the Phase 2 licensing round of available oil blocks in 2019. In DR Congo, inflows into mining sector supported overall FDI inflows, which stood at US$ 1.6 billion in 2020 (increasing by 11 percent as compared to 2019), as prices for cobalt increased with rising demand for its

[12] UNCTAD Investment Policy Hub, Algeria, June 2020

use in smartphones and electric car batteries. Similarly, Gabon registered robust inflows into the oil industry, as the adoption of its new Petroleum Code in 2019 led to several new offshore production-sharing agreements, some of which materialized in 2020. This led to increase in FDI inflows by 11 percent to US$ 1.7 billion. Ethiopia, despite registering a 6 percent reduction in inflows to US$ 2.4 billion in 2020, accounted for more than one third of foreign investment to East Africa. The manufacturing, agriculture and hospitality industries drew the highest shares of investment in 2020. Inflows to Mozambique increased by 6 percent to US$ 2.3 billion driven by investments in LNG project. Ghana, on the other hand, registered a 52 percent decline in FDI in 2020, with inflows reaching US$ 1.9 billion in 2020. FDI inflows into South Africa decreased by 39 percent to US$ 3.1 billion in 2020 as the country had to borne high human and economic costs due to the pandemic. **Chart 1.9** depicts the major recipients of FDI inflows into Africa during 2020.

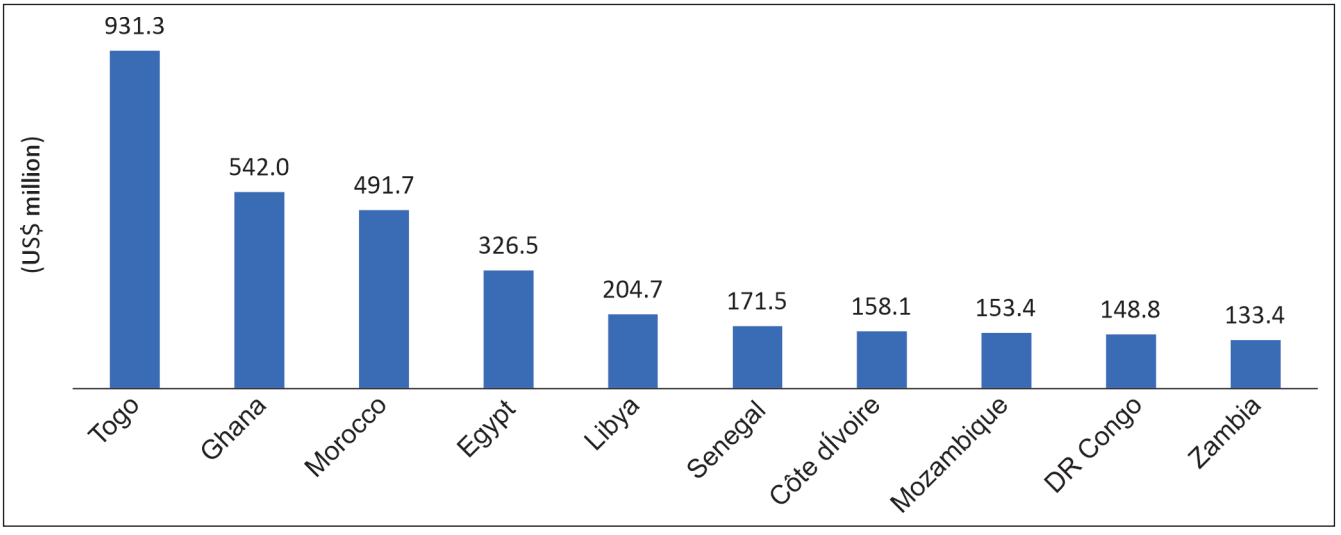
Chart 1.9: Major Recipients of FDI Inflows into Africa in 2020



Source: UNCTADstat; and India Exim Bank Analysis

FDI outflows from Africa fell by two thirds in 2020 to US$ 1.6 billion, from US$ 4.9 billion in 2019. Highest FDI outflows were from Togo of US$ 931 million mainly towards the financial services sector of African countries in the West African region. Other significant outflows were from Ghana (US$ 542 million) and Morocco (US$ 492 million). **Chart 1.10** depicts the African countries with major FDI outflows during 2020.

Chart 1.10: Major Sources of FDI Outflows from Africa in 2020



Source: UNCTADstat; and India Exim Bank Analysis

According to the UNCTAD's World Investment Report 2021, foreign investment in Africa directed towards sectors related to the Sustainable Development Goals (SDGs) fell considerably in nearly all sectors in 2020. Renewable energy was the only exception, with international project finance deals increasing by 28 percent to US$ 11.1 billion, from US$ 8.7 billion in 2019. This is consistent with rising global trends of investment in renewable energy. In contrast, greenfield investment projects fell significantly in food and agriculture (declining by 78 percent to US$ 1.7 billion), health (declining by 58 percent to US$ 267 million) and education (declining by 45 percent to US$ 143 million).

According to the latest preliminary estimates of the UNCTAD[13], global FDI strongly rebounded in 2021, up by 77 percent as compared to 2020 levels. Investor confidence remained strong in the infrastructure sector driven by favourable long term financing conditions and recovery stimulus packages and overseas investment programmes. On the other hand, greenfield investments were found to be modest as investor confidence in global value chains remain weak, remaining 30 percent below the pre-pandemic levels. According to the UNCTAD estimates, FDI inflows to Africa increased by 147 percent during 2021 as compared to 2020 amounting to US$ 97 billion. However, this could be owing to US$ 46 billion share swap between Naspers and Dutch investment unit Prosus in South Africa in the second half of 2021[14]. While North African region witnessed a contraction of 13 percent in FDI inflows to US$ 9 billion, Sub-Saharan Africa recorded a 200 percent rise to US$ 88 billion in 2021.

[13] Investment Trends Monitor, UNCTAD, Issue 40, January 2022
[14] Naspers, Prosus launch share swap deal to shrink S.Africa discount, Reuters, May 12, 2021

International project finance is expected to drive the momentum in 2022 as well. However, given a modest GDP growth rate, inflationary pressures and a slow vaccine roll-out programme, investment recovery in Africa is likely to be less than the rest of the world. In the long run, however, Europe's quest for alternative energy sources may benefit Africa leading to higher investments, especially in oil and gas producing countries. Other beneficiaries could be fertiliser producing countries like Morocco and Egypt, which may receive increased investments to meet the increased fertiliser demand-supply gap evolved out of the current geopolitical situations. Also, South Africa, which is the largest producer of palladium after Russia, may receive increased investments as palladium remains a critical input for automobiles and electronics.

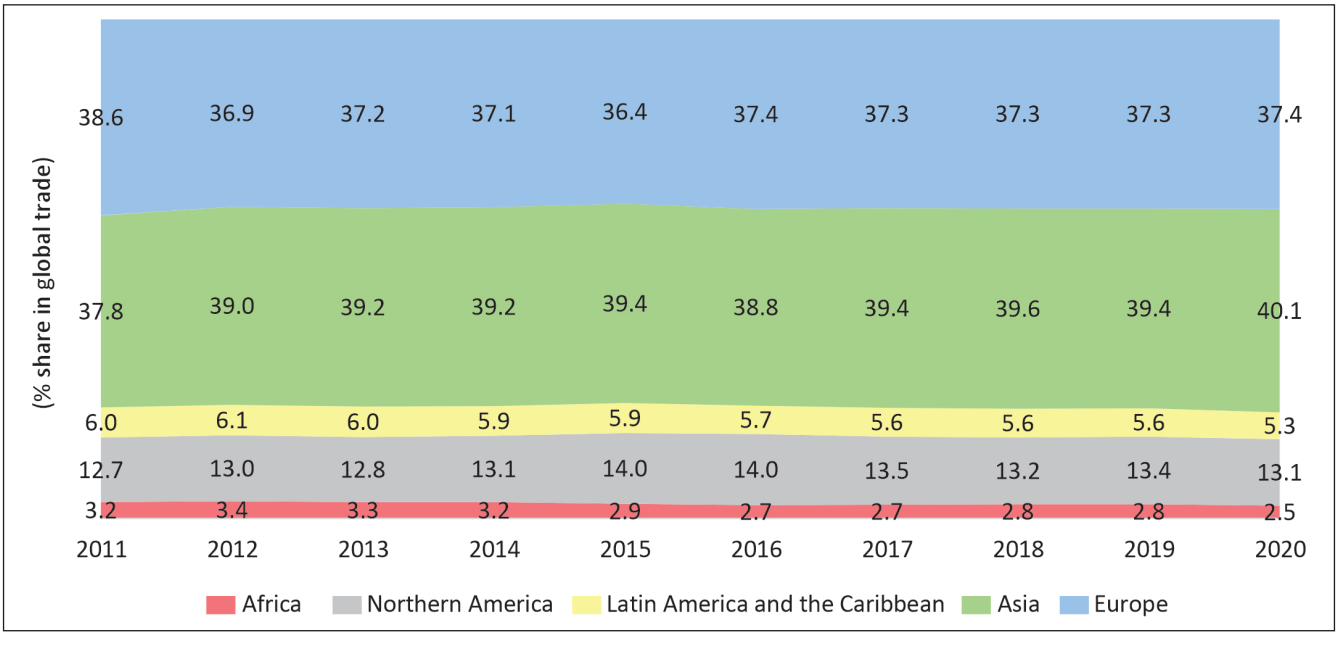
Chapter

2

AFRICA'S QUEST FOR TRADE INTEGRATION

Trade indicators in several African countries have been moderating in recent years as they remain highly sensitive to international commodity price movements. Even though the continent has positioned itself as a key partner in the global arena, its share in global trade has declined from 3.2 percent in 2011 to 2.5 percent in 2020 (**Chart 2.1**). Africa's exports accounted for 2.2 percent of global exports in 2020, while its imports accounted for 2.9 percent of global imports. The marginalisation of Africa in global trade is the consequence of the continued reliance on the exports of primary commodities and natural resources at a time when global trade is increasingly dominated by manufactured goods with high technological content. Even though the resource intensive exports have helped Africa achieve higher growth rates in earlier years, it also increased the region's exposure to global volatility and adverse terms of trade shocks.

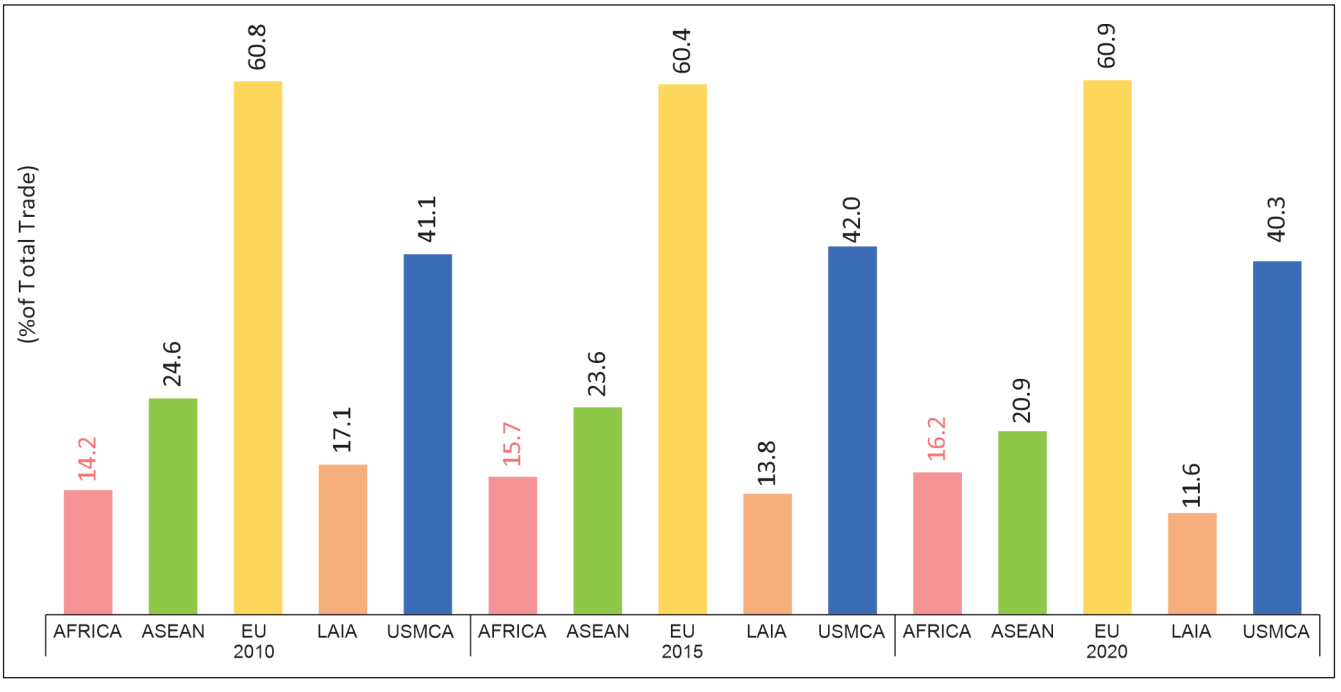
Chart 2.1: Share of Select Regions in Global Trade



Source: UNCTADstat; and India Exim Bank Analysis

Intra-regional trade (average of exports and imports) in Africa stood at 16.2 percent in 2020, increasing from a share of 14.2 percent in 2010. The European Union recorded the highest intra-regional trade share of 60.9 percent in 2020, followed by the USMCA at 40.3 percent, and Association of South East Asian Nations (ASEAN) at 20.9 percent. Africa's share of intra-regional trade remains at the second lowest, only after Latin American Integration Association (LAIA) (**Chart 2.2**). However, the positive aspect is that Africa's intra-regional trade has been witnessing an increase in last 10 years as compared to the other regions which have witnessed a decline, except for the EU. The lower intra-continental trade in Africa underscores the extent of the revenue foregone and the scope for improvement in African countries. This is particularly critical for Africa, considering that 16 of the 55 countries are landlocked. This gap also highlights the immense benefits that the African economies may reap by working towards a successful implementation of the African Continental Free Trade Area (AfCFTA).

Chart 2.2: Intra-regional Merchandise Trade for Select Regions



Note: The North American Free Trade Agreement (NAFTA) was superseded by the USMCA effective from July 1, 2020.

Source: UNCTADstat; and India Exim Bank Analysis

Intra-African exports stood at US$ 69.1 billion in 2020 declining from US$ 80.3 billion in 2019 whereas imports stood at US$ 72.2 billion in 2020 as compared to US$ 82.3 billion in 2019, so the intra-regional trade (considering the average of export and import[15]) stood at US$ 70.7 billion in 2020 as compared to US$ 81.3 billion in 2019.

[15] UNCTAD Methodology

Eight Regional Economic Communities (RECs) are recognized by the African Union (AU) for continental economic integration. RECs recognized by the AU include Arab Maghreb Union (UMA); Common Market for Eastern and Southern Africa (COMESA); Community of Sahel-Saharan States (CEN-SAD); East African Community (EAC); Economic Community of Central African States (ECCAS); Economic Community of West African States (ECOWAS); Intergovernmental Authority on Development (IGAD), and Southern African Development Community (SADC). These eight sub-regional bodies are the building blocks of the African Economic Community established by the 1991 Abuja Treaty, which provides the overarching framework for continental economic integration.

Africa's market is highly fragmented and is characterized by a plethora of trade regimes shaped majorly by its colonial past. It may be divided into three broad categories. First being the preferential agreements individual African countries have with countries outside the continent. These include agreements under the Generalised System of Preferences (GSP), Duty-Free Treatment for Least-Developed Countries (LDCs), and preferential access to the US market under the African Growth and Opportunity Act (AGOA). Second being the regional trade agreements between African countries and countries outside Africa. This grouping includes the various Economic Partnership Agreements (EPAs) that the EU has negotiated with different countries and regional groupings on the continent, which also calls for the partial and gradual opening of African markets to the EU imports. Third, there is a web of intra-African trade agreements, including eight RECs, and four sub-regional groupings (**Table 2.1**).

Table 2.1: Existing Regional Trade Agreements in Africa in 2020

RECs	Sub - Grouping	Membership	Free Trade Area	Customs Union
AMU		Algeria, Libya, Mauritania, Morocco, and Tunisia	No	No
CEN–SAD		Benin, Burkina Faso, Cape Verde, Central African Republic, Chad, Djibouti, Egypt, Eritrea, the Gambia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Somalia, Sudan, Togo, and Tunisia	No	No
COMESA		Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Swaziland, Tunisia, Uganda, Zambia, and Zimbabwe	Yes	Partially

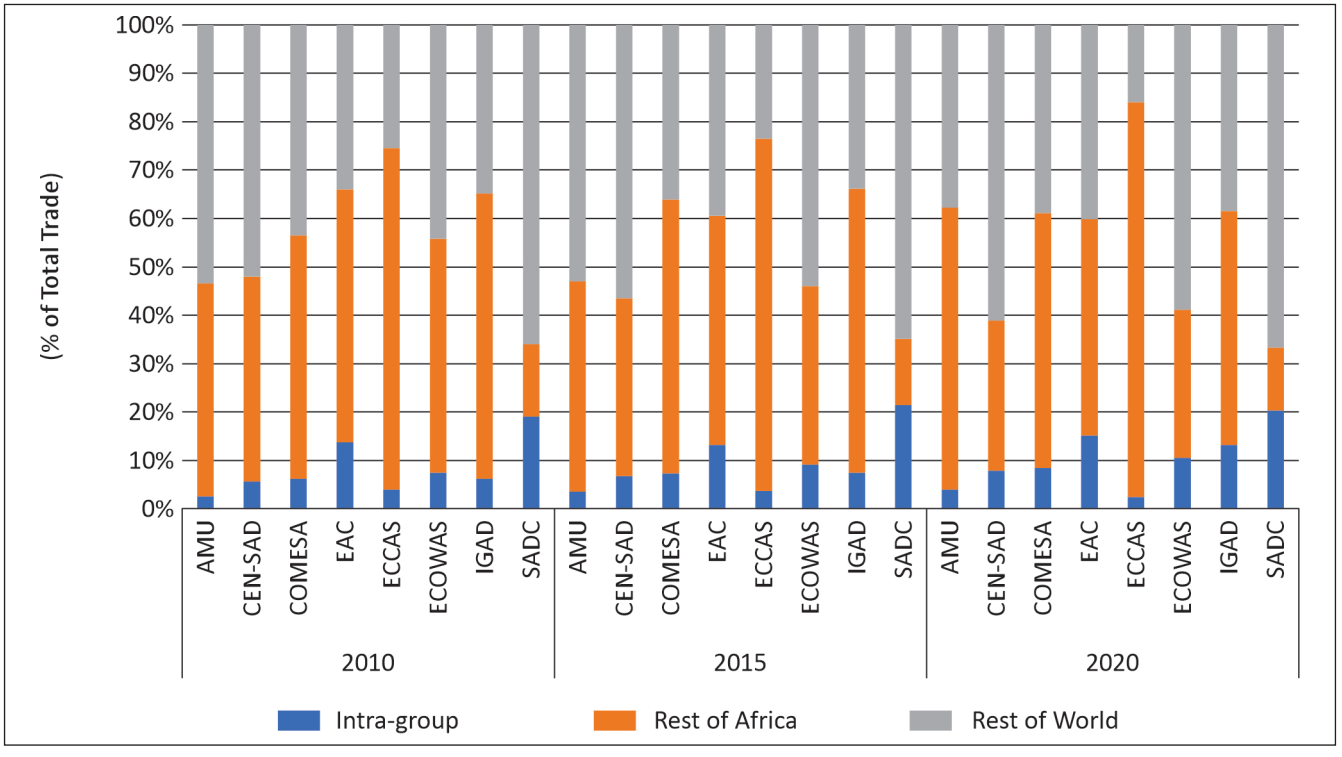
RECs	Sub - Grouping	Membership	Free Trade Area	Customs Union
EAC		Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda	Yes	Yes
ECCAS	**CEMAC**	Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, and Republic of Congo	Yes	Yes
	ECCAS	CEMAC + Burundi, DR Congo, Angola, and Sao Tome and Principe	Yes	No
ECOWAS	**WAEMU**	Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo	Yes	Yes
	ECOWAS	WAEMU + Cabo Verde, the Gambia, Ghana, Guinea, Liberia, Nigeria, and Sierra Leone	Yes	Yes
IGAD		Djibouti, Ethiopia, Eritrea, Kenya, Somalia, Sudan, South Sudan, and Uganda	No	No
SADC	**SACU**	Botswana, Lesotho, Namibia, South Africa, and Swaziland	Yes	Yes
	SADC	SACU + Angola, DR Congo, Madagascar, Malawi, Mauritius, Mozambique, Seychelles, Tanzania, Zambia, and Zimbabwe	Yes	No

Source: Afreximbank and India Exim Bank Analysis

Despite having eight regional economic communities and four sub-regional groupings, Africa's intra-regional trade continues to remain low. According to the ITC, official trade data underestimates intra-African trade as it does not include the large share of informal cross-border trade that takes place on the continent, especially in agricultural goods and household items. Another reason for Africa's trade integration to remain low is the nature of the products traded within the continent. Africa's export profile does not overlap with its import basket. Increasing complementarity to ensure that a larger share of African supply matches African demand would require product diversification.

According to the UNCTAD, the share of SADC's intra-regional trade was the highest among all the RECs at 20.3 percent in 2020, followed by EAC accounting for 15.1 percent of intra-regional trade. **Chart 2.3** reveals that although SADC is found to be among the most integrated trade blocs among the African Economic Communities, however, it trades less with the rest of Africa compared to extra-African economies.

Chart 2.3: Intra-regional Trade by Select Economic Communities in Africa



Note: Trade with rest of the world excludes intra-African trade and trade with rest of Africa.

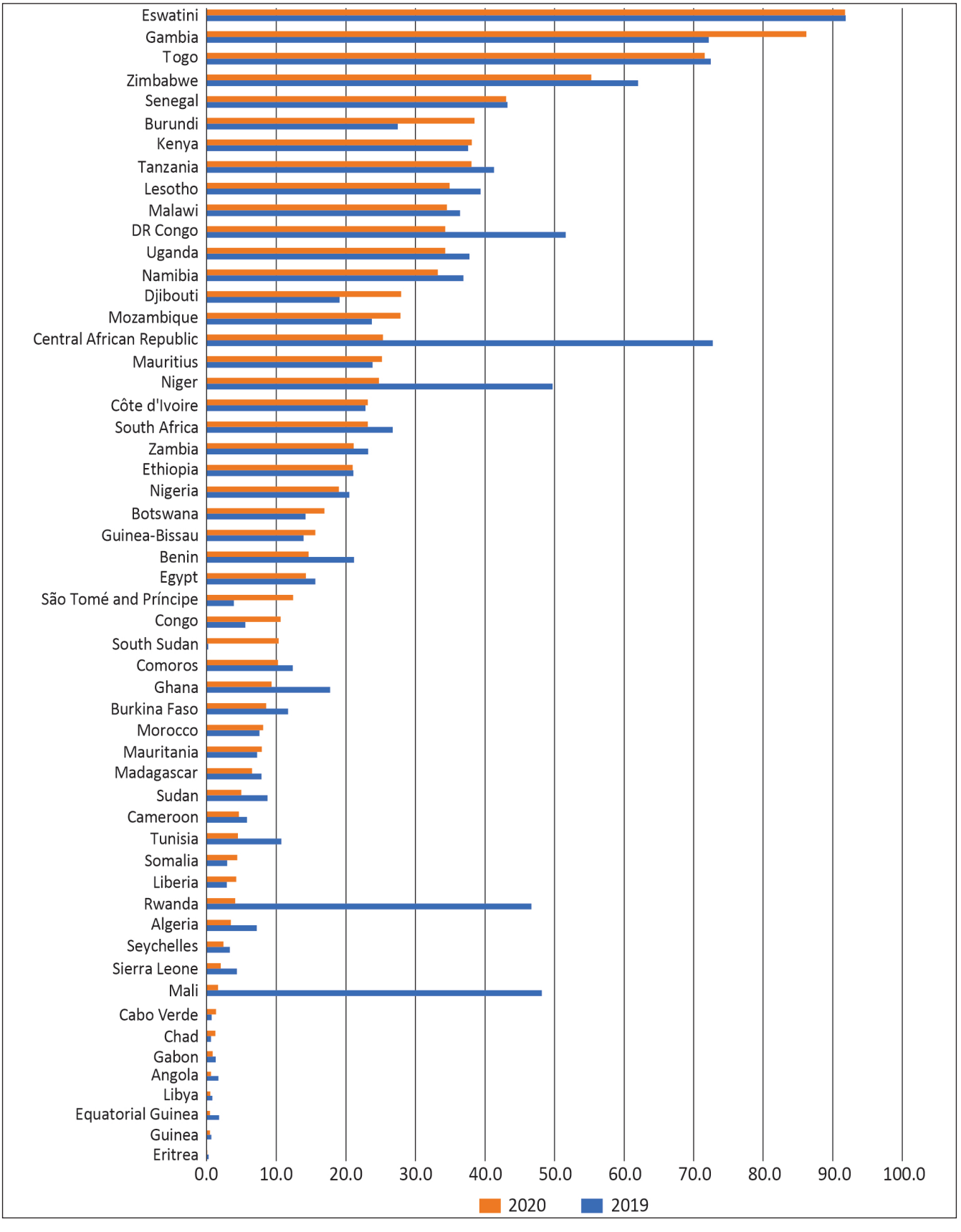
Source: UNCTADstat and India Exim Bank Analysis

The difference across these trading blocs reflects various economic factors leading to a difference in trade integration. The economic groups as well as the countries are at different stages of economic as well as industrial development, production processes and structures, state of political situations and implementation of agreements. As established in India Exim Bank's study[16] using WTO data, intra-African trade is characterized by trade in manufacturing whereas trade between African and the rest of the world is dominated by primary commodities (majority being fuel and mining products).

Chart 2.4 highlights the share of intra-regional exports of African economies to their total exports. It may be noted that 91.5 percent of Eswatini's exports are to Africa, particularly South Africa, mainly under SADC grouping. Among the larger exporters of the continent, the share of Africa in South Africa's global exports was 23.1 percent in 2020, followed by Nigeria (19 percent), Morocco (8.1 percent), Egypt (14.2 percent), and Angola (0.7 percent). Many African countries including DR Congo, Niger, Rwanda, Mali, and Ghana, among others, have undergone a decline in share of their intra-African exports during 2020 as compared to 2019.

[16] India Exim Bank (2019), India-SADC Trade and Investment Relations: Harnessing the Potential, March 2019

Chart 2.4: Intra-regional Exports of African Countries (% of Total Exports)



Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

African Continental Free Trade Area Agreement

The African Continental Free Trade Area (AfCFTA) agreement, signed in Kigali, Rwanda, on March 21, 2018, presently has 54 African States (except Eritrea) as signatories. On April 29, 2019, Sierra Leone and the Sahrawi Republic ratified the AfCFTA, and with this ratification the threshold of 22 ratifying states for the free trade area to formally exist was reached. As a result, the AfCFTA came into force on May 30, 2019, for the 24 countries which had deposited their instruments of ratification with the African Union Commission (AUC). The operational phase of the AfCFTA was launched during the 12th Extraordinary Session of the Assembly of the Union on the AfCFTA in Niamey, Niger on July 7, 2019. Trading under the AfCFTA Agreement began on January 1, 2021[17].

As on March 2022, 42 of the 54 signatories (76 percent) have deposited their instruments of the AfCFTA ratification - Ghana, Kenya, Rwanda, Niger, Chad, Eswatini, Guinea, Côte d'Ivoire, Mali, Namibia, South Africa, Congo Republic, Djibouti, Mauritania, Uganda, Senegal, Togo, Egypt, Ethiopia, Gambia, Sahrawi Republic, Sierra Leone, Zimbabwe, Burkina Faso, São Tomé & Príncipe, Equatorial Guinea, Gabon, Mauritius, Central African Republic, Angola, Lesotho, Tunisia, Cameroon, Nigeria, Malawi, Zambia, Algeria, Burundi, Seychelles, Tanzania, Cabo Verde, and DR Congo. However, confirmation of Parliamentary/Cabinet approval for Somalia remains pending. Rules of Origin have been agreed on 87.7 percent of total tariff lines and the operationalisation of the Pan-African Payments and Settlements System (PAPSS) has been officially launched.

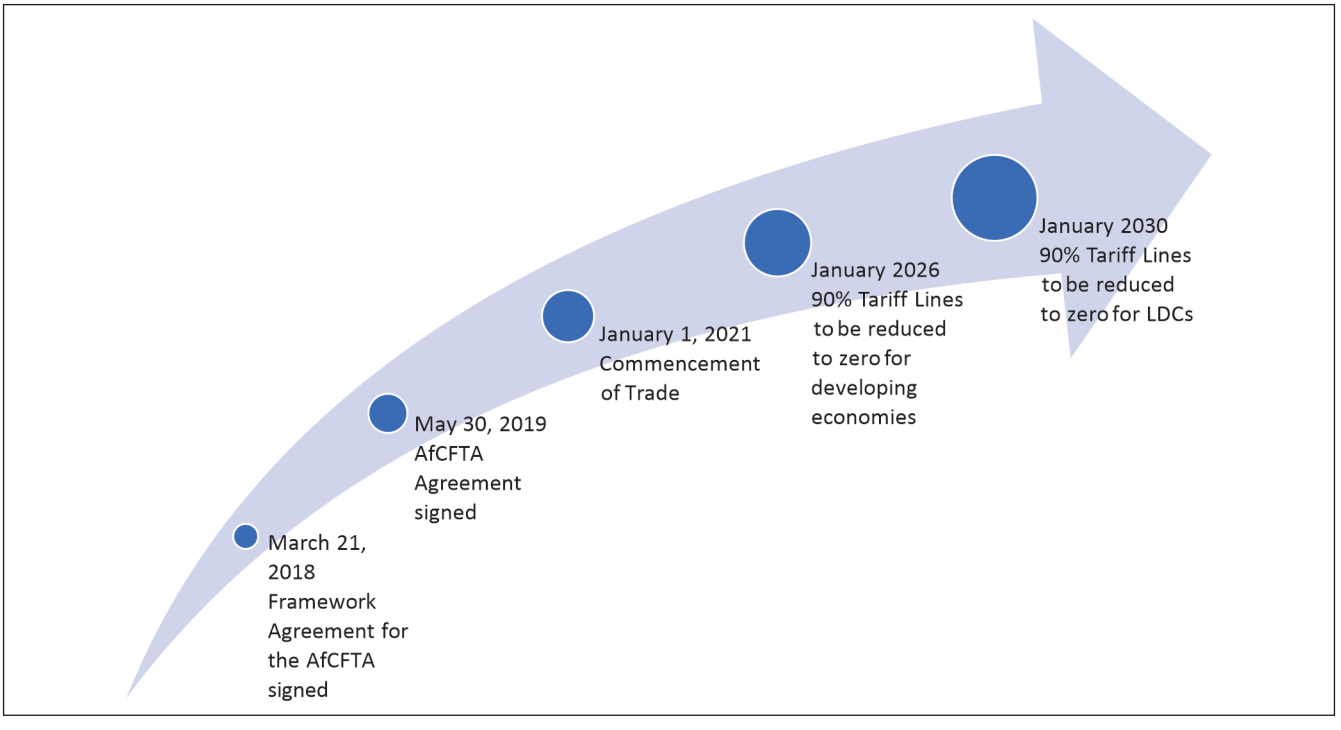
According to the Article 19(2) of the AfCFTA agreement "State Parties that are members of other regional economic communities, regional trading arrangements and custom unions, which have attained among themselves higher levels of regional integration than under this Agreement, shall maintain such higher levels among themselves." Article 8(2) of the Protocol on Trade in Goods states that "State Parties that are members of other RECs, which have attained among themselves higher levels of elimination of customs duties and trade barriers than those provided for in this Protocol, shall maintain, and where possible improve upon, those higher levels of trade liberalisation among themselves". During the Johannesburg Declaration in December 2020, the Assembly of the African Union reaffirmed "the role of the Regional Economic Communities as building blocks to the African Economic Community and urged the RECs and the AfCFTA Secretariat to collaborate in the implementation of the AfCFTA Agreement". This statement implies recognition of the fact that the RECs are legal persons in their own right and that they have adopted legal obligations to deepen their own integration, and many want to be customs unions[18].

[17] Status of AfCFTA Ratification, TRALAC Feb 2022
[18] AfCFTA Parallelism and the Acquis, TRALAC, February 2021

In lines with the objectives of the Abuja Treaty, the AfCFTA was designed to create an integrated continental market for goods and services and to support the movement of capital and natural persons. The AfCFTA is one of the flagship projects of the First Ten Year Implementation Plan under the African Union (AU) Agenda 2063. It is expected to create ample opportunities for entrepreneurs across the continent and has the potential to enhance competitiveness, promote industrial development through diversification and regional value chain development, as well as sustainable socio-economic development and structural transformation of the continent.[19]

The Niamey Summit also launched five complementary initiatives to support the implementation of the AfCFTA: a) AfCFTA product-specific rules of origin covering 90 percent of tariff lines, b) Continental Online Mechanism for Monitoring, Reporting and Eliminating Non-Tariff Barriers, c) Pan-African Payments and Settlements System, d) Online Portal for Trade in Goods Tariff Negotiations, and e) AU Trade Observatory. The timelines for implementing the AfCFTA is highlighted in **Exhibit 2.1.**

Exhibit 2.1: Timeline for the Implementation of the AfCFTA



The AfCFTA is being negotiated in two phases. Trade in goods and services and dispute settlement are negotiated in Phase I. Phase II negotiations will focus on investment,

[19] A step forward for continent if transport, utilities, capital, and the right rules of commerce are put in place, Dr. Mukhisa Kituyi, Secretary-General of UNCTAD, 2019

competition policy and intellectual property rights.[20] Following are the objectives of the AfCFTA for enhancing goods and services trade (**Table 2.2**).

Table 2.2: Key Objectives of the African Continental Free Trade Agreement

Trade in Goods	Trade in Services
• Elimination of duties and quantitative restrictions on imports • Imports shall not be treated less favourably than exports • Elimination of non-tariff barriers • Enhance efficiency of custom procedures • Improve cooperation on product standards and regulations • Cooperation in technical assistance and capacity building • Industrialization of African economies and promote regional and continental global value chains	• Transparency of service regulations • Mutual recognition of standards, licensing, and certification • Services suppliers are not to be treated less favourably than domestic suppliers in liberalized sectors • Progressively liberalize services trade

Source: African Continental Free Trade Area, United Nations Economic Commission for Africa

Starting from 2021, the AfCFTA aims to liberalise 90 percent of tariff lines over 5 years for the members and least developed countries (LDCs) will implement their agreed tariff reductions over 10 years. The remaining 10 percent of tariff lines are divided into two categories – 7 percent of the tariff lines may be designated sensitive products and liberalised over 10 years (LDCs will be provided a time frame of 13 years). The remaining 3 percent of the tariff lines (not exceeding 10 percent of the value of trade) may be excluded from liberalisation. The criteria for designating products as "sensitive" or "excluded" include items concerning food security, national security, fiscal revenue, livelihood, and industrialisation.[21] **Table 2.3** summarises the modalities for the negotiation of tariff concessions under the AfCFTA.

[20] The African Continental Free Trade Area Agreement – what is expected of LDCs in terms of trade liberalisation?, Trudi Hartzenberg, LDC Portal, UNCTAD

[21] African Continental Free Trade Area (AfCFTA), Tralac Law Centre, 2022

Table 2.3: Tariff Liberalization under the AfCFTA

	LDCs	Non-LDCs
Full liberalisation	90 percent of tariff lines	90 percent of tariff lines
	10-year phase down	5-year phase down
Sensitive products	7 percent of tariff lines	7 percent of tariff lines
	13-year phase down (current tariffs can be maintained during first 5 years – phase down starting from the 6th year)	10-year phase down (current tariffs can be maintained during first 5 years – phase down starting from the 6th year)
Excluded products	3 percent of tariff lines	3 percent of tariff lines

Note: LDCs include Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, DR Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Togo, Uganda, Tanzania, and Zambia

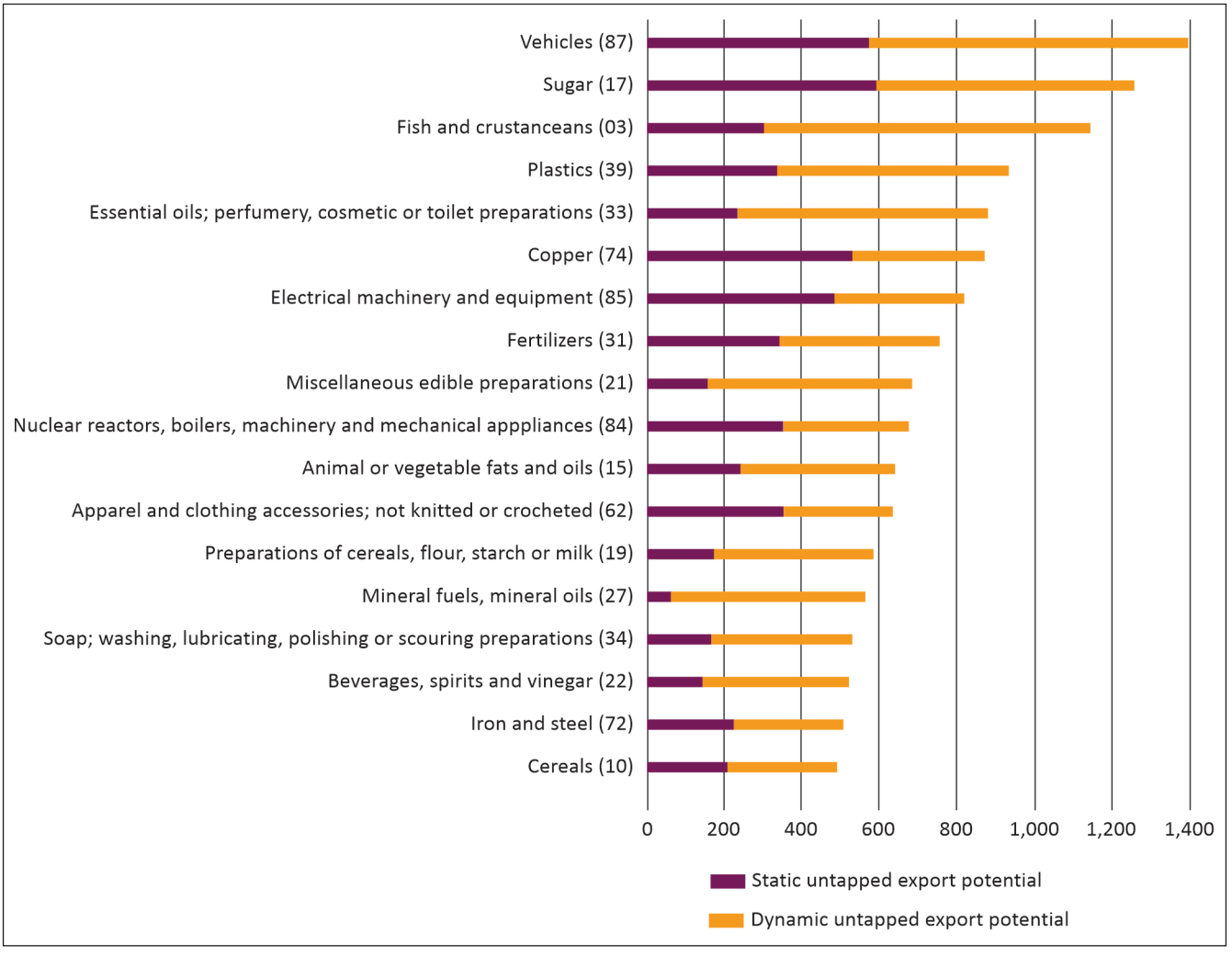
Source: African Continental Free Trade Area, United Nations Economic Commission for Africa, January 2020; UNCTAD LDC Portal; and India Exim Bank Analysis

According to a study by the International Trade Centre[22], in a scenario without the AfCFTA, Africa has an untapped intra-regional export potential of US$ 21.9 billion. Out of this, US$ 8.6 billion could be tapped by engaging actively in efforts to identify and address current market constraints for intra-African trade. The remaining US$ 13.3 billion in untapped export potential is driven by GDP and population growth, which are expected to translate into increased supply and demand. The vehicles sector has the highest untapped export potential (US$ 1.4 billion), followed by sugar and sugar confectionery (US$ 1.3 billion). Other top sectors include fish and crustaceans (US$ 1.1 billion), plastics (US$ 931 million), essential oils, perfumery, and cosmetics (US$ 877 million), and copper and its articles (US$ 867 million).

Export potential in food manufactures is more equally distributed across countries in Africa, as many countries have at least some basic supply capacities. In contrast, export potential in the sectors like vehicles are strongly concentrated among a few exporters; it is also the sector with the second largest dynamic export potential, after fish and crustaceans, which is largely driven by expected GDP and population growth over the next five years, triggering rising continental import demand (**Chart 2.5**).

[22] Unlocking Regional Trade Opportunities in Africa for a more Sustainable and Inclusive Future, International Trade Centre and UNCTAD, December 6, 2021

Chart 2.5: Export Potential of Africa in the Pre-AfCFTA Scenario (US$ million)



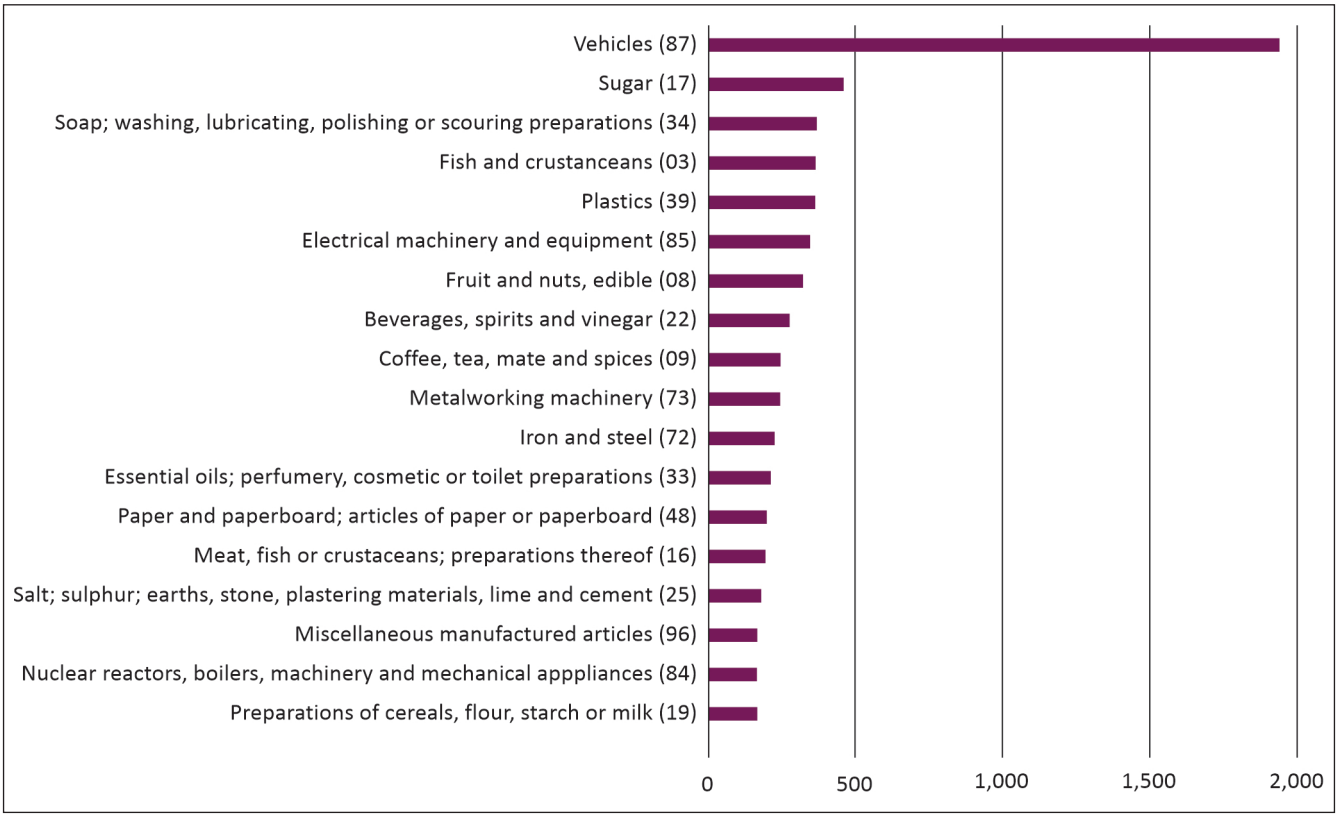
Note: Numbers mentioned in the parenthesis are HS codes of the products.
Source: Adapted from Economic Development in Africa Report 2021, UNCTAD

The share of untapped export potential of Africa varies among exporting countries. For some exporters like South Sudan, Cabo Verde, Equatorial Guinea, and the Gambia, more than 80 percent of their total export potential remains untapped. For others like Zambia, Ethiopia and Guinea-Bissau, untapped export potential represents less than 30 percent of their total export potential to Africa. In absolute terms, South Africa is by far the exporter with the largest untapped export potential to Africa (US$ 7.9 billion), followed by Egypt (US$ 3.3 billion), Morocco (US$ 1.3 billion), Côte d'Ivoire (US$ 1.1 billion), and Tunisia (US$ 1 billion).

Under the scenario of the AfCFTA being implemented and considering differential liberalization by LDC status and RECs, and assuming that all countries liberalise tariffs on all products equally, intra-African export potential would increase by US$ 31.1 billion, an additional US$ 9.2 billion over the pre-AfCFTA scenario. Vehicles continue to remain the sector with

highest export potential of almost US$ 2 billion, followed by sugar and sugar confectionery (US$ 463 million); soap, washing preparations; and fish and crustaceans; with export potential ranging between US$ 350 million and US$ 375 million, due to their relatively high initial trade-weighted average tariff rates (**Chart 2.6**). On the other hand, other sectors with high export potential including plastics and electrical machinery and equipment have lower initial tariff rates. Unlike the pre-AfCFTA scenario, edible fruits and nuts, and coffee, tea, and spices were found to witness a large increase in export potential through partial tariff liberalization due to existing high intra-African tariff rates.

Chart 2.6: Export Potential of Africa in the Post-AfCFTA Scenario (US$ million)



Note: Numbers mentioned in the parenthesis are HS codes of the products.
Source: Adapted from Economic Development in Africa Report 2021, UNCTAD

Traditionally, agriculture, food and consumable products in Africa remain highly protected through tariffs. According to the UNCTAD, the simple average applied intra-African bilateral tariff rate stood at 5.25 percent in 2019. The intra-African applied tariff rate was 4.93 percent on primary commodities, 3.76 percent on intermediate goods, 8.9 percent on consumer goods and 3.4 percent on capital goods. East Asia and Latin America show a lower trade weighted average of intra-regional applied tariffs, at 1.56 percent and 1.16 percent, respectively, as compared to Africa at 2.4 percent indicating considerable scope for tariff liberalization between countries in Africa. Intra-regional trade in South Asia is on average

remains more restrictive, with a trade weighted average of 7.33 percent. Therefore, final tariff reductions may be lower in some of the top sectors, particularly in sugar, soap and washing preparations, and coffee, tea, and spices, leading to lower realisations of the export potential.

Phase I of the implementation of the AfCFTA agreement is aimed at fully eliminating tariffs, allowing for different liberalization schedules for the least developed countries and countries not in that category. The Central African Economic and Monetary Community, the East African Community and the Economic Community of West African States have submitted their group tariff concessions for a phase-down period of 10 years, following the modalities granted to the least developed countries. The expected additional export potential under the AfCFTA in high value-added sectors, such as vehicles and electrical machinery and equipment, points towards benefits for transformative growth. However, much of that potential is currently concentrated in countries other than the LDCs (ITC and UNCTAD).

Similarly, United Nations Economic Commission for Africa (UNECA)[23] has estimated that full implementation of the Agreement establishing the AfCFTA would lead to substantial increase in African GDP, trade, output, and welfare. Under the baseline scenario, the results suggest that if the Agreement were to be implemented, GDP in Africa would be 0.5 percent (around US$ 55 billion) higher in 2045 than without the Agreement in place. The results also show that exports would be 5.1 percent (US$ 110 billion) higher, imports 4.7 percent (US$ 110 billion) higher, output 0.3 percent (US$ 55 billion) higher, and welfare 0.4 percent (US$ 3 billion) higher by 2045.

Pan-African Payment and Settlement System (PAPSS)[24]

The Pan-African Payment and Settlement System (PAPSS) is a centralised payment and settlement infrastructure for intra-African trade and commerce payments, jointly developed by the African Union and the African Export-Import Bank. It will facilitate payments as well as formalise some of the unrecorded trade due to prevalence of informal cross-border trade in Africa. It will also provide alternative to current high-cost and lengthy correspondent banking relationships to facilitate trade and other economic activities among African countries through a simple, low-cost and risk-controlled payment clearing and settlement system, which could result in Africa saving more than US$ 5 billion annually in payment of transaction costs.

[23] New Assessment of the Economic Impacts of the Agreement Establishing the African Continental Free Trade Area on Africa, UNECA, July 2021

[24] Pan-African Payment and Settlement System Launched by President Akufo-Addo Foreseeing $5 billion Annual Savings for Africa, Afreximbank Press Release, January 13, 2022.

PAPSS, developed by African Export-Import Bank (Afreximbank), is expected to boost intra-African trade by transforming and facilitating payment, and clearing and settlement for cross-border trade across Africa. According to Afreximbank, PAPSS provides the solution to the disconnected and fragmented nature of payment and settlement systems that have long impeded intra-African trade. Prior to PAPSS, over 80 percent of African cross-border payment transactions originating from African banks had to be routed offshore for clearing and settlement using international banking relationships. That posed multiple challenges, ranging from payment delays to operational inefficiencies and compliance concerns for the disparate regional payment systems. PAPSS, which has been successfully piloted in the six countries of the West African Monetary Zone, delivers multiple advantages and efficiencies to intra-African trade payments, including:

- Reducing the cost, duration and time variability of cross-border payments across Africa;
- Decreasing the liquidity requirements of commercial banks for cross-border payments; and
- Strengthening oversight of cross-border payment systems by central banks.

PAPSS is also set to deliver harmonisation across the continent through its comprehensive legal, regulatory, and operational framework comprising standardised rules, formats, and governance arrangements, harmonised Know-Your-Customer and Anti-Money Laundering procedures, payment confirmation and settlement finality. A precondition for participation in PAPSS is compliance with its set rules and standards. All countries in Africa have signed the agreement, except Eritrea.

Challenges to the AfCFTA

Africa is a highly fragmented continent, with its economies at varying stages of development. It would thus be a challenge to ensure an easy and quick facilitation of movement of goods and people within the continent. The AfCFTA's success depends on Africa's ability to overcome several challenges, such as limitations in infrastructure, resources, political climate, and existing regional trade agreements.

The present low level of intra-regional trade clearly indicates that the regional integration in Africa is an unattained goal, despite having formal set ups in place through its several RECs. Despite the challenges, some RECs have successfully encouraged effective trade between member countries. Côte d'Ivoire, Kenya, Senegal, Morocco, and South Africa have become regional trading hubs, having leveraged alliances established through their RECs. For African

economies to further implement effective intra-regional trade they should draw on the lessons learned from these successful RECs[25].

Presently, since the RECs in Africa are fragmented, the Rules of Origin (RoO) are also fragmented; for example, SADC members follow the SADC RoO model. To boost intra-regional trade, African countries also need to ensure that a well-integrated policy framework is in place, particularly in terms of the Rules of Origin compatible with the African productive capacity needs[26].

Tariff concessions are a matter of concern for African LDCs. Despite low levels of intra-Africa trade, tariff revenue is still an important source of government revenue. The African countries also use tariffs to protect their domestic industries by reducing import competition. In 2019, the trade-weighted average tariff rate varied across countries, ranging from 0.01 percent in Namibia to 20.97 percent in Equatorial Guinea.[27] As mentioned earlier, the intra-African applied tariff rate for raw materials was 4.93 percent, 3.76 percent for intermediate goods, 3.4 percent capital goods, whereas for consumer goods the tariff rate was as high as 8.9 percent.[28] Despite the fact that the trade weighted average tariff rate of Africa is 2.4 percent there is still room for tariff liberalisation among African countries, especially between those countries that are not members of the same regional economic community. There is thus a need to eliminate tariffs on intra-African trade, making it easier for African businesses to trade within the continent and cater to and benefit from the growing African market.

Further, remains the issue of addressing the other non-tariff barriers to intra-regional trade. Apart from infrastructure and poor trade logistics, onerous regulatory requirements, volatile financial markets, regional conflict, and complex and distorted customs procedures pose significant hindrance to smooth trade.

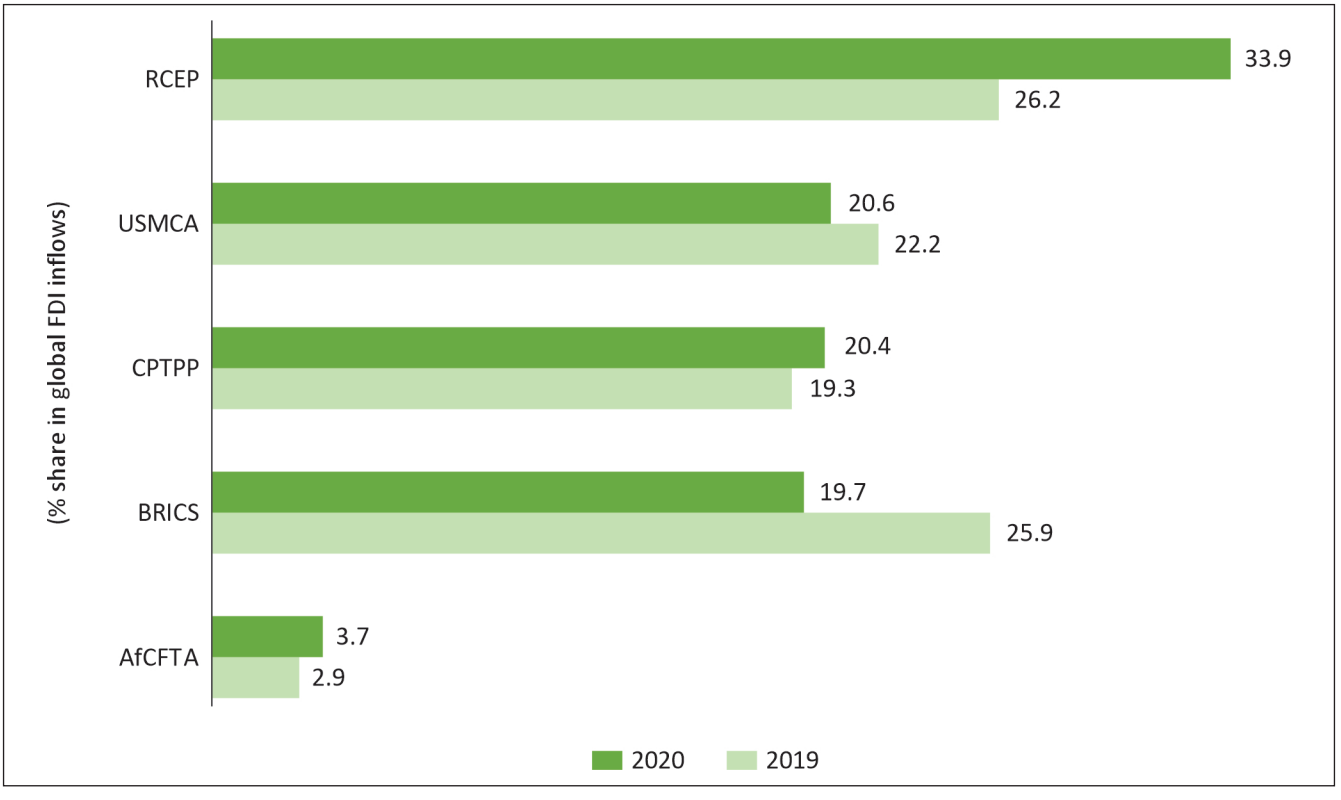
Even though trading under the AfCFTA commenced in January 2021, the complexity of negotiations and protracted negotiations on Rules of Origin have led to delaying of meaningful trade under the AfCFTA. Notwithstanding, significant progress was achieved with over 87 percent of Rules of Origin agreed. In addition, preparatory work for negotiations on Trade in Services, Intellectual Property, Investment, and Digital Trade commenced. The commencement of lowering of tariff and increase in trade under the AfCFTA and remaining issues on Rules

[25] How to Unlock Africa's $ 3 trillion Free Trade Opportunity, Baker McKenzie, November 11, 2019
[26] The African continental free trade area and its implications for India-Africa trade, Observer Research Foundation, October 2018
[27] ITC
[28] Reaping The Potential Benefits of the African Continental Free Trade Area for Inclusive Growth, Economic Development in Report 2021, UNCTAD

of Origin are expected to be resolved by 2022. Negotiations on Trade in Services are also expected to pick up pace as State Parties prepare for Phase II negotiations. The roll out of the Pan-African Payments and Settlements System is also expected to facilitate payments using local currencies under the AfCFTA.[29]

The expected adoption of the Sustainable Investment Protocol of the AfCFTA could also bolster FDI flows to and within Africa in the long term. The protocol is being negotiated as Phase II of the agreement, along with competition policy and intellectual property rights. As shown in **Chart 2.7**, FDI inflows to the AfCFTA remains much lower compared to the other trade blocs across the world.

Chart 2.7: FDI Inflows in Select Trade Blocs



Note: AfCFTA = African Continental Free Trade Area; BRICS = Brazil, Russian Federation, India, China and South Africa; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific-Partnership; RCEP = Regional Comprehensive Economic Partnership; USMCA = United States–Mexico–Canada Agreement.

Source: UNCTADstat and India Exim Bank Analysis

[29] A year in Review 2021, Trade Policy Brief, Afreximbank

Chapter

INDIA'S TRADE AND INVESTMENT RELATIONS WITH AFRICA

Africa is a dynamic continent, with unlimited commercial and development opportunities. The recent years have witnessed tremendous increase and deepening of economic and cultural exchanges and cooperation between India and Africa. The COVID-19 pandemic has further strengthened the existing developmental partnership guided by the Kampala Principles.[30] With a view to facilitate and further enhance bilateral trade and commercial relations with countries in Africa, India has put in place important policy measures as also institutional frameworks to create an enabling trade and business environment. Major policy initiatives and institutional frameworks, among others, include, Focus Africa Programme, India's Duty Free Tariff Preference (DFTP-LDC) Scheme for Least Developed Countries, Pan-African E-Network: India and Pan-African Countries Initiative (renamed as e-VidyaBharati and e-AarogyaBharati (e-VBAB) Network Project), IBSA Initiative, Interbank Cooperation Mechanism among BRICS members, and India-Africa Forum Summit.

Trends in India-Africa Bilateral Trade

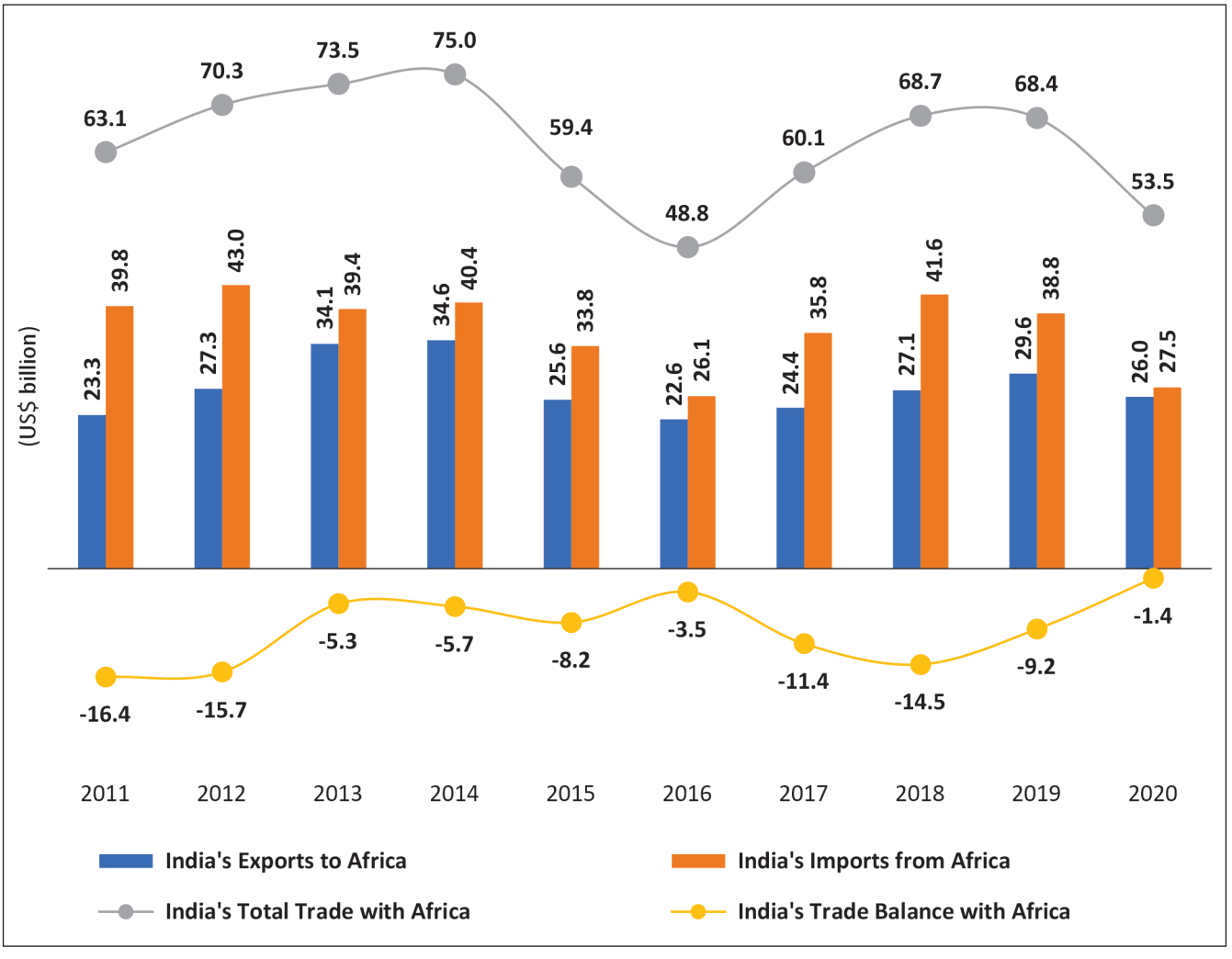
The synergy that exists between India and Africa can be gauged from the robust trends in India-Africa trade relations. India's bilateral trade with Africa has remained above US$ 60 billion except during the commodity price slowdown of 2016 and later due to the pandemic in 2020 (**Chart 3.1**). India's Trade Complementarity Index with Africa remained above 68 during the last four years indicating high complementarity between the two regions[31].

[30] Keynote Address by External Affairs Minister at the inaugural session of the 16th CII-EXIM Bank Conclave on India & Africa Project Partnership, Ministry of External Affairs, July 2021

[31] The trade complementarity index (TCI) indicates to what extent the export profile of the reporter country matches, or complements, the import profile of the partner country. A high index may indicate that two countries would stand to gain from increased trade, and may be particularly useful in evaluating prospective bilateral or regional trade agreements. The index is zero when no goods are exported by one country or imported by the other and 100 when the export and import shares exactly match

India's exports to Africa have increased from US$ 23.3 billion in 2011 to US$ 26 billion in 2020, thereby accounting for 9.4 percent share in India's total exports. India's imports from Africa, at the same time, decreased from US$ 39.8 billion in 2011 to US$ 27.5 billion in 2020, accounting for 7.5 percent share in India's total imports. India's trade deficit with Africa significantly narrowed during 2020 to US$ 1.4 billion as compared to the pre-pandemic level.

Chart 3.1: India's Trade with Africa



Source: *ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis*

India and Africa remain key trading partners as reflected in **Table 3.1**. India's exports to Africa accounted for 5.2 percent of Africa's global imports whereas India's imports accounted for 7 percent in Africa's global exports during 2020. However, scope remains to utilise the untapped potential for trade between the two regions.

Table 3.1: Pattern of India-Africa Bilateral Trade

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Share of India's Exports to Africa in India's Global Exports	7.7%	9.4%	10.1%	10.9%	9.7%	8.7%	8.2%	8.4%	9.2%	9.4%
Share of India's Exports to Africa in Africa's Global Imports	4.3%	5.0%	6.1%	5.9%	4.9%	4.5%	4.8%	4.6%	5.2%	5.2%
Share of India's Imports from Africa in India's Global Imports	8.6%	8.8%	8.5%	8.8%	8.6%	7.3%	8.1%	8.2%	8.1%	7.5%
Share of India's Imports from Africa in Africa's Global Exports	6.7%	7.2%	7.1%	7.6%	8.4%	7.1%	8.3%	8.2%	8.1%	7.0%

Note: Higher the value, greener the shade of the cells and vice versa

Source: *ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis*

Major Export Partners

In 2020, South Africa remained the leading destination for India's exports to Africa, accounting for 13.4 percent of India's exports to the region. Other major export destinations include Nigeria, Egypt, Kenya, Mozambique, and Tanzania. Trends in India's exports to major markets in Africa are shown in **Table 3.2**. In 2020, India's exports to most of the countries in the region have decreased as a result of the pandemic, except for Kenya (increased exports of petroleum oils) and Togo (increased exports of cereals, pharmaceutical products, articles of iron and steel, and machinery, among others).

Table 3.2: India's Major Export Destinations in Africa

Region/Country	2019			2020		
	India's Exports (US$ bn)	Share in Exports to Africa (%)	Share in Country's Global Imports (%)	India's Exports (US$ bn)	Share in Exports to Africa (%)	Share in Country's Global Imports (%)
Africa	**29.6**	**100.0**	**5.2**	**26.0**	**100.0**	**5.2**
South Africa	4.0	13.5	4.5	3.5	13.4	5.1
Nigeria	3.7	12.4	7.8	3.0	11.3	5.6
Egypt	2.7	9.0	3.4	2.1	8.3	3.6
Kenya	1.9	6.5	11.2	2.0	7.6	12.9
Mozambique	2.1	7.2	28.0	1.4	5.5	22.4
Tanzania	1.7	5.7	18.7	1.4	5.4	16.7
Togo	1.1	3.7	55.5	1.2	4.6	55.4
Sudan	1.1	3.6	13.2	1.0	4.0	12.3
Ghana	0.6	2.0	5.8	0.7	2.9	4.5
Ethiopia	0.8	2.8	5.3	0.7	2.6	4.7

Source: *ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis*

Major Import Partners

As regards India's imports from Africa, South Africa replaced Nigeria as the major import source for India during 2020, accounting for a share of 24.3 percent of India's imports from Africa, reflecting higher imports of ships, boats and floating structure, and copper and articles. Nigeria was the second-largest import source with a share of 23 percent in India's imports from Africa during 2020, followed by Angola, Egypt, and Morocco (**Table 3.3**). Nigeria's share has declined from 27.4 percent in 2019 to 23 percent in 2020 due to reduced import of mineral fuels (mainly crude). Nigeria was India's fourth largest global source for mineral fuels during 2020. Apart from South Africa, India's imports have also increased from Morocco (driven by increased imports of fertilisers), and Guinea (increased imports of gold) during the same period.

Table 3.3: India's Major Import Sources from Africa

Region/Country	2019			2020		
	India's Imports (US$ bn)	Share in Imports from Africa (%)	Share in Country's Global Exports (%)	India's Imports (US$ bn)	Share in Imports from Africa (%)	Share in Country's Global Exports (%)
Africa	**38.8**	**100.0**	**8.1**	**27.5**	**100.0**	**7.0**
South Africa	6.6	17.1	7.3	6.7	24.3	7.8
Nigeria	10.6	27.4	19.8	6.3	23.0	19.0
Angola	3.8	9.8	10.9	2.0	7.4	8.5
Egypt	2.0	5.2	6.5	1.8	6.4	6.6
Morocco	1.1	2.8	3.7	1.3	4.7	4.6
Ghana	2.5	6.4	14.9	1.2	4.4	8.6
Guinea	0.4	1.0	5.9	1.0	3.7	8.3
Tanzania	0.9	2.2	17.4	0.9	3.3	15.2
Algeria	2.0	5.1	5.4	0.7	2.6	3.3
Mozambique	0.9	2.2	18.1	0.7	2.6	20.6

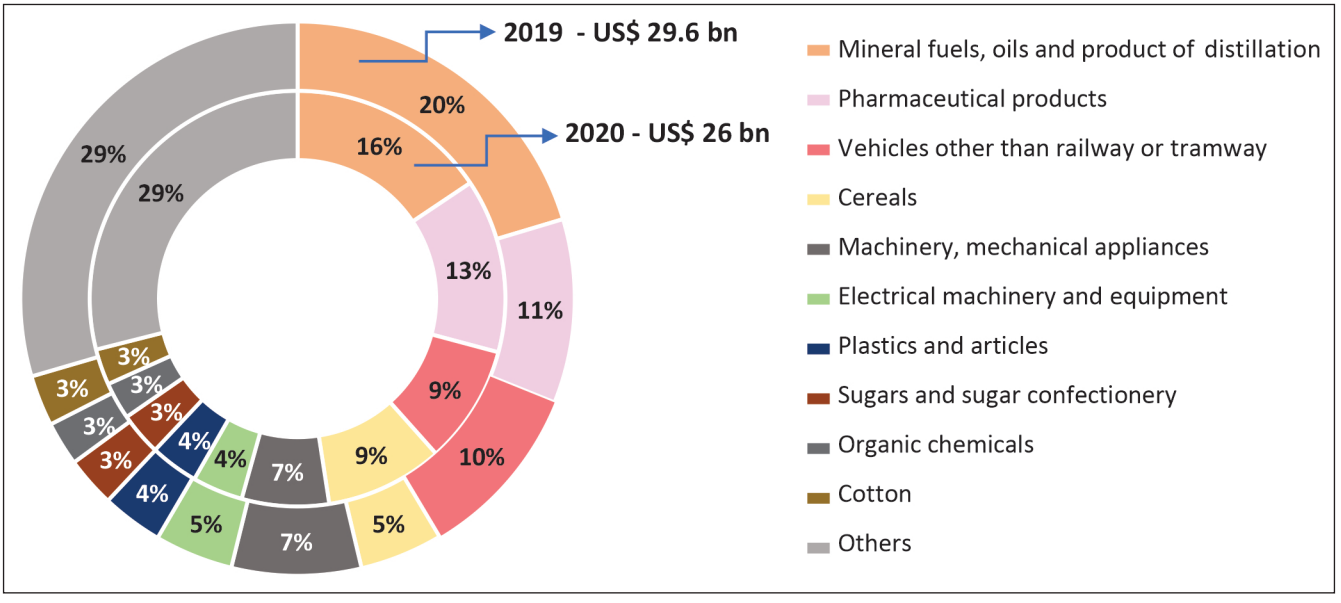
Source: *ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis*

Major Traded Items

Exports

Petroleum products are the largest items in India's export basket to Africa, contributing 16 percent of India's total exports to Africa during 2020 **(Chart 3.2)**. All major export items have undergone a decline in share except for pharmaceutical products and cereals.

Chart 3.2: India's Major Export Items to Africa



Source: *ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis*

Table 3.4 shows the major destinations in Africa for the top ten products exported by India, which accounted for than 70 percent of India's exports to Africa during 2020.

Table 3.4: India's Major Export Items to Africa

HS Code	Products	2019 (US$ bn)	2020 (US$ bn)	Major Export Destinations in 2020
	All products	**29.6**	**26.0**	-
27	Mineral fuels, mineral oil and products	6.0	4.1	Mozambique (25%), Togo (17.1%), Kenya (15.3%), South Africa (14.3%), and Tanzania (11.9%)
30	Pharmaceutical products	3.2	3.5	South Africa (19.7%), Nigeria (11.6%), Tanzania (6.6%), Kenya (6.6%), and Uganda (5.7%)
87	Vehicles other than railway or tramway rolling stock, and parts and accessories	3.1	2.4	South Africa (26.3%), Nigeria (19.9%), Egypt (8%), Kenya (6.2%), and Uganda (3.8%)
10	Cereals	1.4	2.4	Benin (14.9%), Togo (11.4%), Senegal (9.3%), Côte d'Ivoire (8.9%), and Guinea (8.5%)

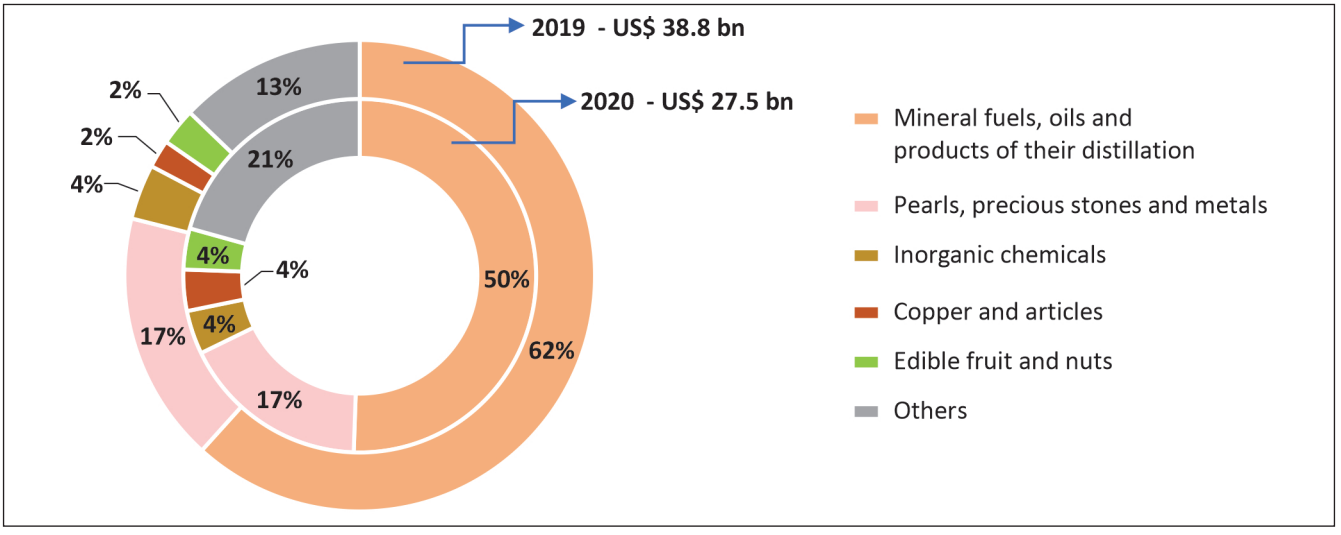
HS Code	Products	2019 (US$ bn)	2020 (US$ bn)	Major Export Destinations in 2020
84	Machinery and mechanical appliances	2.2	1.8	Nigeria (24.5%), Kenya (9.3%), South Africa (9.1%), Egypt (8.4%), and Ghana (5.8%)
85	Electrical machinery and equipment	1.4	1.0	Nigeria (25.8%), South Africa (21.2%), Egypt (7%), Kenya (5.7%), and Morocco (3.8%)
39	Plastics and articles	1.1	1.0	Nigeria (17.3%), Kenya (10.1%), South Africa (8.6%), Egypt (7.6%), and Ghana (7%)
17	Sugars and sugar confectionery	0.9	0.9	Sudan (41.8%), Somalia (21.9%), Djibouti (12.1%), Kenya (4.7%), and Tanzania (3.9%)
29	Organic chemicals	0.8	0.8	Egypt (33.4%), South Africa (18.4%), Nigeria (12%), Kenya (6.6%), and Uganda (4.1%)
52	Cotton	0.9	0.7	Egypt (22.4%), Nigeria (10.3%), Senegal (10.3%), Sudan (9.4%), and Gambia (5.5%)

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

Imports

Chart 3.3 highlights the major items imported by India from Africa. As is evident, mineral fuels, mineral oils, and its products (mainly crude) accounted for more than half of India's total imports from Africa during 2019 and 2020. However, during 2020, the share of fuel imports from Africa declined as a result of increased imports of natural or cultured pearls, precious or semiprecious stones, inorganic chemicals, copper articles, and edible fruits and nuts. During 2020, imports of copper and articles and edible fruits and nuts have increased.

Chart 3.3: India's Major Import Items from Africa



Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

Table 3.5 shows India's major import suppliers in Africa for the top ten products imported by India, which accounted for more than 79 percent of India's imports from Africa during 2020.

Table 3.5: India's Major Import Items from Africa

HS Code	Products	2019 (US$ bn)	2020 (US$ bn)	Major Import Sources in 2020
	All products	**38.8**	**27.5**	–
27	Mineral fuels, mineral oils and products	23.9	13.9	Nigeria (44.4%), South Africa (16.8%), Angola (14.4%), Egypt (7.2%), and Algeria (4.7%)
71	Pearls, precious stones and metals	6.7	4.7	South Africa (42.9%), Ghana (18%), Guinea (17.1%), Botswana (9.9%), and Burkina Faso (6.6%)
28	Inorganic chemicals; organic or inorganic compounds of precious and rare-earth metals	1.5	1.1	Morocco (49.3%), Senegal (29.2%), Tunisia (8.9%), Egypt (7.3%), and South Africa (3.2%)
74	Copper and articles	0.7	1.0	South Africa (32.7%), Tanzania (28.1%), Zambia (27.9%), Mozambique (8.3%), and Kenya (0.8%)
08	Edible fruit and nuts; peel of citrus fruit or melons	1.0	1.0	Tanzania (21.5%), Benin (17.2%), Ghana (13.7%), Guinea-Bissau (12.4%), and Côte d'Ivoire (10.2%)

HS Code	Products	2019 (US$ bn)	2020 (US$ bn)	Major Import Sources in 2020
89	Ships, boats and floating structures	0.2	0.9	South Africa (99.6%), Namibia (0.3%), and Gabon (0.1%)
31	Fertilisers	0.3	0.8	Morocco (57.8%), Egypt (37.6%), and Algeria (4.5%)
26	Ores, slag, and ash	0.7	0.7	South Africa (44.7%), Gabon (25.1%), Guinea (22%), Mozambique (3%), and Côte d'Ivoire (2.6%)
12	Oil seeds and oleaginous fruits	0.4	0.5	Benin (26%), Sudan (25.8%), Togo (15.7%), Nigeria (10.6%), and Ghana (4.6%)
25	Salt; sulphur; earths and stone	0.5	0.5	Morocco (49.4%), Egypt (22.1%), Togo (14.9%), South Africa (11%), and Madagascar (1.4%)

Source: ITC Geneva, based on COMTRADE Statistics; and India Exim Bank Analysis

India's Duty Free Tariff Preference Scheme for Least Developed Countries

India's Duty Free Tariff Preference Scheme for Least Developed Countries (DFTP-LDC) came into effect in August 2008 with tariff preferences spread over five years. The Scheme came into full operation in October 2012, with 85 percent of India's total tariff lines made duty free, 9 percent tariff lines enjoying a Margin of Preference ranging from 10 percent to 100 percent and only 6 percent of total tariff lines retained in the Exclusion List with no duty preferences, for the exports from LDCs.

To fully meet the obligations under the Hong Kong Ministerial Mandate of 2005, the DFTP-LDC Scheme has been expanded by the Department of Commerce. With effect from April 1, 2014, the DFTP-LDC scheme provides duty free/preferential market access on about 98.2 percent of India's tariff lines (at HS 6-digit level of classification). Only 1.8 percent of the tariff lines have been retained in the Exclusion List, with no duty concessions. Only 97 lines are under exclusion list and 114 lines are under Margin of Preference (MOP) list. On all other lines, zero duty access has been provided for exports from beneficiary LDCs.

Apart from the expansion in the product coverage of the Scheme, procedural matters related to the Rules of Origin provisions of the DFTP-LDC Scheme have also been simplified on March

10, 2015, to further trade facilitation process. The new scheme provides market access on 95.5 percent of the lines on which LDCs have made to exports to India over the last two financial years. As on September 2020, 34 out of 47 LDCs have become beneficiaries to the scheme, which include 26 African countries.[32]

Box 3.1: India - Mauritius Comprehensive Economic Cooperation and Partnership Agreement (CECPA)[33]

With the aim of enabling trade between both regions, the Comprehensive Economic Cooperation and Partnership Agreement (CECPA) between India and Mauritius, was signed on February 22, 2021, and entered into force on April 01, 2021. The CECPA is the first trade Agreement signed by India with a country in Africa. The Agreement is a limited agreement, covering Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures, Dispute Settlement, Movement of Natural Persons, Telecom, Financial services, Customs Procedures and Cooperation in other areas.

The India-Mauritius CECPA provides for an institutional mechanism to encourage and improve trade between the two countries. The CECPA between India and Mauritius covers 310 export items for India, including food stuff and beverages (80 lines), agricultural products (25 lines), textile and textile articles (27 lines), base metals and articles (32 lines), electricals and electronic item (13 lines), plastics and chemicals (20 lines), wood and articles (15 lines), and others. Mauritius will benefit from preferential market access into India for its 615 products, including frozen fish, speciality sugar, biscuits, fresh fruits, juices, mineral water, beer, alcoholic drinks, soaps, bags, medical and surgical equipment, and apparel.

As regards trade in services, Indian service providers will have access to around 115 subsectors from the 11 broad service sectors such as professional services, computer related services, research & development, other business services, telecommunication, construction, distribution, education, environmental, financial, tourism & travel related, recreational, yoga, audio-visual services, and transport services. India has offered around 95 sub-sectors from the 11 broad services sectors, including professional services, R&D, other business services, telecommunication, financial, distribution, higher education, environmental, health, tourism and travel related services, recreational services, and transport services. Indian exporters have to obtain a Certificate of Origin (CoO) from the authorised Indian agencies to avail the preferential benefits under the CECPA.

Source: India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement will enter into force on 1st April 2021, Press Information Bureau, March 31, 2021; and Ministry of Commerce & Industry

[32] Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020 (CAROTAR, 2020)

[33] India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement will enter into force on 1st April 2022, PIB, March 31, 2021

Cotton-TAP Programme

As part of its long-standing development partnership with Africa, India implemented a technical assistance programme (TAP) for cotton in six African countries, namely Benin, Burkina Faso, Chad, Malawi, Nigeria, and Uganda, from 2012 to 2018. During the Partners' Conference organized as part of the inaugural ceremony of World Cotton Day celebrated by World Trade Organisation (WTO) in 2019 at Geneva, Government of India announced the launch of the second phase of C-TAP, scaling up the Programme to cover 5 additional African countries, making a total of 11 countries (Benin, Burkina Faso, Chad, Mali, Malawi, Nigeria, Uganda, Ghana, Togo, Tanzania, and Zambia) over a five-year period. Focus of Cotton TAP – II is for increasing cotton production and improving the post-harvest and plant by-products industry in the participating countries, as well as building the capacity of the cotton- based textile sector. The activities relating to the implementation were affected due to the COVID-19 pandemic.

Potential for Enhancing Exports to Africa

Using an export potential assessment methodology developed by the International Trade Centre (ITC), this section assesses Africa-India trade products with the highest export potential.[34] It is based on a decomposition of a country's potential exports of a product to a given target market, considering three factors such as supply, demand, and ease of trading. The Export Potential Indicator identifies products in which both Africa and India have proven to be internationally competitive, and which have good prospects of export success in each other's markets. Product categories where India has above US$ 100 million exports have been considered for this analysis.

Based on the export potential, taking into account the proven ability to export and products that have good prospects for export, the bilateral trade potential between India and Africa is expected to be around US$ 48 billion. India's export potential to Africa remains at US$ 36 billion with US$ 19.6 billion of untapped export potential.

An examination of the products with the greatest export potential to Africa based on India's proven ability to be internationally competitive and those products that have good prospects for export success reveals that the 28 products with the greatest export potential amounts to US$ 33.6 billion (**Table 3.6**). The product with the greatest export potential is rice, followed by pharmaceutical products, machinery, motor vehicles and parts, and chemicals.

[34] Export Potential Assessments: A methodology to identify export opportunities for developing countries, Yvan Decreux and Julia Spies, 2016

Table 3.6: Potential Products for Enhancing India's Exports to Africa (US$ billion)

Sl. No.	Broad Product Category	Export Potential	Untapped Potential
1	Rice	4.7	2.9
2	Pharmaceutical products	3.9	1.2
3	Machinery	3.8	1.9
4	Motor vehicles	3.5	1.7
5	Chemicals	2.6	1.5
6	Plastic and rubber articles	1.9	1.0
7	Ferrous metals	1.9	1.5
8	Apparel	1.4	0.8
9	Metal products	1.3	0.7
10	Sugar	1.2	0.6
11	Cotton (fabric)	0.9	0.3
12	Synthetic textile fabric	0.7	0.4
13	Meat (except poultry)	0.5	0.1
14	Fish & shellfish	0.5	0.4
15	Ceramic articles	0.5	0.3
16	Paper products	0.5	0.2
17	Food products	0.4	0.3
18	Jewellery & precious metals	0.4	0.3
19	Textile products	0.4	0.2
20	Mineral products	0.4	0.2
21	Miscellaneous chemical products	0.3	0.2
22	Beauty products & perfumes	0.3	0.2
23	Metals (other than ferrous & precious)	0.3	0.2
24	Optical products, watches & medical instruments	0.3	0.2
25	Footwear	0.3	0.2
26	Electronic equipment	0.3	0.1
27	Home textiles	0.3	0.2
28	Spices	0.3	0.1
	Total of the above 28 sectors	**33.6**	**17.9**
	India's Total Export Potential in Africa	**36.0**	**19.6**

Source: ITC Trade Map, ITC Export Potential Map, and India Exim Bank Analysis

The West African region accounts for the highest untapped export potential, followed by Eastern Africa **(Table 3.7).**

Table 3.7: Region-wise Potential for Enhancing India's Exports to Africa (US$ billion)

Region	Export Potential	Untapped Potential
Western Africa	11.0	6.0
Eastern Africa	9.4	4.6
Southern Africa	7.3	4.0
Northern Africa	6.8	4.0
Central Africa	1.5	1.0
Africa	**36.0**	**19.6**

Source: ITC Trade Map, ITC Export Potential Map, and India Exim Bank Analysis

An examination of the products with the greatest export potential to India based on Africa's proven ability to compete internationally reveals that the top 20 products with greatest export potential amounts to US$ 11.5 billion **(Table 3.8).** The products with the greatest export potential are nuts (cashew nuts), followed by chemicals (phosphoric acid and polyphosphoric acid), metals (except ferrous and precious), fertilisers, jewellery & precious metal articles, pulses, and woods.

Table 3.8: Potential Products for Enhancing Africa's Exports to India (US$ billion)

Sl. No.	Product	Export Potential	Untapped Potential
1	Nuts	3.1	2.0
2	Chemicals	2.0	0.9
3	Metals (except ferrous and precious)	1.5	0.7
4	Fertilisers	0.8	0.4
5	Jewellery & precious metal articles	0.7	0.6
6	Pulses	0.6	0.3
7	Wood	0.6	0.4
8	Oilseeds	0.3	0.2
9	Machinery	0.3	0.2
10	Ferrous metals	0.3	0.2
11	Paper products	0.3	0.1

Sl. No.	Product	Export Potential	Untapped Potential
12	Plastics and rubber articles	0.2	0.2
13	Spices	0.2	0.1
14	Fruits	0.2	0.1
15	Precious metals	0.1	0.1
16	Cocoa beans and products	0.1	0.1
17	Vegetal textile fibres	0.1	0.0
18	Vegetable oils and fats	0.1	0.1
19	Skins, leather and products	0.1	0.1
20	Food products (processed or preserved)	0.1	0.1
	Total of the above 20 sectors	**11.5**	**6.7**
	Total	**12.0**	**7.2**

Source: ITC Trade Map, ITC Export Potential Map, and India Exim Bank Analysis

Southern Africa has the highest untapped export potential for India, followed by Western Africa as shown in **Table 3.9**.

Table 3.9: Region-wise Potential for Enhancing Africa's Exports to India (US$ billion)

Region	Export Potential	Untapped Potential
Western Africa	4.0	2.4
Southern Africa	3.7	2.4
Northern Africa	2.5	1.2
Eastern Africa	1.5	1.0
Central Africa	0.3	0.2
Africa	**12.0**	**7.2**

Source: ITC Trade Map, ITC Export Potential Map, and India Exim Bank Analysis

According to preliminary estimates by the ITC, India's total trade with Africa stood at US$ 82.5 billion in 2021, recording the highest ever level witnessed by both regions. India's exports to Africa in 2021 were US$ 37.9 billion, increasing by around 45 percent. India's imports were to the tune of US$ 44.6 billion in 2021, increasing by around 62 percent over 2020. While India's exports to Africa accounted for 9.6 percent share in India's total exports in 2021, India's imports from Africa accounted for 7.8 percent share in India's total imports. India's trade deficit with the region widened to US$ 6.8 billion in 2021.

The major exports from India to Africa in 2021 were mineral fuels (19.1 percent), vehicles other than railway or tramway (10.4 percent), pharmaceutical products (10.3 percent), and cereals (8.5 percent), among others. On the other hand, mineral fuels (mainly crude) accounted for 47.8 percent of India's total imports from Africa in 2021. Other major imported commodities include pearls and precious stones (25.4 percent) and copper and articles (4 percent). Within Africa, South Africa and Nigeria were the major export destinations and import sources for India in 2021.

Trends in India-Africa Bilateral Investments

India increasingly emerged as an important global investor in overseas markets, besides being one of the major recipients of global FDI inflows.

Historically, India's business interest and investments in Africa were largely driven by small and medium enterprises and traders. In the recent past, such investments were increasingly driven by bigger Indian companies. Most of these companies have made significant investments in the extraction sector of various African countries. Increasing demand for energy and raw materials in the domestic economy are the major driving forces for these companies.

Indian investments in Africa are spanning across sectors, both in greenfield and brownfield, covering sectors such as pharmaceuticals and healthcare, energy, ICT, power, roads, railways, and automobiles, among others. Many Indian investments resulted in creation of infrastructure backbone in several African countries. Major Indian investors present in Africa include Tata Motors, Mahindra and Mahindra, Bharati Airtel, ONGC Videsh, Reliance Industries, Tata Group, Vedanta Resources, Shree Renuka Sugars Ltd, Apollo Tyres, Cipla, Kanoria Chemicals, Glenmark Pharmaceuticals, Onmobile Global, RITES, Larsen & Toubro Ltd, and Ashok Leyland, among others.

Indian Investments in Africa

According to data from the Ministry of Finance, Government of India, and the Reserve Bank of India (RBI), approved[35] cumulative India's investments in Africa during April 1996 to March 2022 amounted to US$ 73.9 billion. Mauritius, Mozambique, Sudan, Egypt, and South Africa were the top destinations of India's investments in Africa (**Table 3.10**). India's investments

[35] Approved Overseas Direct Investment implies RBI approvals (financial commitments) for Overseas Direct Investment in Equity, Loan and Guarantees

in Africa have largely been concentrated in Mauritius, mainly due to the Double Taxation Avoidance Convention[36].

Table 3.10: India's Overseas Investments in Africa (US$ million)

Country	April 1996 to March 2013	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	April 1996 to March 2022
Mauritius	34048.2	4581.9	4580.8	3670.4	5392.7	1387.1	3086.8	2940	2496.8	872.2	63056.9
Mozambique	22.8	2643.1	7.7	1.7	8	37.3	40.2	150.4	323.1	2261.4	5495.7
Sudan	1238.7	-	-	-	-	-	-	-	12.2	22.5	1273.4
Egypt	934.3	29.2	17.6	8.3	1	13.8	22	0.2	0.2	0.6	1027.2
South Africa	389	19.1	29.5	60.6	32.5	64.9	54.8	12.8	15.1	7.2	685.5
Kenya	161.6	1.8	6.1	3.8	7.8	28.1	20.7	22	16.4	7.5	275.8
Libya	220	27.2	7.4	0.1	0.5	0.6	5.2	1	0.1	0.1	262.2
Tunisia	9.9	103.5	-	82.2	0.1	2.5	-	-	-	-	198.2
Liberia	191.8	0.3	0.2	-	-	-		-	-	-	192.3
Nigeria	99.3	6.6	12.7	0.6	5	4.3	9.7	12.3	34.8	2.7	188.0
Africa Total	**37790.1**	**7492.5**	**4790.2**	**3970.5**	**5520.9**	**1651.6**	**3335.5**	**3208.7**	**2935.1**	**3228.4**	**73923.5**
India Total	**191144.1**	**36900.5**	**30919.5**	**22016.5**	**24901.5**	**18654.9**	**21322.6**	**20995.4**	**18619.2**	**24955.2**	**410429.4**
Share of Africa	*19.77%*	*20.30%*	*15.50%*	*18.00%*	*22.20%*	*8.90%*	*15.60%*	*15.30%*	*15.76%*	*12.94%*	*18.01%*

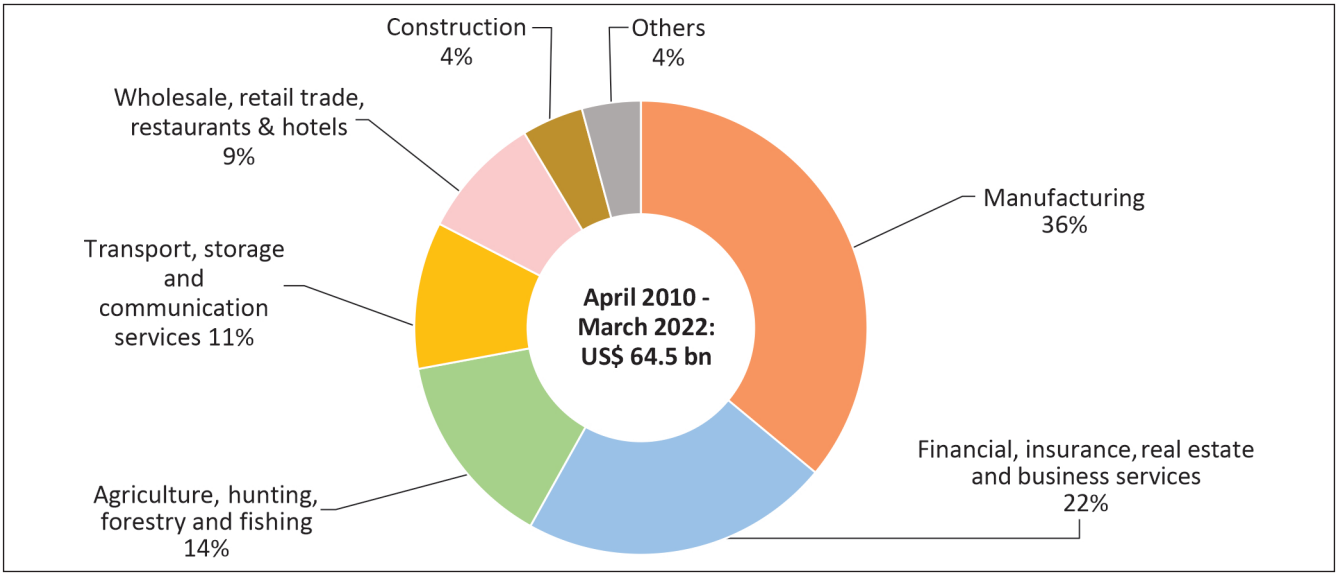
Note: - Negligible/ nil; * India's total Overseas Investment figure include investments in Gift City
Source: Ministry of Finance and Reserve Bank of India (RBI); and India Exim Bank Analysis

Setting up a Wholly Owned Subsidiary (WOS) is the most preferred route of investment for Indian investors in Africa, with nearly 81.6 percent of the total approved investments in WOS during April 2010- March 2022. Joint Ventures (JV) accounted for 18.4 percent of the total approved investments during the same period.

Africa's manufacturing sector attracted the highest Indian investments during April 2010-March 2022 (**Chart 3.4**). Other major sectors attracting Indian investments include financial, insurance, real estate and business services, agriculture and allied sectors, transport, storage and communication services.

[36]In 2016, the Indian government amended its tax treaty with Mauritius; after which, the preferential tax benefits were removed partially starting in the fiscal year of 2017 and removed completely starting fiscal year 2019

Chart 3.4: Sector-wise Indian Investments in Africa



Note: Legend is arranged based on the size of its share in total investments; others include electricity, gas and water and miscellaneous

Source: RBI; and India Exim Bank Analysis

Table 3.11: Country-wise Major Sectors Attracting Indian Investments in Africa, April 2010-March 2022

Sector/ Major Countries	Share in the respective sector
Manufacturing	
Mauritius	93.8%
Tunisia	0.8%
South Africa	0.7%
Morocco	0.7%
Ethiopia	0.6%
Financial, insurance, real estate, and business services	
Mauritius	96.6%
South Africa	1.9%
Egypt	0.4%
Zambia	0.3%
Tanzania	0.2%
Agriculture, forestry, fishing, and mining	
Mozambique	91.8%

Sector/ Major Countries	Share in the respective sector
Mauritius	6.9%
Zambia	0.3%
Uganda	0.2%
Tanzania	0.2%
Transport, storage, and communication services	
Mauritius	99.5%
Kenya	0.1%
Mozambique	0.1%
Wholesale, retail trade, restaurants, and hotels	
Mauritius	97.9%
South Africa	0.8%
Uganda	0.5%
Ghana	0.3%
Kenya	0.2%
Construction	
Mauritius	97.8%
Nigeria	1.1%
Zambia	0.4%
South Africa	0.3%
Mozambique	0.1%
Uganda	0.1%
Kenya	0.1%
Community, social and personal services	
Mauritius	98.6%
South Africa	0.4%
Uganda	0.2%
Guinea republic	0.2%
Ethiopia	0.2%
Electricity, gas, and water	
Mauritius	44.6%
Zambia	34.8%

Sector/ Major Countries	Share in the respective sector
Egypt	13.9%
Ghana	4.4%
Seychelles	1.8%
Miscellaneous	
Mauritius	89.0%
Nigeria	11.0%

Note: - Negligible/ nil; Note: Cumulative approved investments during April 2010- March 2022 stood at US$ 64.5 billion

Source: RBI; and India Exim Bank Analysis

FDI Inflows from Africa

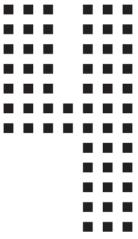
FDI inflows to India from Africa have been dominated by investments from Mauritius, that accounted for 26.8 percent of India's overall FDI inflows (**Table 3.12**). Other African countries investing in India include South Africa, Seychelles, Morocco, and Kenya.

Table 3.12: India's FDI Inflows from Africa, April 2000 to March 2022

Country	FDI Inflows (US$ million)	Share in India's Total FDI Inflows (%)
Mauritius	1,57,741.8	26.8
South Africa	564.5	0.1
Seychelles	217.5	0.04
Morocco	140.4	0.02
Kenya	28.2	-
Mozambique	15.7	-
Nigeria	15.5	-
Liberia	14.7	-
Egypt	10.4	-
Uganda	10.2	-
Africa Total	**1,58,790.8**	**27.0**
India Total	**5,88,406.5**	**100.0**

Source: Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India; and India Exim Bank Analysis

Chapter



INDIA'S DEVELOPMENT COOPERATION MECHANISM WITH AFRICA

Inspired by the spirit of '*Vasudhaiva Kutumbakam*' ('The World is One Family'), India's international development cooperation programmes are an important component of India's engagements with foreign countries. India's strive for independence and the solidarity with other developing countries have shaped India's approach towards Development Partnership, making it people-centric, forward looking, sustainable and determined by the development partner's economic priorities. These development cooperation programmes have expanded significantly in recent years both in terms of geographical reach and areas of cooperation. India's long-term geopolitical, strategic, and economic interests, as well as the necessity to efficiently deliver India's assistance programme, have driven more engagements with developing countries, notably in the area of development assistance.

Following a path of economic diplomacy, India does not consider itself as an aid donor, rather an equal partner seeking long-term, mutually beneficial relationships under South-South Cooperation mechanism. The Indian model of developmental cooperation is comprehensive and involves multiple instruments including Lines of Credit (LOCs), Grant assistance, High Impact Community Development Projects (HICDPs), Technical Consultancy, Disaster Relief and Humanitarian aid, as well as capacity-building programmes for civilian and military training under Indian Technical and Economic Cooperation Programme (ITEC).

This development cooperation is based on two main pillars, firstly, development cooperation incorporating the idea of partnership, i.e., working for mutual benefit and secondly, development cooperation based on priorities determined by the partner. Since India is a developing country, India's development assistance is in line with partners' priorities and are closely linked to India's own commercial, foreign policy and strategic interests. India's development assistance is demand-driven and is geared towards responding to as many requests received from these countries as technically and financially feasible. More importantly, these assistance do not constrain the sovereignty of its partners in any way, which is one of the defining features of South-South cooperation. Over the last few years,

the sustainability of projects, besides the project delivery and implementation have also received increased attention from India.

Accordingly, India's development partnership model has received a high degree of acceptance from its partners because of the focus on keeping the requirements and priorities of the partner country at the center of the projects. Moreover, India's development assistance has been a major catalyst for creation of much needed infrastructure in the partner countries such as railway links, roads and bridges, waterways, border-related infrastructure, transmission lines, power generation, hydropower, etc. Thus, India's approach towards developmental partnerships has been a comprehensive one offering assistance and sharing of India's own developmental experience in the full spectrum of activities, ranging from creation of infrastructure to building capacities to education, healthcare, agriculture and community development. Africa remains a major focus region of India's development assistance[37].

India's Development Cooperation with Africa

India and Africa share a unique relationship that is strategic, reliable, and time-tested on one hand, and is based on historical, cultural and ties of kinship on the other. The relationship has been further strengthened by the close engagement between the leadership and strong people to people ties. Over the years, India's engagement with Africa has evolved into a multifaceted relationship, encompassing cooperation in key priority areas including people-oriented development partnership, defence and maritime cooperation, trade and commercial ties, capacity building through scholarships, ITEC programmes, cultural cooperation, etc. Developmental cooperation has been one of the strongest pillars of India's bilateral relations with Africa. Africa views India as a partner of preference in meeting its developmental and national priority goals.

India's partnership with Africa is based on a consultative model of cooperation and sharing of development experiences and is focused on addressing the priorities and needs of the African countries. In recent years, India has substantially expanded the scope and spread of its development programmes in various countries in Africa which includes grant assistance, LOCs, technical consultancy, disaster relief, humanitarian aid, educational scholarships and a range of capacity-building programmes, including short-term civilian and military training courses encompassing wider geographical reach and broader sectoral coverage. The three India-Africa Forum Summits [IAFS I, II & III] in 2008, 2011 and 2015 have further reinforced

[37] Sourced from annual reports and other documents, Ministry of External Affairs, Government of India

the development partnership with the continent. These relations between India and Africa remained vibrant even during economic crises, especially it has been reinforced by the close cooperation in the face of common challenges arising due to COVID-19 pandemic. India is further expanding its diplomatic footprint in Africa by opening new resident missions in various countries. India is also currently implementing a flagship project in tele-education and tele-medicine for Africa called e-VidyaBharati e-ArogyaBharati Network Project (e-VBAB).

Lines of Credit

Extension of the Government of India (GOI) supported Lines of Credits (LOCs) on concessional terms remains a major component of India's diplomatic strategy, which has been useful in generating goodwill and building long term partnerships with African countries. Export-Import Bank of India (India Exim Bank), as a policy Institution wholly owned by the GOI, has been entrusted with the responsibility of extending LOCs on behalf of, and with the support of the GOI. These LOCs are extended on a bilateral basis to several low-and lower middle income (L&MI) countries/overseas agencies/ multilaterals on concessional credit terms for undertaking various development projects. The scheme with the nomenclature "India Development Initiative" (IDI), was launched in FY 2003-04, and was revised and approved in 2010 with the new nomenclature Indian Development and Economic Assistance Scheme (IDEAS). The IDEAS guidelines are reviewed and renewed from time to time; with revamped IDEAS 2022 notified on March 31, 2022.

As on March 31, 2022, a total of 204 LOCs amounting to US$ 12.37 billion have been extended by the Government of India to 42 African countries (including ECOWAS Bank for Investment and Development (EBID)) in varied sectors such as power plants, hydroelectricity, power transmission and distribution networks, dams, roads, railways, ports, agriculture and irrigation, industrial units, skills development, civil construction, etc. New sectors such as telecommunication, defence and solar power have also been included under LOCs to Africa in the last few years. Africa currently accounts for over 40 percent by value and over 65 percent by number of GOI-supported LOCs. List of current operational LOCs are provided in **Annexure III.**

LOC is a demand driven; development oriented and non-prescriptive program which supplements the Focus Africa programme of the Government of India. The LOCs are in line with the Indian policy of nurturing development partners for mutual growth as opposed to the traditionally more hierarchical relationship implied in a donor and recipient relationship. LOCs contribute to boosting Indian exports of goods and services to previously untapped markets,

thus expanding India's global footprint, generate goodwill for India, facilitates demonstration of Indian project execution capabilities, and results in increased employment generation and growth in exports from the country. Some large iconic projects supported by India in Africa under GOI-supported LOCs include construction of National Assembly (Parliament) building in the Gambia; construction of Seat of Government and Presidency Building in Ghana; Metro Express Project in Mauritius; Cricket Stadium at Georgetown, Guyana, for World Cup 2007; Mahatma Gandhi IT and Biotechnology Park in Côte d'Ivoire; Convention Centres, etc. among others.

People oriented projects in the arena of drinking water and sanitation and rural electrification are also being undertaken in African countries. Some of the major people-oriented projects under GOI-supported LOCs include Kosti Power Plant, which supplies around 35 percent of power supply of Sudan; Nyaborongo Hydropower project, supplying around 25 percent of power supply of Rwanda; 120 MW Itezhi Hydroelectric Power Plant in Zambia, which is a first-of a kind PPP power project of Africa; Upper Ruvu water treatment plant in Tanzania, which provides potable water to 2 million people in Dar-es-Salaam region; and Mozambique Drinking Water project, providing clean water to 825,000 people. The Government of India has also set up first ever manufacturing industries like cement plants, milk processing plants, tractor assembly units, food processing plants, solar module manufacturing units etc. in various countries of Africa.

Debt Service Waiver: Because of the unprecedented impact of pandemic on several developing countries, the G20 Finance Ministers and Central Bank Governors, at a meeting held on April 15, 2020, agreed on the issue of suspension of debt service payment by official bilateral creditors for the requiring countries that request forbearance. In accordance with the G20 Debt Service Suspension Initiative (G20 DSSI), India, as a member of G20, agreed to a time bound suspension of debt service payment to the GOI-supported LOC Borrower Governments as per the standard template of G20 DSSI. Accordingly, the Government of India has approved the request for debt service suspension by several African countries viz. Burkina Faso, Cameroon, Comoros, DR Congo, Djibouti, Ethiopia, Lesotho, Malawi, Mozambique, Republic of Congo, Senegal, Sierra Leone, Tanzania, Togo, and Zambia.[38]

Grant Assistance

As part of India's commitment towards South-South Cooperation, India is also extending developmental assistance by way of taking up grant assistance projects aimed at economic

[38] Annual Report 2021-22, Ministry of External Affairs, Government of India

cooperation and capacity building keeping in view the local requirements. Several Centres of Excellence in IT (CEITs) are at various stages of implementation in partner countries around the world including African countries viz. Namibia, Egypt, etc; along with Vocational Training Centre (VTC) in Zanzibar. India is also undertaking several grant-in-aid projects such as supply of Midi Buses; ambulances; medical equipment, and CT scan machines to various African countries.[39]

The construction of the new Supreme Court building in Port Louis, Mauritius; a Civil Services College in Port Louis; the new Magistrates' Court in Seychelles; military hospitals in Liberia etc, are some of the recent projects supported through grants by India, along with high impact community development projects in several countries in Africa. Year-wise grant details for providing developmental assistance to African countries are given in **Table 4.1.**

Table 4.1: India's Grants to African Countries (Disbursed, in Rs. crores)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23*
African Countries	283.8	286.4	172.7	340.0	497.8	226.3	200.0	250.0
Mauritius	-	410.0	350.4	659.8	1100.0	652.1	839.2	900.0
Seychelles	-	50.0	223.2	99.8	24.5	90.3	18.5	14.1

Note: *- Budget Estimates

Source: Union Budget Documents, Government of India and Ministry of External Affairs

Humanitarian Assistance as Development Partnership and Cultural and Heritage Cooperation in Development Projects

In October 2018, the 'India for Humanity' initiative was launched to commemorate the 150th birth anniversary of Mahatma Gandhi and honour his service to humanity. In collaboration with the NGO Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS), popularly known as "Jaipur Foot," a number of artificial limb fitment camps have already been organized in several countries in Asia and Africa. During the pandemic, India has extended COVID-related medical assistance including testing kits, protective gear and Hydorxychloroquine and other medicines to countries across the globe, including 35 African countries, complementing the national efforts of various countries in Africa to combat the pandemic. Several e-ITEC webinars on handling the pandemic have also been hosted for sharing experience and best practices with experts from other countries.

[39] Annual Report 2020-21, Ministry of External Affairs, Government of India

Apart from medical aid, India has also recently rendered technical assistance in the form of dispatching Rapid Response Teams to countries, including Comoros and Mauritius; delivering rice to Madagascar, Eswatini, Ethiopia, Mozambique, Namibia and Comoros as food assistance for the ongoing drought/ famine/ crisis; supply of essential medicines to support health systems in countries like Djibouti, Sudan, South Sudan, Tunisia, and Sao Tome & Principe, and NCERT Textbooks to Uganda, Rwanda, Mozambique and Malawi are some of the other humanitarian assistance and disaster responses by India in the recent times.

Additionally, with Government of India's assistance programme more than 50 cultural and heritage projects have been completed globally, which includes setting up of National Archives and Library in Mauritius.

Capacity Building through Indian Technical and Economic Cooperation

Capacity building assistance is an integral component of India's development partnership programme. The Government of India provides capacity building support to other friendly countries in various forms such as civilian and military training programmes in India, training on-site abroad, deputation of Indian experts, establishment of centres of excellence in IT and vocational training centres.

As the flagship capacity building programme of the Government of India, the ITEC programme has a footprint in 161 countries, including African countries and has contributed to the capacity enhancement of more than 2,00,000 professionals since its inception in 1964. The programme has grown organically from about 4,000 training slots in 2006-07 to around 14,000 slots (including defense training) in 2019-20. It is also closely associated with cooperation programmes conceived in regional and inter-regional context such as Economic Commission for Africa, Commonwealth Secretariat, UNIDO, Group of 77 and G-15; and regional and multilateral organizations and cooperation groupings like African Union (AU), Afro-Asian Rural Development Organization (AARDO), Pan African Parliament, World Trade Organization (WTO), and India-Africa Forum Summit, among others. Apart from being a powerful tool of India's soft power diplomacy, the ITEC programme has also assumed the mantle of leadership in capacity building initiatives in South-South Cooperation. Under ITEC, 161 countries in Asia, Africa, East Europe, Latin America, the Caribbean as well as Pacific and Small Island countries are invited to share in the Indian developmental experience acquired over six decades of India's existence as a free nation. Country-wise allocation and utilization of ITEC Slots in Africa in the last three years are provided in **Table 4.2.**

Apart from providing capacity building training programmes in the traditional areas of governance, ITEC has been expanded to include emerging areas like AI, Nano technology, forensics, and cyber security. ITEC now enables participating professionals to access programmes and registrations using a dedicated online portal and provides its training content through reputed partner institutions like Indian Institute of Technology (IITs), Indian Institute of Management (IIMs), National Law University (NLUs) and Indian Institute of Science (IISC) in the public sector as well as reputed institutions in the private sector.

The ITEC Programme has the following components:

- Training (civilian and defense) in India of nominees from ITEC partner countries;
- Deputation of Indian experts abroad; and
- Study Tours.

Table 4.2: Country-wise Allocation and Utilization of ITEC Slots in Africa

Sl. No.	Country	2018-19	2019-20	2020-21[40]
		Slots Allotted	Slots Allotted	eITEC participations
1	Algeria	40	40	1
2	Angola	30	12	
3	Benin	20	25	8
4	Botswana	180	200	10
5	Burkina Faso	20	5	
6	Burundi	30	40	
7	Cameroon	32	32	
8	Cape Verde	10	17	
9	Chad	20		
10	Comoros	25	15	
11	Cote d'Ivoire	100	100	1
12	Djibouti	10		
13	DR Congo	75	90	
14	Egypt	200	200	5
15	Equatorial Guinea	5	32	2
16	Eritrea	47	40	

[40] Due to the onset of COVID-19 Pandemic travel restrictions, in-person trainings were replaced with eITEC trainings delivered virtually

Sl. No.	Country	2018-19	2019-20	2020-21
		Slots Allotted	Slots Allotted	eITEC participations
17	Eswatini	50	50	167
18	Ethiopia	400	406	31
19	Gabon	15	10	
20	Gambia	50	60	1
21	Ghana	150	150	6
22	Guinea	30	40	
23	Guinea-Bissau	10	8	
24	Kenya	270	240	193
25	Lesotho	50	70	
26	Liberia	60	70	
27	Libya	10		
28	Lithuania	15	6	
29	Madagascar	80	107	3
30	Malawi	130	150	
31	Mali	60	70	
32	Mauritius	200	210	38
33	Morocco	40	150	59
34	Mozambique	50	60	
35	Namibia	125	125	
36	Niger	160	156	
37	Nigeria	200	250	102
38	Republic of Congo	20	10	
39	Rwanda	17	10	
40	Sao Tome	20	2	
41	Senegal	25	28	
42	Seychelles	90	90	5
43	Sierra Leone	60	50	
44	Somalia	12	15	26
45	South Africa	70	50	2
46	South Sudan	200	240	31
47	Sudan	200	270	36

Sl. No.	Country	2018-19	2019-20	2020-21
		Slots Allotted	Slots Allotted	eITEC participations
48	Tanzania	460	450	3
49	Togo	40	20	
50	Tunisia	115	100	19
51	Uganda	125	125	
52	Zambia	100	170	50
53	Zimbabwe	260	217	6

Source: Ministry of External Affairs, Government of India

Pan-African E-Network: India and Pan-African Countries Initiative

An important element of the strategy to enhance Indo-African cooperation in the 21st century is the Pan African E-Network Project that is funded entirely by India. The project was announced by the then President of India, H.E. Dr. A.P.J. Abdul Kalam, during the Inaugural session of the Pan-African Parliament held in Johannesburg in September 2004. Towards this end, a Memorandum of Understanding (MOU) was signed between the Government of India and the African Union in October 2005, and Telecommunications Consultants India Ltd. (TCIL) has been selected to implement the project.

The Pan-African E-Network Project seeks to cover the cost of supply, installation, testing and commissioning of hardware and software, end-to-end connectivity, satellite bandwidth, operational and maintenance (O&M) support, and providing tele-education and tele-medicine services to 53 African countries. The first phase of the project which was launched on February 26, 2009, included 11 countries, namely, Benin, Burkina Faso, Gabon, the Gambia, Ghana, Ethiopia, Mauritius, Nigeria, Rwanda, Senegal, and Seychelles. The second phase of the project that covers another 12 countries – Botswana, Burundi, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Libya, Malawi, Mozambique, Somalia, Uganda, and Zambia – was launched in 2010. 48 African countries have signed the agreement with TCIL for participating in the project. The Project successfully imparted tele-education and tele-medicine by linking educational institutions and hospitals in India with those from the participating African countries.

On September 10, 2018, the Pan-Africa E-Network project has been succeeded by e-VidyaBharati and e-AarogyaBharati (e-VBAB) Network Project, which would be a digital bridge of knowledge and health between India and Africa. e-VBAB Network Project is primarily a technological upgrade and extension of the Pan-African e-Network Project (Phase

1) which was implemented in 48 partner countries across Africa during 2009-2017. Over the 5-year project duration, e-VBAB Network Project is expected to provide free tele-education courses in various academic disciplines to 4000 students every year from African countries. The Project will also be utilized for providing free Continuing Medical Education (1000 every year) to African doctors/nurses/para-medical staff. The Project also offers full scholarships to students and professionals in participating countries in Africa. The 19 participating countries in Africa under the project include Benin, Comoros, Côte d'Ivoire, DR Congo, Eritrea, the Gambia, Ghana, Guinea, Mali, Malawi, Mauritius, Mozambique, Nigeria, Seychelles, Sierra Leone, Somalia, Sudan, Uganda, and Zambia.[41]

International Solar Alliance

The International Solar Alliance (ISA) was conceived as a joint effort by India and France to mobilize efforts against climate change through deployment of solar energy solutions. It was conceptualized on the sidelines of the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Paris in 2015. With the amendment of its Framework Agreement in 2020, all member states of the United Nations are now eligible to join the ISA. The ISA is guided by its 'Towards 1000' strategy which aims to mobilise US$ 1,000 billion of investments in solar energy solutions by 2030, while delivering energy access to 1,000 million people using clean energy solutions and resulting in installation of 1,000 GW of solar energy capacity. At present, 101 countries are signatories to the ISA Framework Agreement. 82 countries have submitted the necessary instruments of ratification to become full members of the ISA, which include 37 African countries. With more African Countries joining the India led - ISA, India-Africa partnership in solar energy and renewables is set to scale new frontiers.

Coalition for Disaster Resilient Infrastructure

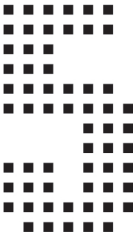
Disaster and climate resilient infrastructure is increasingly recognized as critical for achieving development that endures climate change and reduces disaster risk. A large proportion of direct damages from disasters – sometimes up to two-thirds of the total – are related to infrastructure. The effects of infrastructure system disruptions can ripple across multiple sectors, economies and geographies, creating impacts that are difficult to predict.

[41] ilearn.gov.in; Ministry of External Affairs, GOI

The Coalition for Disaster Resilient Infrastructure (CDRI), launched at the 2019 UN Climate Action Summit, is a global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, academic and knowledge institutions that aims to promote the resilience of infrastructure systems to climate and disaster risks, thereby ensuring sustainable development. The genesis of the Coalition is a result of the unequivocal commitment and efforts of the Government of India to promote disaster resilient infrastructure, spearheaded by the National Disaster Management Authority (NDMA). African countries such as Ghana, Madagascar, and Mauritius are members of CDRI. CDRI supports the achievement of goals and targets enshrined in the SDGs, Paris Agreement on Climate Change, Sendai Framework for Disaster Risk Reduction (SFDRR) and the UN Agenda 2030 principles of leaving no one, no place and no ecosystem behind.

Thus, on Africa's domestic front, India and Africa have been cooperating in areas such as infrastructure, health, education and skill development, agriculture, and ICTs. On a wider international forum, India and Africa have been cooperating on various issues such as climate change, sustainable development, energy, blue and ocean economy. India and Africa are also collaborating on two major multilateral initiatives launched by India, the International Solar Alliance, and the Coalition for Disaster Resilient Infrastructure. Several African countries continue to support India's candidature in various elections in the United Nations and related international bodies. India, on the other hand, has always taken due consideration and represented not only its own people, but also the developing South, on international forums to find global solutions to global challenges.

Chapter



AFRICA'S NEED FOR INFRASTRUCTURE INVESTMENTS AND INDIA'S CAPABILITIES

The COVID-19 pandemic has brought about significant disruptions in global supply chains, necessitating global economies to give increased attention towards sustainable infrastructure development. Moreover, technological changes, pragmatic attitudes of governments, a greater sensitivity towards the contribution of infrastructure to economic growth and poverty alleviation, and a renewed commitment towards social and environmental concerns have together created a paradigm shift in infrastructure development across the countries in the world. However, finance has been unable to keep pace with the rising global demand, and the infrastructure investment gap remains significant. According to an analysis undertaken by the GI Hub, in collaboration with Oxford Economics, the need for infrastructure investment is forecast to reach US$ 94 trillion during 2016-2040 across 50 countries, with an estimated investment gap of nearly US$ 15 trillion.

The development of infrastructure in Africa is critical for fostering economic growth as it contributes significantly to human development, poverty reduction, and the attainment of the SDGs. According to the African Development Bank (AfDB), investment in infrastructure accounts for over half of the improvements in economic growth in Africa witnessed over the last decade and has the potential to contribute much more, given a conducive environment.

Infrastructure Deficit in Africa

In order to ensure Africa's long term economic sustainability, it is imperative to use infrastructure as a tool to build resilience and facilitate growth. For Africa, the need for adequate infrastructure including secure energy, efficient transport, reliable communication systems, safe drinking water and sanitation remain critical. According to the Programme for Infrastructure Development in Africa (PIDA), infrastructure constraints are stunting Africa's growth by 2 percent every year.

In 2018, the AfDB estimated that the continent's infrastructure needs, including power and water systems as well as new roads and railways, amounted to between US$ 130 billion and US$ 170 billion a year, with a financing gap in the range of US$ 67.6 billion to US$ 107.5 billion. The COVID-19 pandemic is likely to have reduced infrastructure spending massively as African government revenues have moderated significantly and institutions have become far more concerned about day-to-day spending than fixed investment. Thus, it is expected that the financing gap in the region have mushroomed, creating enormous opportunities for private sector investors.

According to the AfDB's latest Africa Infrastructure Development Index (AIDI) 2020, which is based on four major components: transport; electricity; ICT; and water & sanitation; North Africa emerged as the best-performing subregion (index value of 75.19), followed by Southern Africa (36.25), with both these regions recording index values more than the African average (29.63). Concomitantly, West Africa, East Africa and Central Africa recorded index values lower than the African average in 2020.

The best performing 10 countries in terms of infrastructure development within Africa in 2020 were Seychelles, Egypt, Libya, South Africa, Mauritius, Tunisia, Morocco, Algeria, Cabo Verde, and Botswana. African countries with the lowest value in AIDI index were Central African Republic, Sierra Leone, Madagascar, Ethiopia, Eritrea, DR Congo, Chad, Niger, South Sudan, and Somalia.

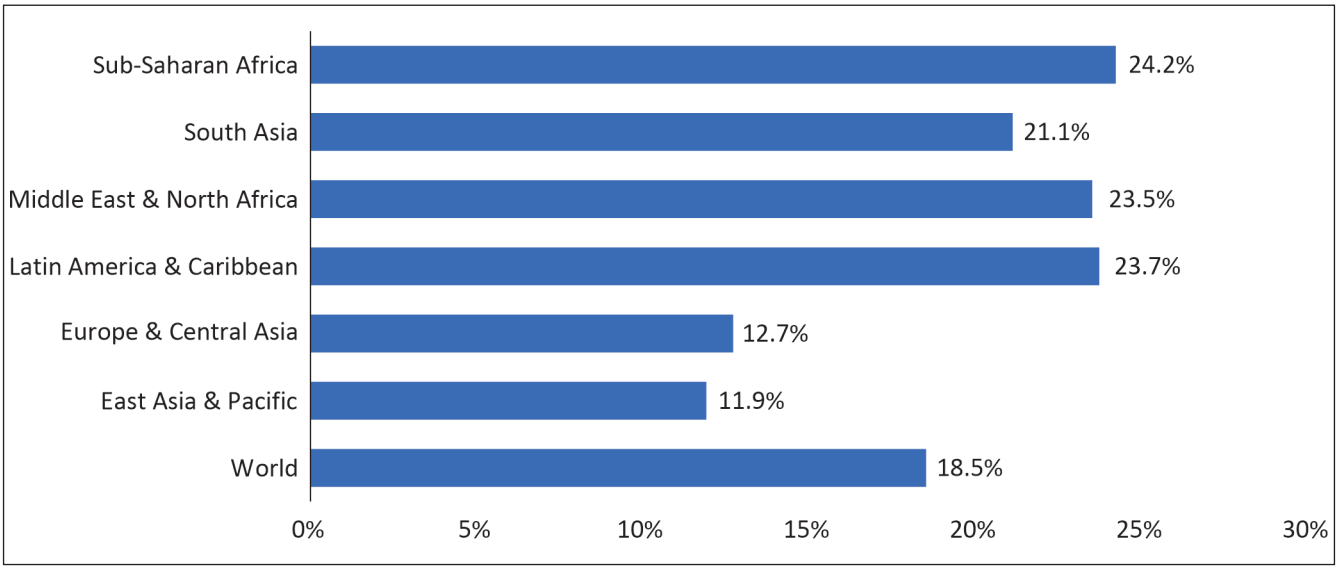
Transport

One of the biggest obstacles to realising the full economic potential of Africa is its poor road and railway infrastructure. Besides fostering regional and cross-border trade, transport infrastructure is essential to enhance connectivity of the landlocked African countries to the river and seaports. Efficient transport connectivity would create economic corridors which can improve productivity and reduce logistic and trade costs and integrate African economies to regional and global value chains.

According to a KPMG report, poor infrastructure leads to 50-175 percent higher cost of transport in Africa than other parts of the world. Sub-Saharan Africa ranks the lowest among all regions in the World Bank's Logistic Performance Index - Quality of trade and transport-related infrastructure (1=low to 5=high) with a score of 2.2 as compared to the world average of 2.7 in 2018. As shown in **Chart 5.1**, 24.2 percent of the manufacturing firms in the Sub-Saharan Africa region identified transportation as a major constraint. In order for AfCFTA to

operate at its fullest potential, Africa requires efficient road and railway network. Roads are the predominant mode of transport in Africa – carrying at least 80 percent of goods and 90 percent of passengers.[42] No major trunk roads exist that link West Africa to Central or Southern Africa, and railways are concentrated in the Southern Africa region. Across African countries, there is an average of 204 km of roads per 1,000 km, with only one-quarter of paved roads as compared to the global average of 944 km per 1,000 km, with more than half paved roads. Africa also lacks roads connecting deep seaports to economic hinterlands. Around 60,000 km and 100,000 km of new roads are required to provide intra-continental connectivity.[43] The Trans-African Highway, nine highways crisscrossing the continent, also remains largely incomplete due to conflicts and climatic reasons.

Chart 5.1: Percentage of Firms Identifying Transportation as a Major Constraint



Source: World Bank Enterprise Survey 2021 and India Exim Bank Analysis

Of all the transportation modes, rail networks are the least developed in Africa, with very few additions since colonial times. Outdated infrastructure and limited maintenance have undermined the effectiveness of railways across Africa, resulting in a significant reduction in usable track. In total, Africa has 84,000 kilometers of rail track, for a surface of about 30 million square kilometers, most of it in Southern and Northern Africa. It is also notable that African exports are largely bulky primary commodities, which could be transported more efficiently and at lower cost by rail than by road. Rail development therefore holds significant opportunities for investors. Opportunities for large scale investments in associated activities like locomotive building, logistics, and communications also exist.

[42] Tracking Africa's Progress in Figures, African Development Bank, 2014
[43] Will Africa's road to prosperity be blocked by environmental concerns?, Investment Monitor, June 2021

Seaports too are badly in need of investment and regulatory reforms to remove the bottlenecks and chronic congestion problems. Whereas Africa operates 64 ports, many of them are poorly equipped and uneconomically operated. Inadequate capacity, particularly in terminal storage and maintenance remains another major issue. Delays are often caused by long processing times and poor shipment handling rates, with over-the-quay container-handling performance running below 20 container moves per hour in the African region, compared to 25 to 30 in modern terminals worldwide. In addition, handling costs average 50 percent more in Africa than in other parts of the world.

Electricity

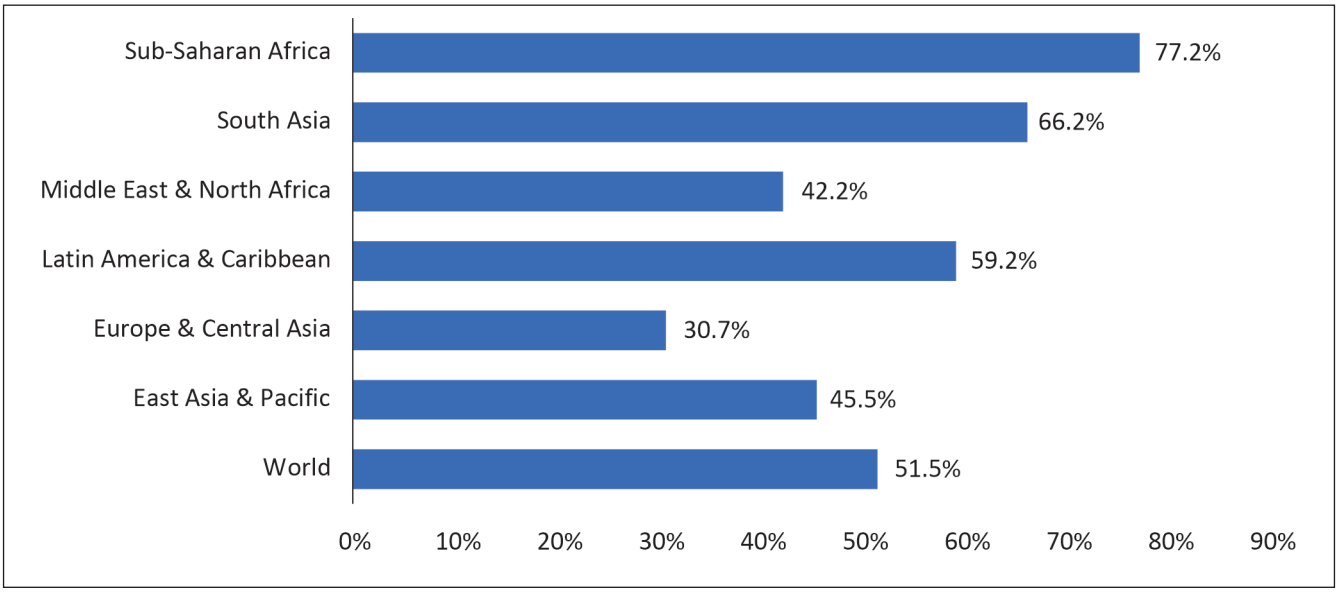
Around 70 percent of the global population without access to electricity is based in Sub-Saharan Africa, which is nearly 600 million.[44] Further, Africa's demand for electricity is expected to grow four-folds between 2010 and 2040. There is a great disparity between the North African countries vis-à-vis the other countries in terms of access to electricity. Population in Egypt, Morocco, Tunisia, and Algeria have access to electricity close to 100 percent in 2020, with exceptions being Libya (69.7 percent) and Mauritania (47.3 percent).[45] Other Sub-Saharan African countries like Mauritius (99.7 percent), Cabo Verde (94.2 percent), Gabon (91.6 percent), Comoros (86.7 percent), Ghana (85.9 percent), and South Africa (84.4 percent) are also exceptions as compared to the African average of 55.6 percent and Sub-Saharan African average of 48.4 percent. At the present rates of growth in electricity access in Africa, the region may not be able to meet the target of the Sustainable Development Goal 7: "By 2030, ensure access to affordable, reliable, sustainable and modern energy for all".

Lack of reliable electric supply also hurts industrialisation. A study on firms of 23 African countries estimates that a 1 percent increase in electricity outages would account for a loss in firms' total factor productivity of 3.5 percent on average (Mensah, 2018).[46] Power outages also have a significant negative impact on the decision to export, with firms facing power outages having 9 to 13 percent lower chances of getting into the export market. Power outages can reduce firms' competitiveness by increasing production cost by forcing firms to rely on more expensive alternate sources of power, disrupt the assembly line, delay

[44] Solving Africa's infrastructure paradox, Mc Kinsey & Company, March 2020
[45] World Development Indicators, World Bank
[46] Jobs! Electricity Shortages and Unemployment in Africa, Policy Research Working Paper, No. 8415, Mensah, Justice Tei, World Bank, 2018

production, and create substandard products.[47] More firms in Sub-Saharan Africa experience electrical outages as compared to other parts of the world as identified in the World Bank's Enterprise Survey (**Chart 5.2**).

Chart 5.2: Percentage of Firms Experiencing Electrical Outages



Source: World Bank Enterprise Survey 2021 and India Exim Bank Analysis

Information and Communication Technology

Africa is considered as a success story when it comes to information and communication technology (ICT). However, the region continues to face a lingering digital divide as compared to the rest of the world. In fact, to achieve universal broadband internet access in Africa, an estimated US$ 100 billion in investment is needed over the next decade, with a third of it in infrastructure.[48]

Digital infrastructure comprises connectivity through high-speed broadband networks and internet exchange points, the Internet of Things (IoT) (for example, mobile devices, computers, sensors, voice activated devices, geospatial instruments, machine-to-machine communications, and vehicle-to-vehicle communications), and data repositories (for example, data centers and clouds). For the digital economy, high-speed broadband connectivity to access the internet is a critical foundation.

[47] Do Power Outages Hurt Export Performance, Evidence from Firm Level Survey, Abhijit Sengupta, Prakash Singh, AIIB Working Paper No. 9, June 2021

[48] Connecting Africa Through Broadband: A strategy for doubling connectivity by 2021 and reaching universal access by 2030, Broadband Commission for Sustainable Development, October 2019

Fixed broadband, i.e., dedicated, physical links of high-speed internet, connected to homes, offices, and governments, has had very limited reach in Africa. Although fixed broadband penetration has continuously increased in recent years in urban areas, largely because of a sharp drop in subscription charges, mainly in Sub-Saharan Africa, Africa still has the lowest penetration of fixed broadband worldwide. Monthly subscriptions in Sub-Saharan Africa are more than twice as costly as those in North Africa. Mobile broadband, i.e., the use of high-speed internet via mobile or smart device, is the principal way by which people across Africa access the internet. Nevertheless, despite the major advances in mobile connectivity and internet access, Africa's mobile broadband penetration rate (about 25 percent) is still the lowest worldwide. While coverage and quality of mobile networks used for the internet varies extensively amongst countries, substantial gaps also remain between urban and rural access within countries. In terms of affordability, the African region has the highest price relative to income for mobile broadband services. According to the International Telecommunication Union (ITU), between 2019 and 2021, internet use in Africa jumped by 23 percent.[49] As evident from **Table 5.1**, values of major key indicators of ICT in Africa remain lower as compared to other regions across the world.

Table 5.1: Key ICT Indicators Representing Penetration Level in 2021

Indicators (per 100 inhabitants)	Africa	Americas	Arab States	Asia-Pacific	CIS	Europe	World
Fixed-telephone subscriptions	1	20	10	8	16	31	11
Fixed-broadband subscriptions	1	23	9	17	20	35	17
Mobile-cellular telephone subscriptions	83	119	98	112	146	118	110
Active mobile-broadband subscriptions	41	103	67	87	94	105	83
Population covered by a mobile-cellular network	90	96	97	99	99	100	97
Population covered by at least a 3G mobile network	82	96	95	98	94	99	95
Percentage of Individuals using Internet	33	81	66	61	82	87	63

Source: ITU World Telecommunication/ICT Indicators database (January 2022) and India Exim Bank Analysis

[49] Measuring Digital Development, Facts and Figures 2021, International Telecommunication Union, December 2021

Water and Sanitation

According to the World Resource Institute, many African countries are at extremely high-water risk considering multiple factors like vulnerability to droughts and floods, seasonal variability and competition for available water. Already, one in every three people across Africa face water scarcity. According to the UNICEF, nearly 418 million people in Africa are denied even basic drinking water supply. Since 2015, the number of people without safely managed drinking water facility in Sub-Saharan Africa has increased from 703 to 766 million in 2020.[50] In Sub-Saharan Africa, 1 out of 3 people have no handwashing facility at all and 839 million people in Africa lack basic hygiene services.

Achieving the SDG targets in Africa will require a 12-fold increase in current rates of progress on safely managed drinking water, a 20-fold increase for safely managed sanitation and a 42-fold increase for basic hygiene services.[51]

While climate is an important factor driving water stress in Africa and around the world, poor management of water resources and services remains the biggest challenge. As climate change makes rainfall more erratic and increases the risks of floods and droughts, investing in better water management and infrastructure is becoming even more important. These investments can strengthen economies by alleviating poverty, supporting jobs and growth, and reducing vulnerability to climate change. Securing safe drinking water, sanitation, and hygiene for all in Sub-Saharan Africa would require US$ 35 billion per year.[52] As highlighted in **Table 5.2**, Sub-Saharan Africa recorded the highest mortality rate attributed to unsafe water, sanitation and lack of hygiene when compared to other regions of the world. This is owing to lower access to basic drinking water and sanitation facilities.

[50] https://unstats.un.org/sdgs/report/2021/goal-06/
[51] Africa to drastically accelerate progress on water, sanitation and hygiene, UNICEF, March 22, 2022
[52] Climate Change Is Hurting Africa's Water Sector, but Investing in Water Can Pay Off, World Resources Institute, October 7, 2019

Table 5.2: Indicators Highlighting Water and Sanitation Facilities

Indicators	East Asia & Pacific	European Union	Latin America & Caribbean	Middle East & North Africa	North America	South Asia	Sub-Saharan Africa	World
Mortality rate attributed to unsafe water, unsafe sanitation, and lack of hygiene (per 100,000 population)	2.1	0.3	1.7	2.2	0.2	17.8	47.2	11.7
People using at least basic drinking water services (% of population)	94.2	99.9	97.2	94.9	99.8	90.8	64.5	90.0
People using at least basic sanitation services (% of population)	90.9	98.4	88.5	91.6	99.6	69.3	32.8	78.1
People using safely managed drinking water services (% of population)	NA	97.8	75.4	78.5	97.3	NA	30.2	74.3
People using safely managed sanitation services (% of population)	60.1	90.3	34.1	38.8	81.1	44.8	21.3	54.0

Source: World Development Indicators, World Bank and India Exim Bank Analysis

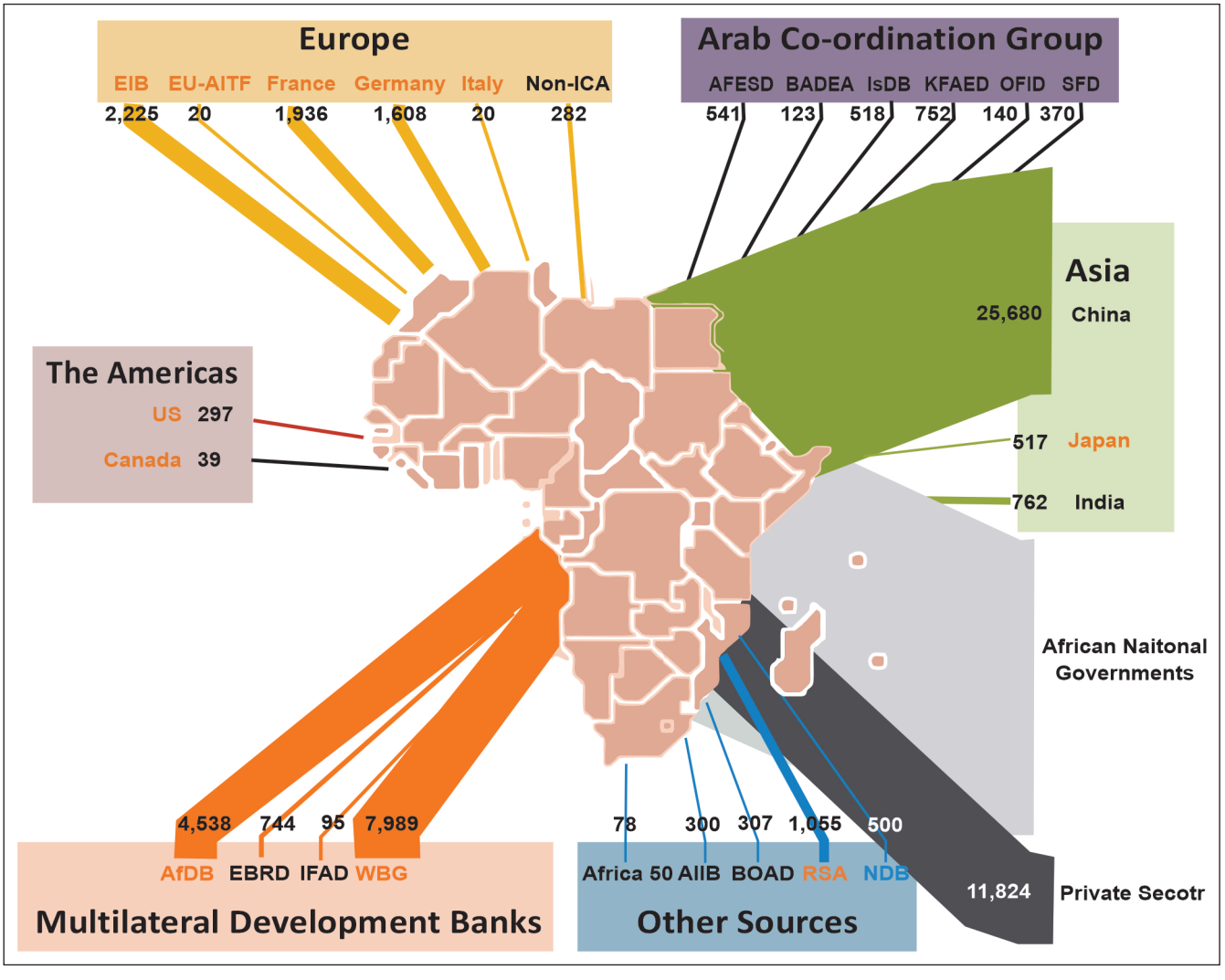
Infrastructure Financing

According to the Global Infrastructure Hub, public investment in infrastructure can effectively increase economic output over the medium term and these multipliers are higher than any other form of public spending. Public investment has an average fiscal multiplier of about 0.8 within 1 year, and around 1.5 within 2 to 5 years. The multiplier effect tends to be larger – at around 1.6 – during the contractionary phase of the economic cycle, suggesting that

public investment is generally less likely to 'crowd out' private economic activity in times of recession. Therefore, infrastructure investment remains an important element to drive economic rebound in medium term to long term.

According to the Infrastructure Consortium of Africa, in 2018, total commitment for African infrastructure amounted to US$ 100.8 billion, an increase of 24 percent over the total commitments reported for 2017 at US$ 81.6 billion. African governments committed US$ 37.5 billion, the largest share (37 percent) of financing in 2018, followed by China (US$ 25.7 billion or 26 percent), and ICA members (US$ 20.2 billion, or 20 percent) (**Exhibit 5.1**). The energy sector received the largest investment commitment at US$ 43.8 billion, followed by transport (US$ 32.5 billion), water (US$ 13.3 billion), ICT (US$ 7.1 billion) and multi-sector (US$ 4.1 billion).

Exhibit 5.1: Sources of Infrastructure Financing in Africa during 2018 (US$ million)

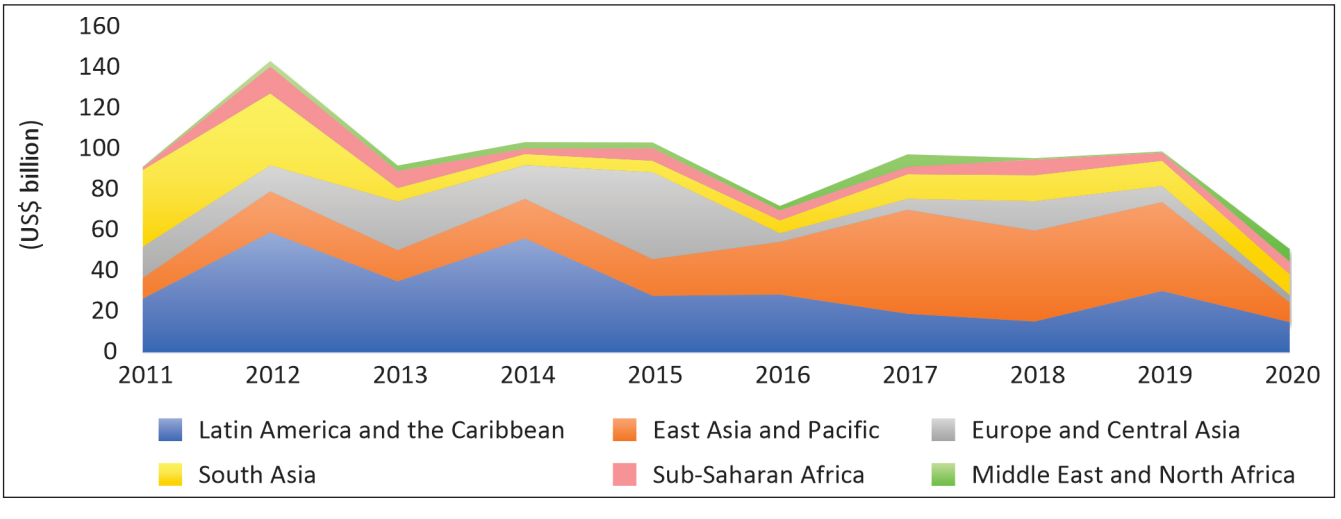


Source: Adapted from the Infrastructure Consortium of Africa

India committed US$ 762 million in 2018 mainly into the water and sanitation sector (US$ 600 million) and transport (US$ 162 million). India's overall commitment in 2018 was slightly higher than the US$ 700 million committed in 2017, but lower than US$ 1.2 billion committed in 2016. China's commitments, on the other hand, have increased from US$ 6.4 billion in 2016 and US$ 19.4 billion in 2017 to US$ 25.7 billion in 2018. The largest share of Chinese financing (71 percent) was for the energy sector, followed by the transport sector which accounted for 26 percent of the total commitment.

According to the World Bank data, private participation in Infrastructure (PPI) investment commitments declined globally by more than half during 2020 as compared to pre-pandemic level and stood at US$ 45.7 billion across 252 projects in emerging market and developing economies (EMDEs). This is the lowest investment commitment registered after 2004 when investments totalled US$ 31.3 billion. PPI investments declined across all regions except Sub-Saharan Africa and Middle East and North Africa. Sub-Saharan Africa received US$ 6.3 billion across 24 projects, a 7 percent increase in investment levels from 2019 and a 14 percent increase from the five-year average of US$ 5.5 billion. Nigeria, Côte d'Ivoire, and Kenya accounted for the majority share of investment commitments in the region. Majority of the projects are fully financed by the Development and Export Finance Institutions (DEFI), indicating DEFI financing remains an important source of financing for large-scale projects. **Chart 5.3** shows the global trend in investment commitments in infrastructure projects, with private participation in emerging markets and developing economies during 2011 to 2020. East Asia and Pacific region has increasingly accounted for a major share of the global commitments, whereas Latin America and Caribbean has witnessed a decline during 2011-2020.

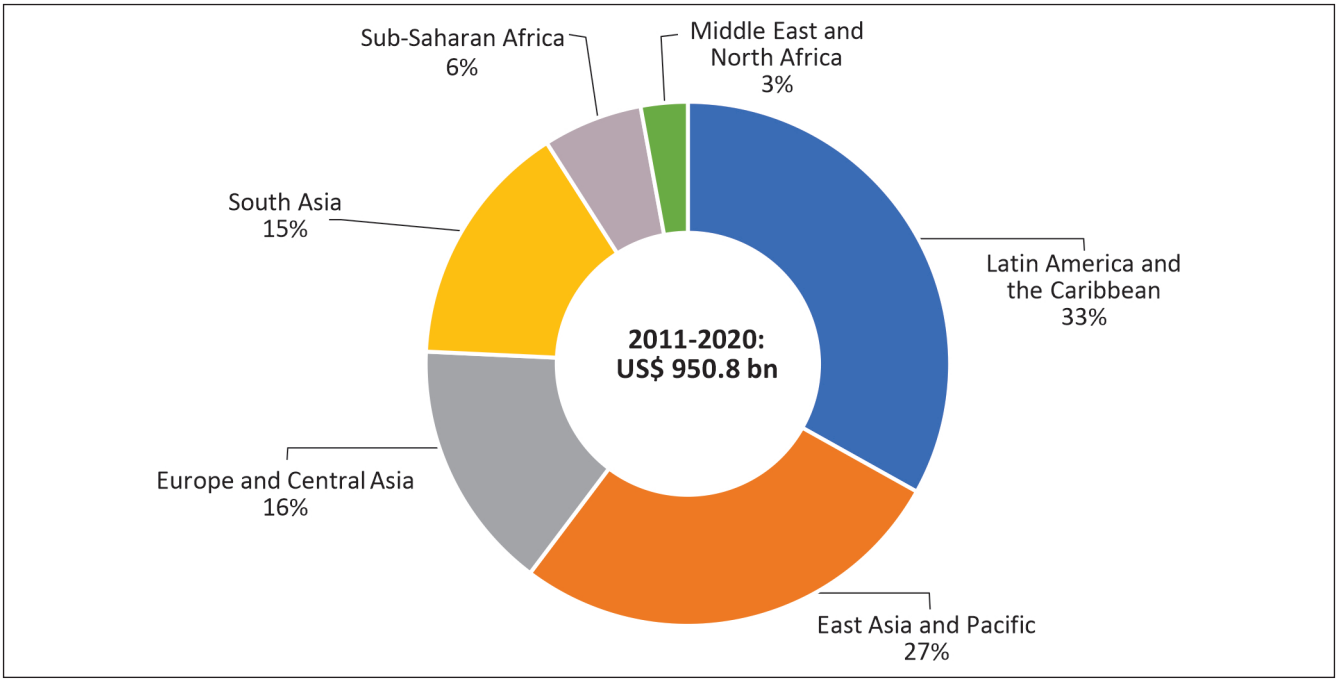
Chart 5.3: Investment Commitments in Infrastructure Projects with Private Participation in EMDEs



Source: World Bank and India Exim Bank Analysis

During 2011 to 2020, cumulative private participation investment commitments across globe amounted to US$ 950.8 billion, with Sub-Saharan Africa accounting for 6 percent of global commitments (**Chart 5.4**).

Chart 5.4: Region-wise Private Participation of Infrastructure Investment



Source: World Bank and India Exim Bank Analysis

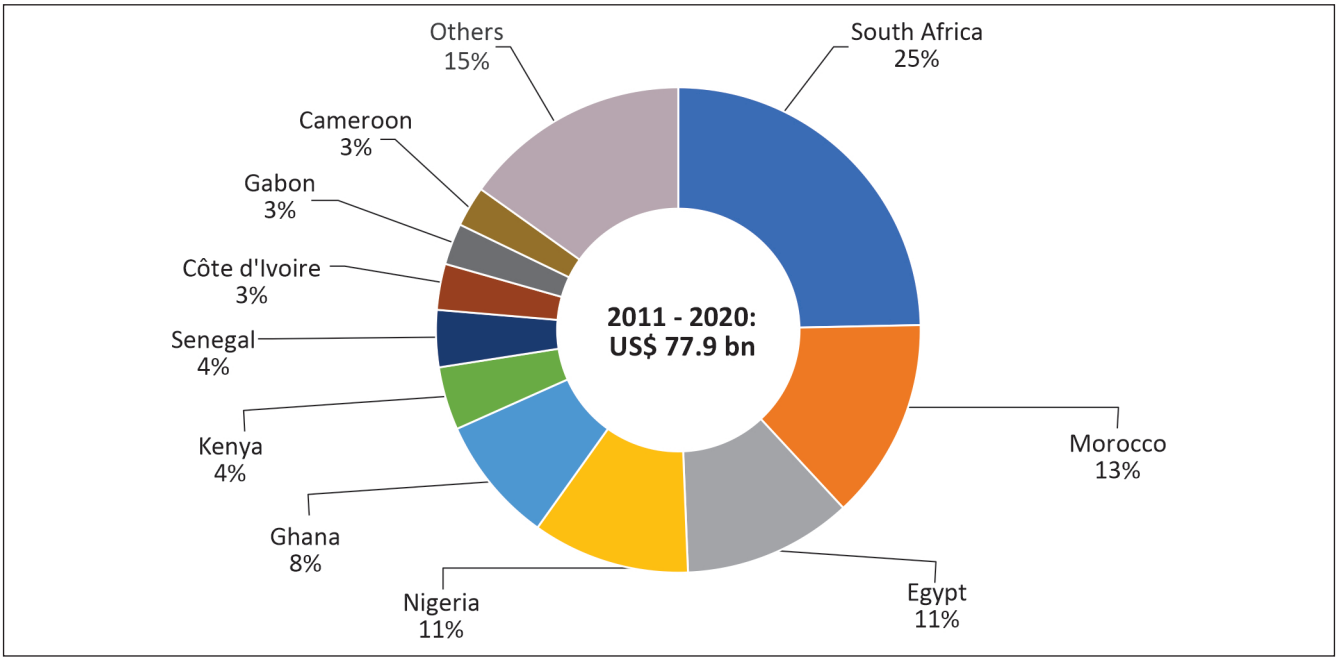
Chart 5.5 shows the major destinations for PPI investment in Africa during 2011 to 2020. The cumulative PPI investments in Africa for 42 countries stood at approximately US$ 78 billion. South Africa, Morocco, Egypt, and Nigeria accounted for 60 percent of the continent's PPI investment commitments during 2011 and 2020.

Around 89 percent of these investments were in greenfield projects, followed by 8 percent in brownfield projects. Electricity remains the sector receiving the largest share of private participation in infrastructure investment during 2011 to 2020, leading to an increase in access to electricity from 43.8 percent of total population of Africa in 2011 to 55.6 percent in 2020.[53] However, Africa's access to electricity remains lowest as compared to other global regions which are all above 95 percent and the world average which remains 90.5 percent in 2020.

Ports and railways remain the second largest sectors receiving investments within the transport category, followed by ICT (**Chart 5.6**).

[53] Average of 54 African countries calculated based on the data from World Development Indicators

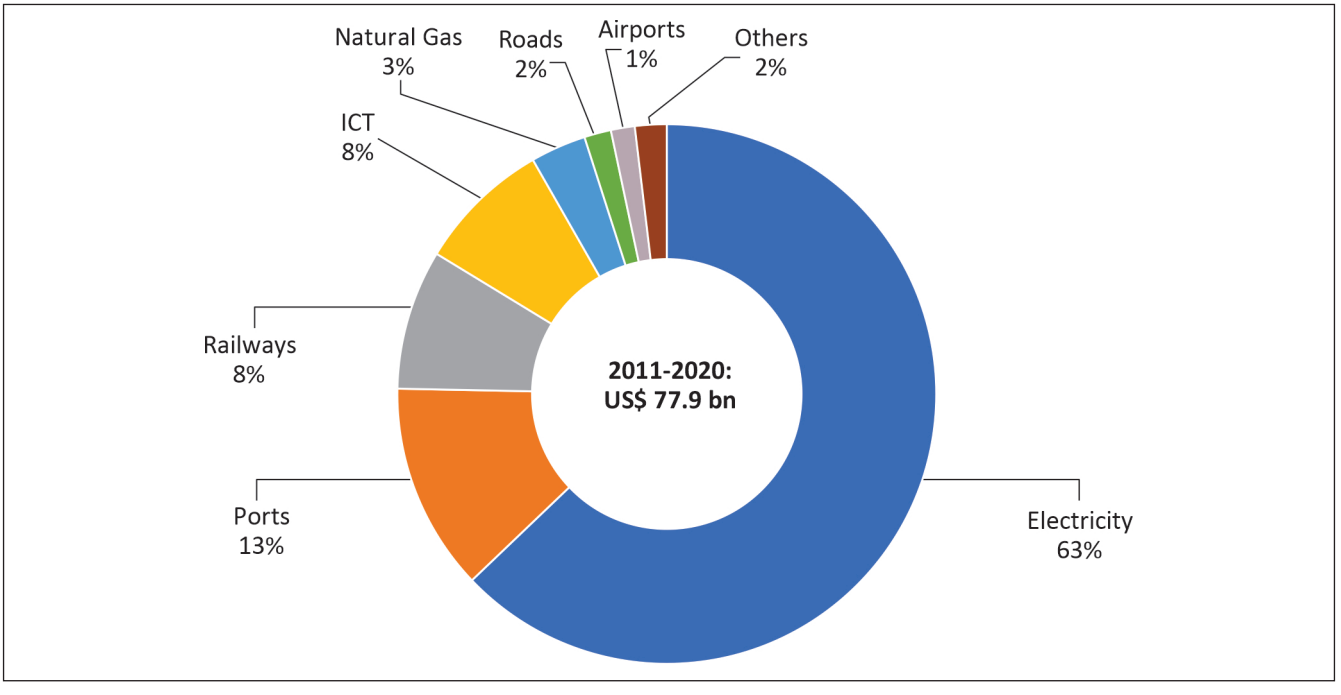
Chart 5.5: Major Destinations for Private Participation of Infrastructure Investment in Africa



Note: Calculated using data available for 42 African countries

Source: World Bank and India Exim Bank Analysis

Chart 5.6: Major Sectors Receiving Private Participation of Infrastructure Investment in Africa



Note: Calculated using data available for 42 African countries

Source: World Bank and India Exim Bank Analysis

Africa's Government Debt Profile

Africa's government debt remains exacerbated after the pandemic, as government spending increased to mitigate the health and economic impact of COVID-19. General government gross debt (covering both domestic and external debt) across Africa increased as compared to the pre-pandemic levels, in both low-income countries (LICs) as well as Market Access Countries (MAC).[54] Out of the 54 countries shown in **Table 5.3**, 29 countries are classified as at high risk of debt distress and 7 countries remain in debt distress as on March 31, 2022. As the COVID-19 pandemic resulted in recession across the world, the World Bank and the IMF along with the G20 had launched the Debt Service Suspension Initiative (DSSI) in May 2020. Forty-eight out of 73 eligible countries participated in the initiative before it expired at the end of December 2021. From May 2020 to December 2021, official bilateral creditors suspended debt-service payments from the eligible countries (73 low-and lower middle-income countries) that requested the suspension. All active International Development Association (IDA) and United Nations Least Developed Countries (UN LDC) as of 2020 were deemed eligible to participate in the DSSI. The DSSI for 2020 provided an NPV-neutral debt-service rescheduling with a one-year grace period and four-year maturity. For debt service suspended in 2021, the total repayment period was six years, including a one-year grace period.[55] However, with the expiry of DSSI in 2021, many countries face the threat of arrears or reduction in expenditure.

The Common Framework for Debt Treatments beyond the DSSI is an agreement of the G20 and Paris Club countries to coordinate and cooperate on debt treatments for up to 73 low-income countries that are eligible for the DSSI. Debt treatments under the Common Framework are initiated at the request of a debtor country on a case-by-case basis. The framework is designed to ensure broad participation of creditors with fair burden sharing. Importantly, it includes not only members of the Paris Club but also G20 official bilateral creditors such as China, India, Turkey, or Saudi Arabia that are not members of the Paris Club. Chad, Ethiopia, and Zambia have requested for debt treatment under the Common Framework.[56]

[54] Market-access countries (MACs) typically have significant access to international capital markets, whereas low-income countries (LICs) meet their external financings needs mostly through concessional resources
[55] Debt Service Suspension Initiative: Q&As, The World Bank, March 10, 2022
[56] https://www.imf.org/en/About/FAQ/sovereign-debt

Table 5.3: General Government Debt Profiles in African Countries

Country	General Government Gross Debt (% of GDP)				Risk of Debt Distress	Whether Opted for DSSI
	2019	2020	2021[e]	2022[f]		
Algeria	46.2	51.3	62.5	56.6	High	-
Angola	113.6	136.8	86.3	57.9	High	Yes
Benin	42.5	46.1	50.6	49.3	Moderate	No
Botswana	16.5	19.0	21.3	23.2	Sustainable	-
Burkina Faso	42.0	46.5	50.7	53.4	Moderate	Yes
Burundi	60.0	66.0	68.6	69.2	High	Yes
Cabo Verde	124.9	158.8	154.1	159.2	High	Yes
Cameroon	41.6	44.9	47.1	45.2	High	Yes
Central African Republic	47.2	43.4	47.6	46.3	High	Yes
Chad	51.1	52.1	58.2	46.5	In debt distress	Yes
Comoros	19.5	22.3	25.2	30.4	High	Yes
DR Congo	15.0	15.6	12.7	10.6	Moderate	Yes
Republic of Congo	81.7	110.1	85.8	64.0	In debt distress	Yes
Côte d'Ivoire	38.4	47.0	51.4	51.8	Moderate	Yes
Djibouti	39.1	41.0	43.2	49.2	High	Yes
Egypt	84.2	89.6	93.5	94.0	High	-
Equatorial Guinea	43.0	48.8	39.9	27.8	High	-
Eritrea	187.1	182.2	170.8	151.9	Non-accrual	-
Eswatini	39.6	42.1	42.8	45.6	High	
Ethiopia	54.7	53.7	53.0	48.3	High	Yes
Gabon	59.8	77.3	69.5	57.4	High	-
The Gambia	83.0	85.0	83.0	80.4	High	Yes
Ghana	62.7	78.3	81.8	84.6	High	No
Guinea	38.4	44.0	39.3	39.1	Moderate	Yes
Guinea-Bissau	66.5	79.4	80.7	79.7	High	Yes
Kenya	58.6	67.6	68.1	70.3	High	Yes
Lesotho	50.5	54.2	54.7	52.5	Moderate	Yes
Liberia	48.9	58.3	52.9	51.6	Moderate	Yes
Libya	-	-	-	-	High	-

Country	General Government Gross Debt (% of GDP)				Risk of Debt Distress	Whether Opted for DSSI
	2019	2020	2021[e]	2022[f]		
Madagascar	38.5	49.0	53.4	57.9	Moderate	Yes
Malawi	45.3	54.8	63.5	66.9	High	Yes
Mali	40.7	47.3	52.1	53.4	Moderate	Yes
Mauritania	56.8	59.2	54.7	55.5	High	Yes
Mauritius	84.6	99.2	100.7	98.9	High	-
Morocco	64.8	76.4	76.3	77.1	High	-
Mozambique	96.1	119.0	102.3	102.0	In debt distress	Yes
Namibia	59.5	66.7	70.2	69.6	High	-
Niger	39.8	45.0	52.9	53.8	Moderate	Yes
Nigeria	29.2	34.5	37.0	37.4	Sustainable	No
Rwanda	49.8	64.6	68.6	72.0	Moderate	No
São Tomé and Príncipe	71.6	81.4	61.3	63.1	In debt distress	Yes
Senegal	63.6	69.2	75.7	75.3	Moderate	Yes
Seychelles	54.2	89.1	72.5	76.7	High	-
Sierra Leone	72.5	76.3	76.2	75.0	High	Yes
Somalia	100.9	100.9	100.6	100.5	In debt distress	No
South Africa	56.3	69.4	69.1	70.2	High	-
South Sudan	28.1	37.2	58.2	50.5	High	No
Sudan	200.3	270.4	184.3	284.1	In debt distress	-
Tanzania	39.0	40.5	40.8	39.8	Moderate	Yes
Togo	52.4	60.3	63.8	63.6	Moderate	Yes
Tunisia	69.0	82.9	82.0	87.3	High	-
Uganda	37.6	46.4	51.6	53.1	Moderate	Yes
Zambia	99.7	140.2	123.2	-	High	Yes
Zimbabwe	93.2	102.6	67.6	67.2	In debt distress	-

Note: In case of Market Access Countries, the risk of debt distress has been considered high if the public debt to GDP ratio breaches 70 percent or Gross Financing Needs breach the threshold of 15 percent; Data for Libya is not available; [e] – estimate; [f] – forecast

Source: Data Mapper, IMF, 2022; List of LIC DSAs for PRGT-Eligible Countries as on March 31, 2022; and Article IV Reports of MAC (highlighted in orange), IMF

According to the Infrastructure Monitor 2021 by the Global Infrastructure Hub, infrastructure projects accounted for 82 percent in the total number of debt projects, however, they represent a smaller share of 76 percent in the total number of debt defaults, indicating that infrastructure debt is less likely to default than non-infrastructure debt. Default rates for infrastructure debt have been consistently lower than non-infrastructure debt. Infrastructure debt exhibits an increasing cumulative default risk during the initial years of the loan, but the risk slows down as the loan matures and then stabilises by the eleventh year, after which the debt performs as an investment-grade security. Non-infrastructure debt exhibits a similar cumulative increase in default risk, but with higher marginal default rates during the initial years of the loan until it stabilises and performs as an investment-grade security by later years. Over a 20-year period, infrastructure debt presents a cumulative default rate of 5.4 percent, significantly lower than the cumulative default rates of 8.2 percent for non-infrastructure debt and 11.0 percent for an investment grade security (Baa3 and above).

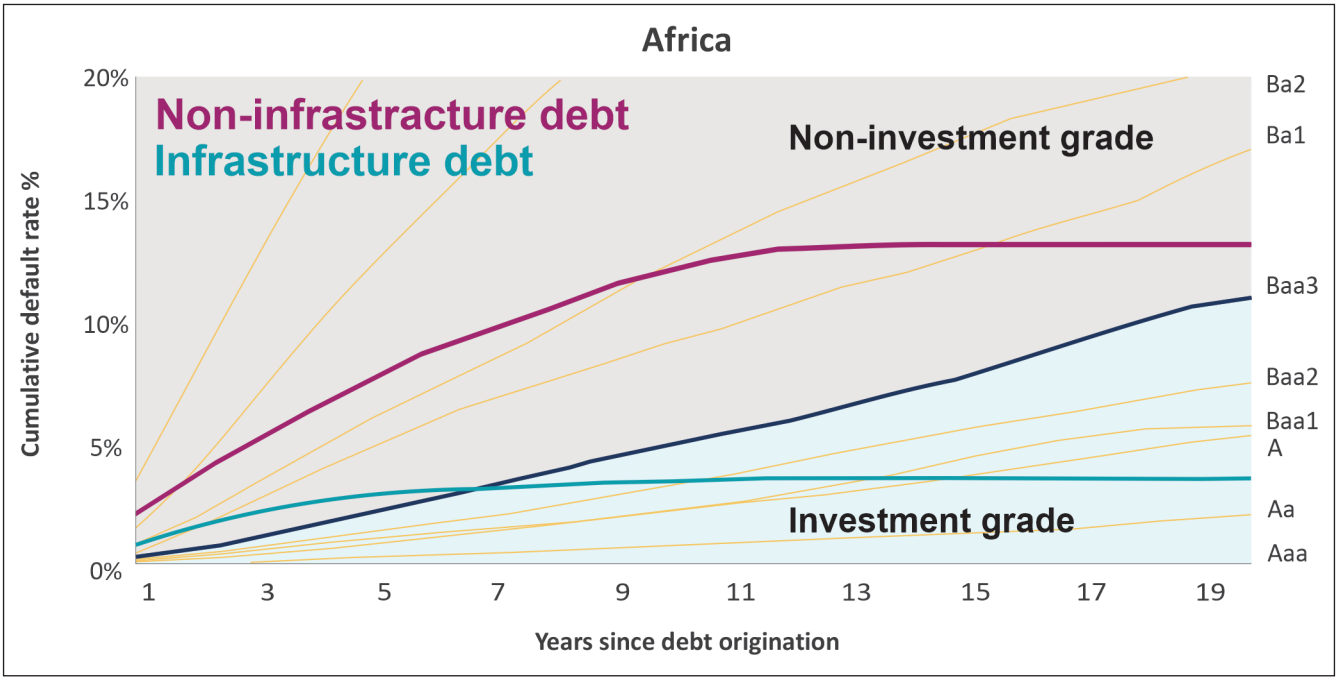
Western Europe has lower default concentration (40 percent) than project concentration (47 percent), indicating that infrastructure debt in Western Europe is less risky than in other regions. Infrastructure debt default rates are the lowest in Africa (**Table 5.4 and Exhibit 5.2**). However, the sample size of projects for the regions are small, and the projects analysed may have more guarantees that significantly offset high risks. Political and regulatory risks are higher in EMDEs like Africa, and these risks are the leading causes of defaults in EMDEs.

Table 5.4: Infrastructure Debt Projects and Defaults by Region

Region	Project Concentration (% of Total Projects)	Default Concentration (% of Total Projects)	Years to Perform like Investment Grade	20-year Cumulative Default Rate
Middle East	3	1	2	1.2%
Africa	3	1	3	1.1%
Western Europe	47	40	9	4.6%
Asia	5	8	13	5.9%
North America	29	32	14	6.8%
Oceania	5	5	15	7.3%
Latin America	5	11	19	10.3%
Eastern Europe	2	2	Non-investment Grade	

Source: Global Infrastructure Hub and India Exim Bank Analysis

Exhibit 5.2: 20-year Cumulative Default Rate by Sectors in Africa



Source: Adapted from the Infrastructure Monitor 2021, Global Infrastructure Hub

The policy, legal and regulatory environment in African countries need to be made conducive for encouraging private sector to participate in infrastructure investments through PPP framework. Risk remains a critical constraint for investment in infrastructure in Africa. Also, according to a report by McKinsey & Company (Solving Africa's Infrastructure Paradox, March 2020), Africa's track record in moving projects to financial closure remains poor as 80 percent of infrastructure projects fail at the feasibility and business-plan stage. Therefore, financial instruments need to be devised which could provide partial risk, and partial credit guarantees to project exports in Africa. Indian companies have been active in African markets especially in sectors like energy, transport, water and sanitation projects funded by the Multilateral Development Banks (MDBs) like the World Bank and the African Development Bank.

Project Exports in Africa

Project exports from a nation reflects its technological and industrial capabilities and acts as a foreign exchange earner in the long term. Project exports comprise overseas projects contracted in civil construction projects; turnkey projects including engineering, procurement and construction (from concept to commissioning) and essentially includes civil work/ construction and all supplies specific to these turnkey projects; process and engineering consultancy services; project construction items (excluding steel and cement), construction

engineering products (fittings & fixtures/ materials), construction equipment and accessories, and other project goods. India's project exports are mainly characterised by process and construction engineering. Most of the projects executed by the Indian companies have been those funded by the multilateral funding agencies, i.e., the World Bank, the Asian Development Bank, and the African Development Bank, among others.

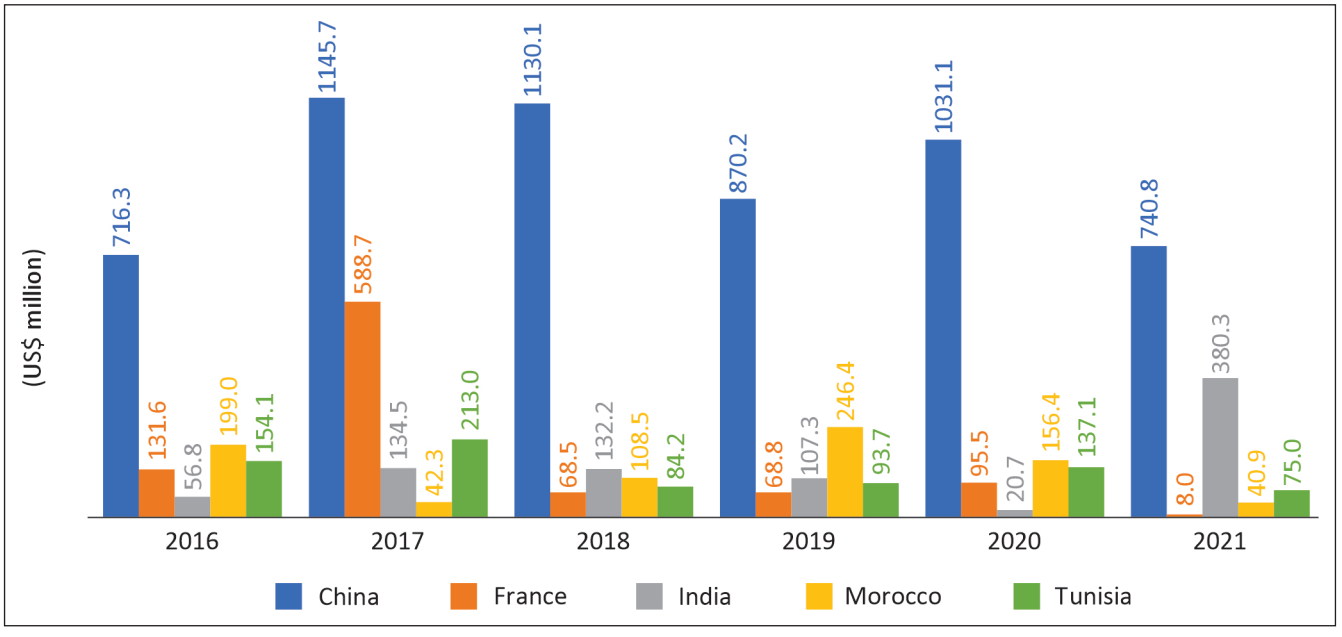
According to the data from the Project Exports Promotion Council (PEPC), project exports from India peaked at US$ 8.2 billion during 2016-17, accounting for nearly 1.9 percent of the overall exports (merchandise and services combined) from India. There has been substantial moderation in the value of project exports for two consecutive years thereafter, which could be partly attributed to the widespread slowdown across economies and deteriorating fiscal position in several developing economies. Thereafter, in 2019-20, project exports from India recovered substantially, registering a y-o-y growth of 10.6 percent to reach US$ 4.3 billion. It may be noted that this value of project exports reported by the PEPC is only based on data reported voluntarily by the PEPC members, and the actual value of project exports would be higher. As a result, in order to understand geographical and sectoral distribution of India's project exports to Africa, contracts awarded by the MDBs like the AfDB, and the World Bank have been considered as these represent a significant part of the total project exports undertaken by Indian project exporters in various African countries.

African Development Bank Funded Projects (2016-2021)

African Development Bank contracts are characterised by contracts for goods, works, consulting services and others (including operating costs, food crisis expenses, and personnel costs). In case of the AfDB funded projects, majority of the contracts in value terms were accorded to non-regional members. China accounted for US$ 5.6 billion worth of contracts during 2016 to 2021, followed by France (US$ 1 billion), and India (US$ 0.8 billion). **Chart 5.7** shows the major bidder countries of the AfDB contracts during 2016 to 2021.

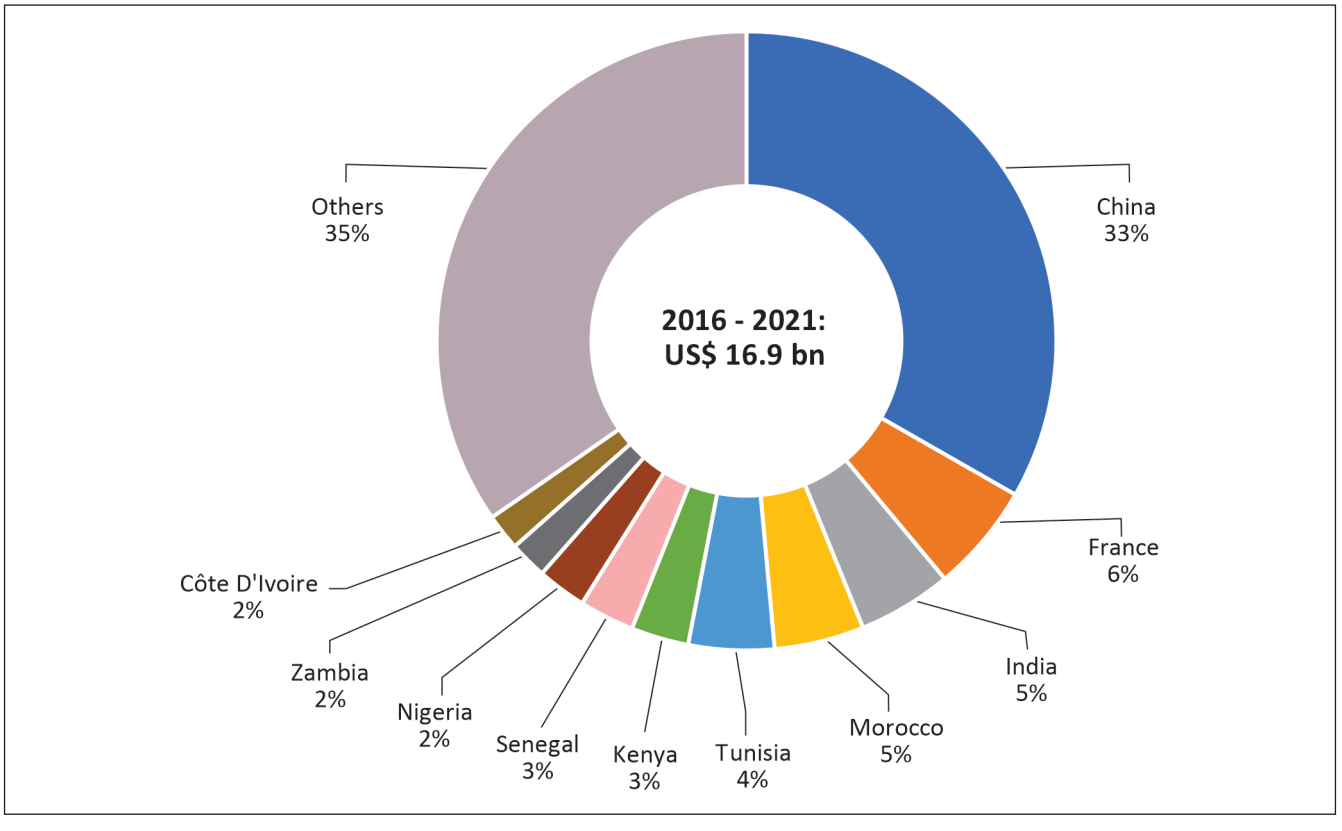
China, France, and India collectively accounted for 44 percent share in total value of contracts awarded by the AfDB during 2016-2021, with China alone accounting for 33 percent share in total value of International Competitive Bidding (ICB) contracts (**Chart 5.8**). Among regional members, Morocco, Tunisia, Kenya, and Senegal were the top countries in terms of value of overall contracts secured during the period under consideration.

Chart 5.7: Top Countries Securing Contracts in the AfDB Funded Projects – By Value of Contracts Awarded



Source: AfDB and India Exim Bank Analysis

Chart 5.8: Share of Top Countries Securing Contracts in the AfDB Funded Projects – By Value of Contracts Awarded

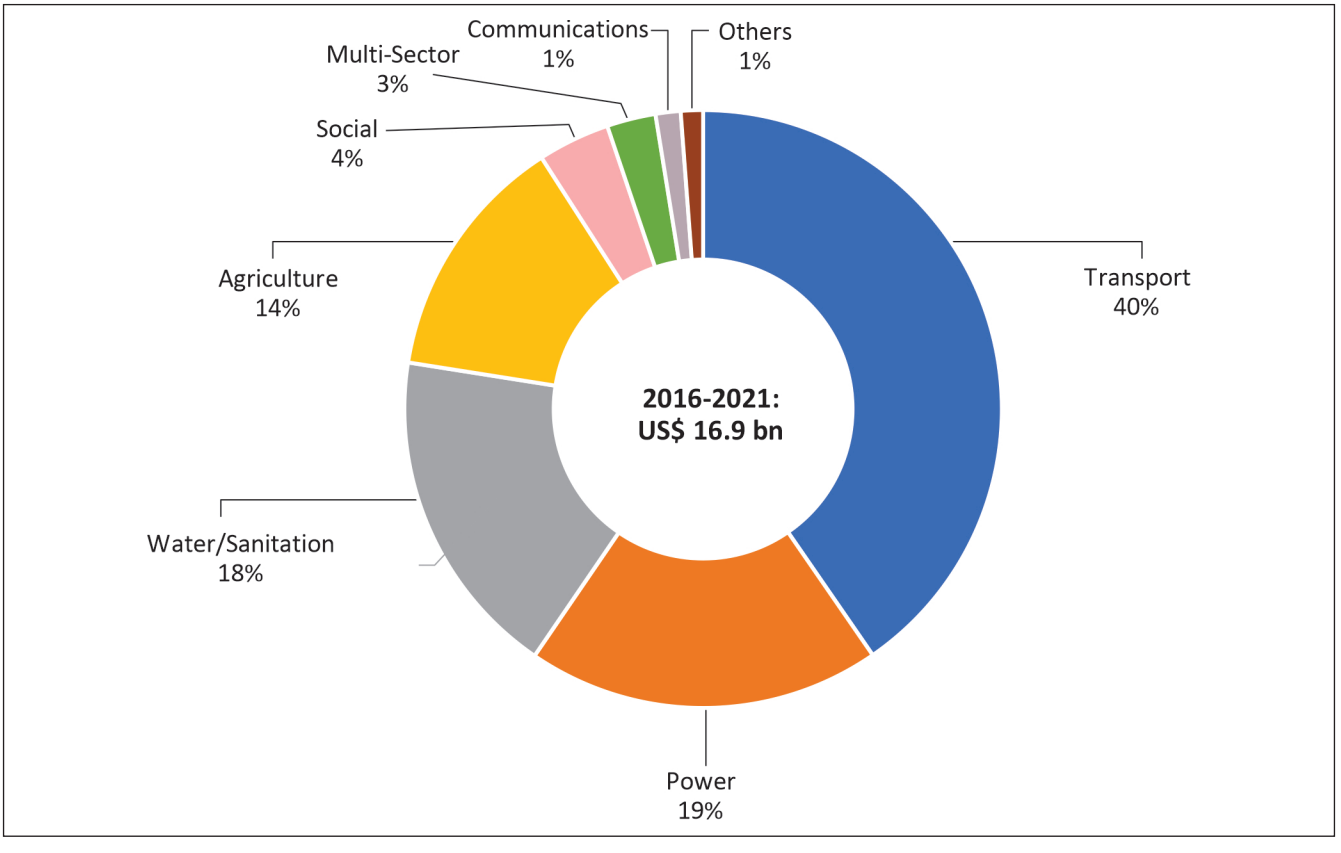


Source: AfDB and India Exim Bank Analysis

The total number of contracts during 2016 to 2021 amounted to 16,783 and remained diversified in terms of the countries securing the contracts. In terms of the number of contracts, none of the non-regional AfDB members featured among the major countries during the period under consideration. The major countries securing the AfDB contracts in terms of number of contracts awarded therefore included Senegal (6.7 percent), Tunisia (6.5 percent), Côte d'Ivoire (4.8 percent), Kenya (4.6 percent) and Burkina Faso (4.4 percent), among others.

In terms of value, 40 percent of the contracts awarded in the AfDB funded projects during the period 2016-2021 were in transport sector, followed by power sector (19 percent), and water and sanitation sector (18 percent), reflecting the AfDB's strategic focus on the development of infrastructure in Africa, as also larger value of contracts in these sectors. Other major sectors included agriculture (14 percent) and social sector (4 percent) (**Chart 5.9**).

Chart 5.9: Sector-wise AfDB Funded Projects – By Value of Contracts Awarded

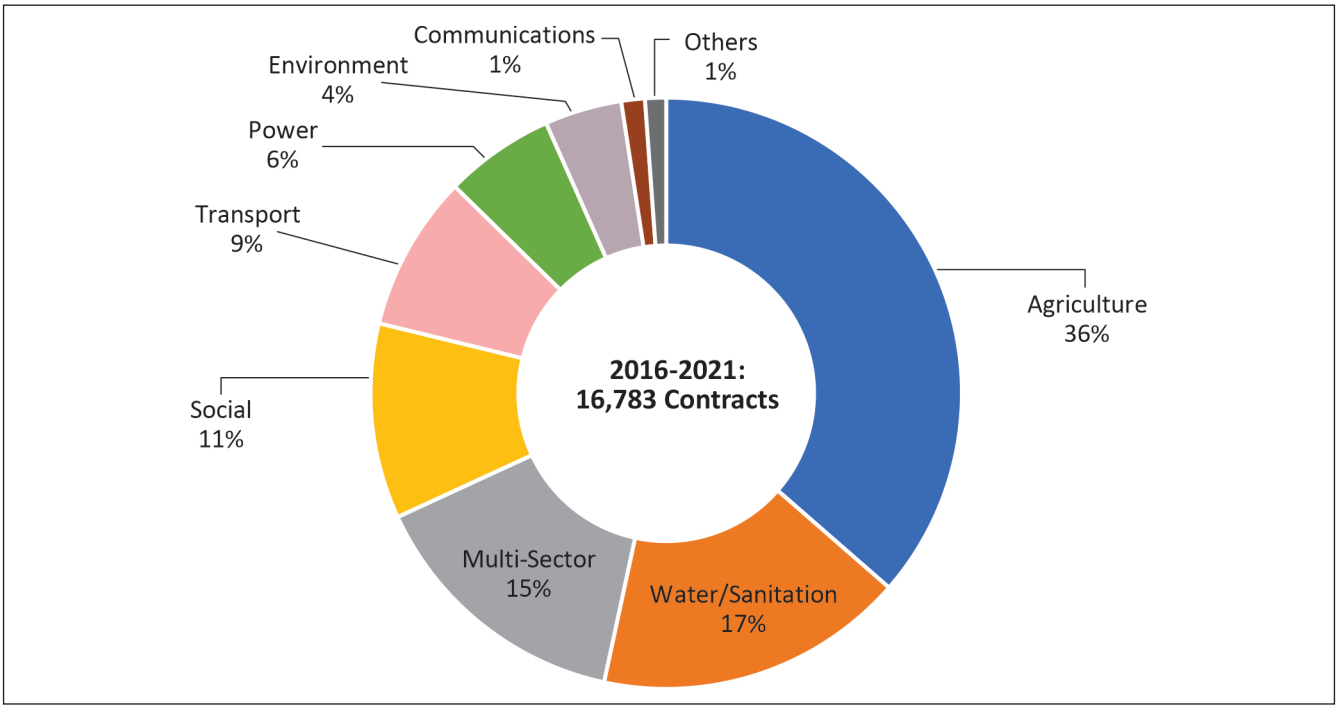


Source: AfDB and India Exim Bank Analysis

However, in terms of number of contracts, agriculture sector accounted for the largest share of 36 percent in total contracts awarded during the period under consideration (**Chart 5.10**).

Other major sectors in terms of number of contracts were water and sanitation (share of 17 percent), multi-sector projects (15 percent), social sector (11 percent), and transport (9 percent).

Chart 5.10: Sector-wise AfDB Funded Projects - By Number of Contracts Awarded



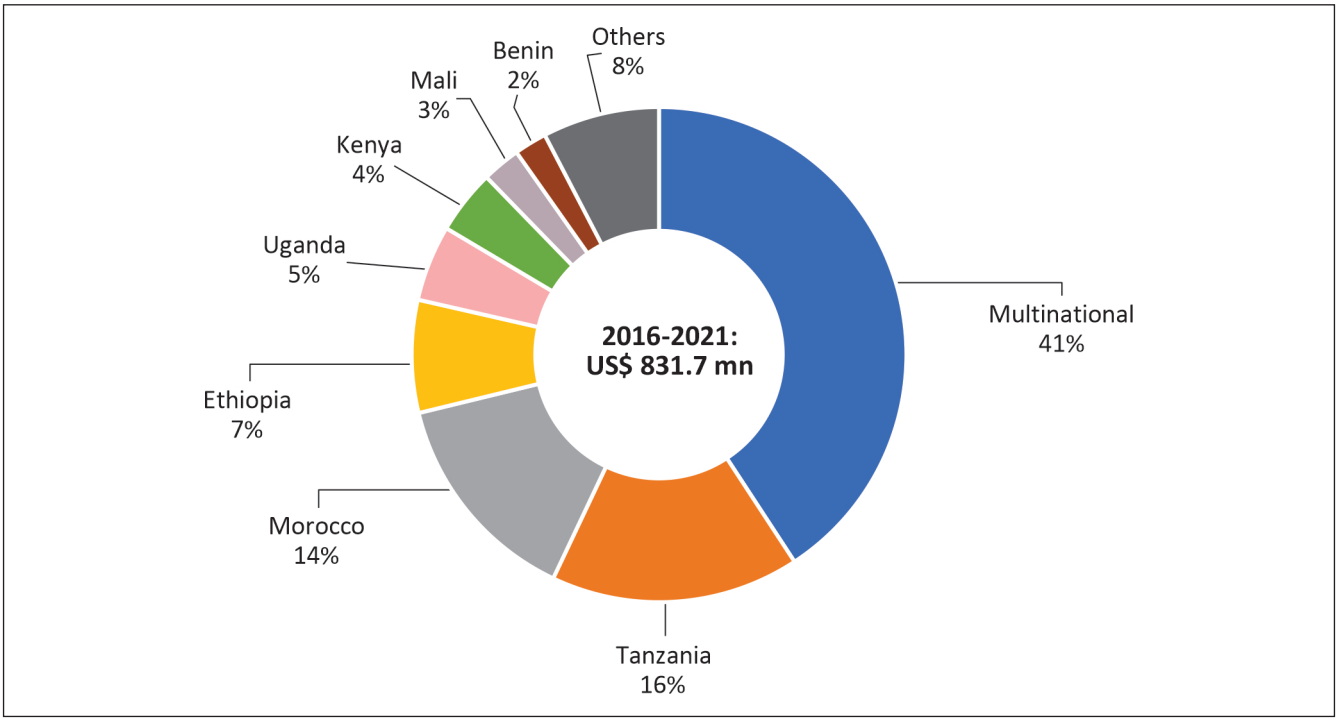
Source: AfDB and India Exim Bank Analysis

India in AfDB Funded Projects

During 2016-2021, India accounted for US$ 831.7 million worth of the AfDB awarded contracts. Multinational projects accounted for the majority of the contracts secured by Indian companies under the AfDB financed projects during 2016-2021, accounting for 41 percent of the total contracts secured by Indian companies during the period. After multinational projects, projects in Tanzania accounted for the highest share in total contracts secured by Indian companies (16 percent) in the AfDB funded projects. Other major project countries for Indian companies in the AfDB funded projects included Morocco (14 percent), Ethiopia (7 percent), Uganda (5 percent), and Kenya (4 percent) (**Chart 5.11**).

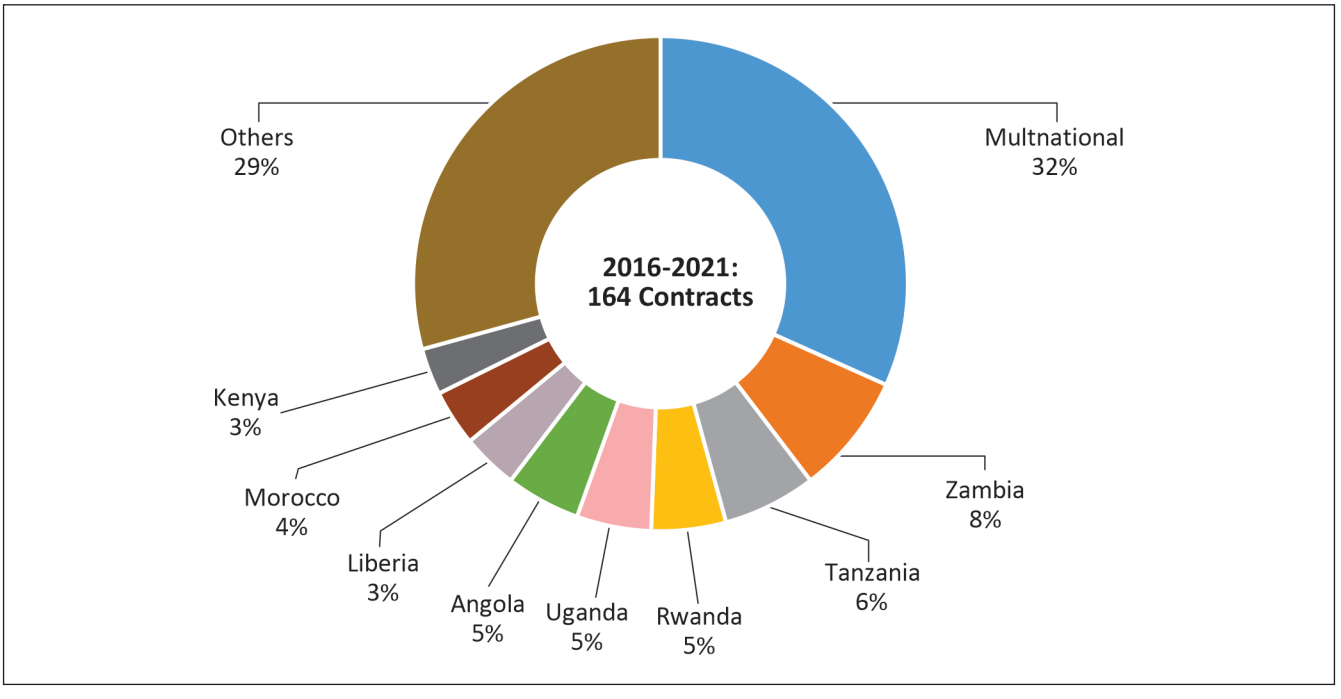
In terms of the number of contracts, Indian companies secured 164 contracts spread across multiple destinations across Africa (32 percent of the total number of contracts), followed by 8 percent in Zambia, and major East African countries like Tanzania, Rwanda, and Uganda during 2016-2021 (**Chart 5.12**).

Chart 5.11: Top Project Countries for Contracts Secured by Indian Companies in the AfDB Funded Projects - By Value of Contracts Awarded



Source: AfDB and India Exim Bank Analysis

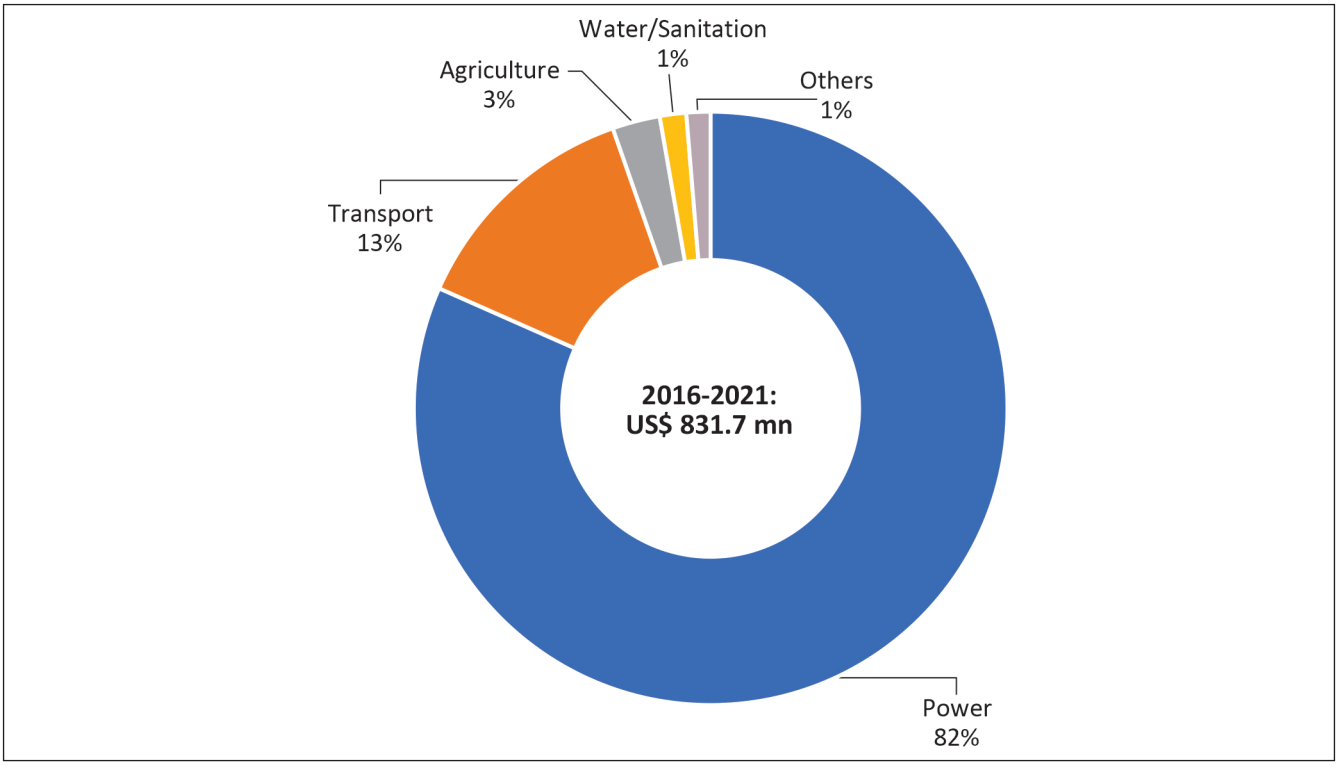
Chart 5.12: Top Project Countries for Contracts Secured by Indian Companies in the AfDB Funded Projects - By Number of Contracts Awarded



Source: AfDB and India Exim Bank Analysis

Civil construction contracts, involving design and construction of civil work, road construction, steel structural works, etc. accounted for the largest share in total value of contracts secured by Indian companies across the projects funded by the AfDB (93 percent), followed by services at 4 percent and goods at 3 percent. However, in terms of number of contracts secured, services (40 percent) accounted for the largest share, followed by civil works (34 percent) and goods (26 percent) during 2016-2021. The power sector accounted for majority of the contracts in terms of value awarded to Indian companies in the AfDB funded projects, accounting for 82 percent of total value of contracts secured during 2016-2021, followed by transport (13 percent), agriculture (3 percent), and water and sanitation (1 percent) (**Chart 5.13**).

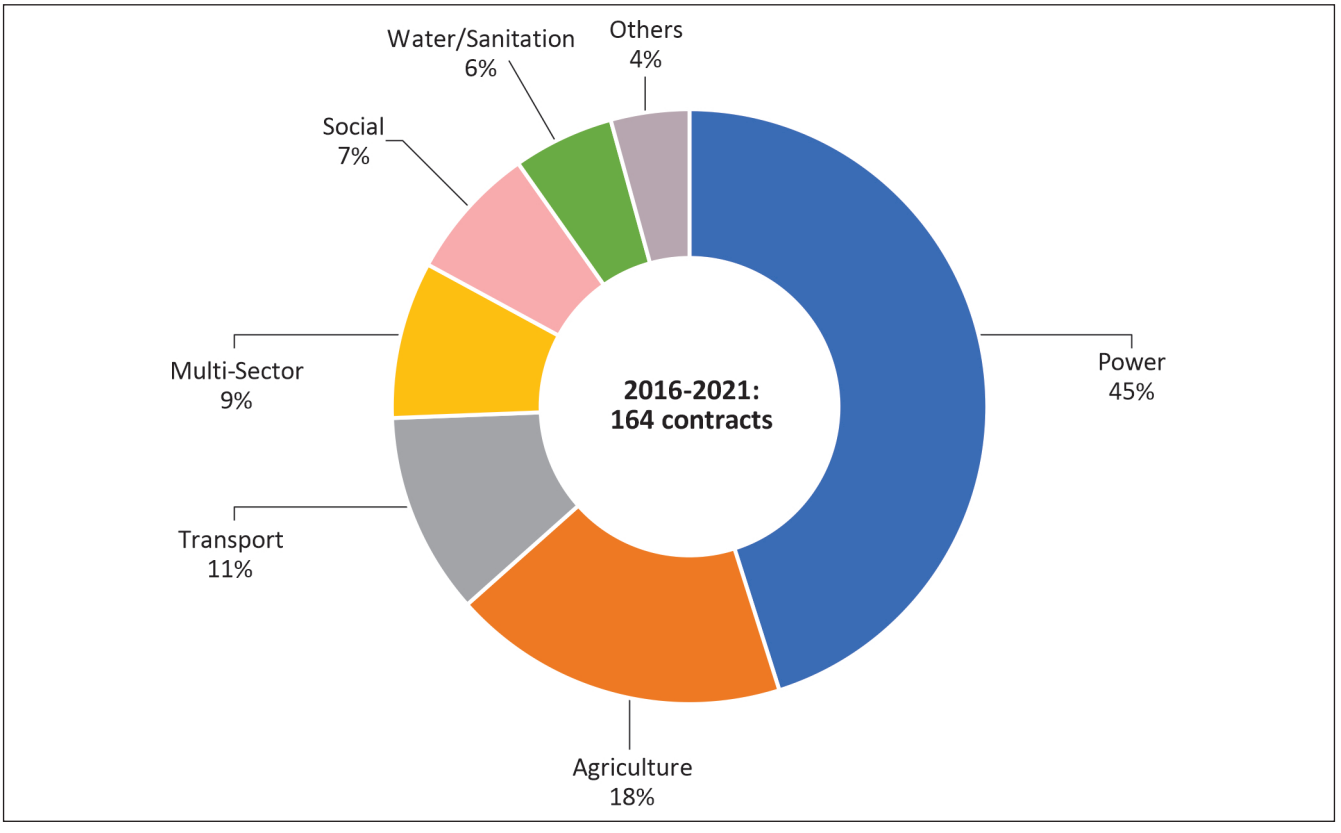
Chart 5.13: Top Project Sectors for Contracts Secured by Indian Companies in the AfDB Funded Projects - By Value of Contracts Awarded



Source: AfDB and India Exim Bank Analysis

In terms of number of contracts secured by the Indian companies in the AfDB funded projects, power sector accounted for the maximum number of contracts (45 percent), followed by agriculture (18 percent), and transport (11 percent), among others as shown in **Chart 5.14**.

Chart 5.14: Top Project Sectors for Contracts Secured by Indian Companies in the AfDB Funded Projects - By Number of Contracts Awarded



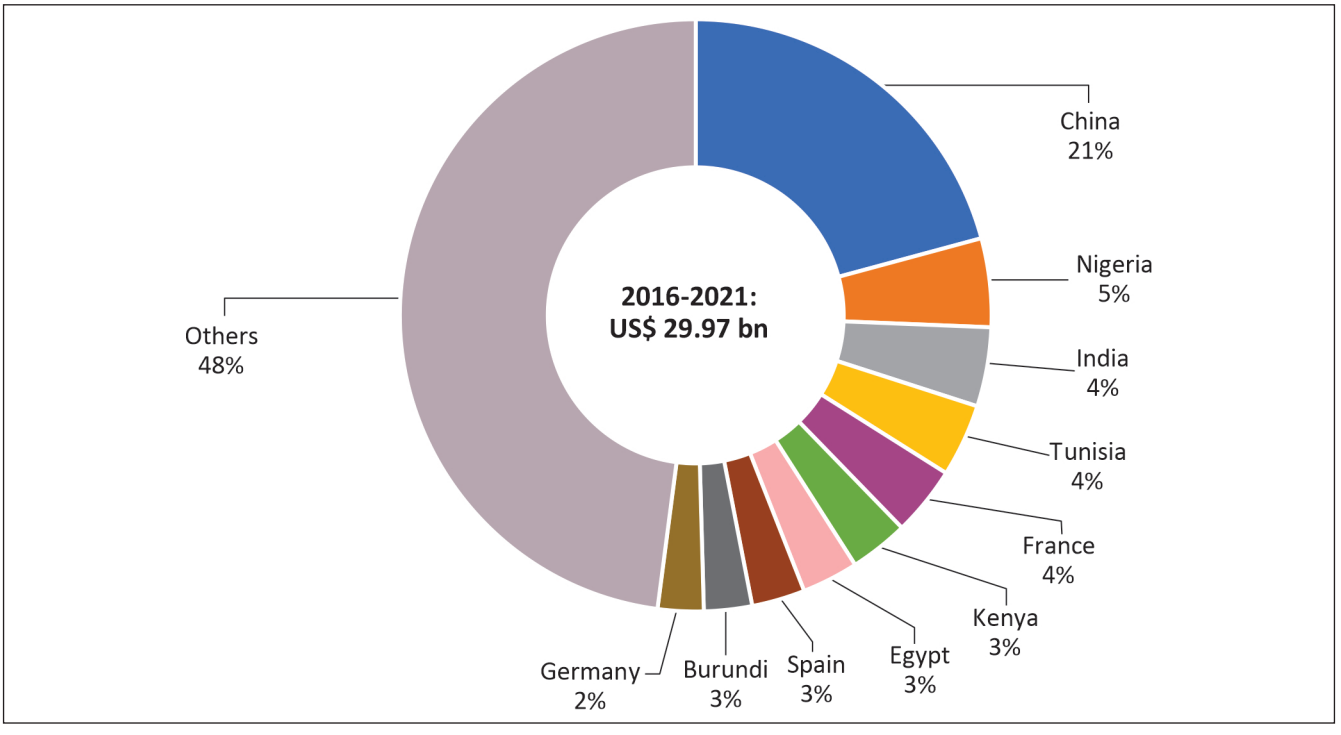
Source: AfDB and India Exim Bank Analysis

World Bank Funded Projects during 2016-2021

During 2016-2021, the World Bank Funded projects in Africa amounted to US$ 29.97 billion, covering 53,608 contracts. China accounted for the largest share (21 percent) in the total value of overall contracts awarded in the World Bank funded projects in Africa during 2016-2021, followed by Nigeria (5 percent) and India (4 percent) (**Chart 5.15**).

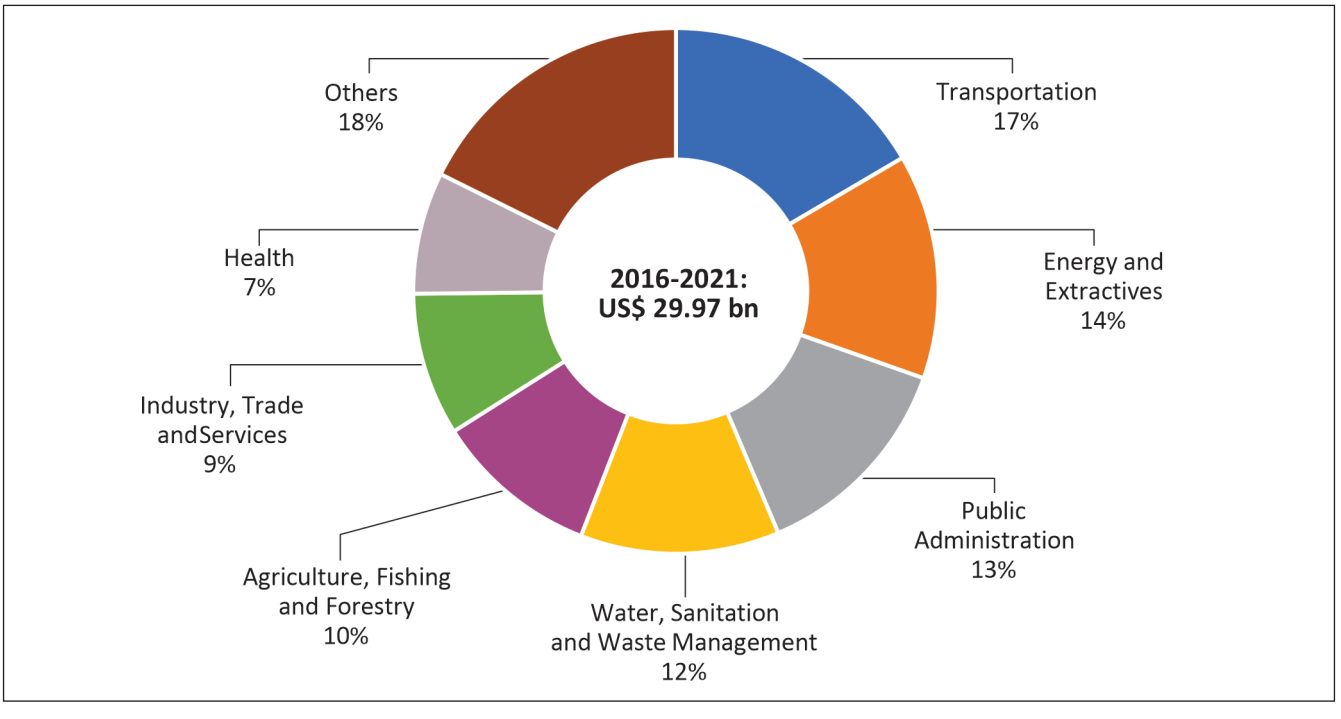
The major sectors for projects funded by the World Bank in Africa during 2016 to 2021 were transportation (17 percent), energy and extractives (14 percent), public administration (13 percent) and water, sanitation, and waste management (12 percent), among others (**Chart 5.16**).

Chart 5.15: Top Countries Securing Contracts in the World Bank Funded Projects in Africa – By Value of Contracts Awarded



Source: World Bank and India Exim Bank Analysis

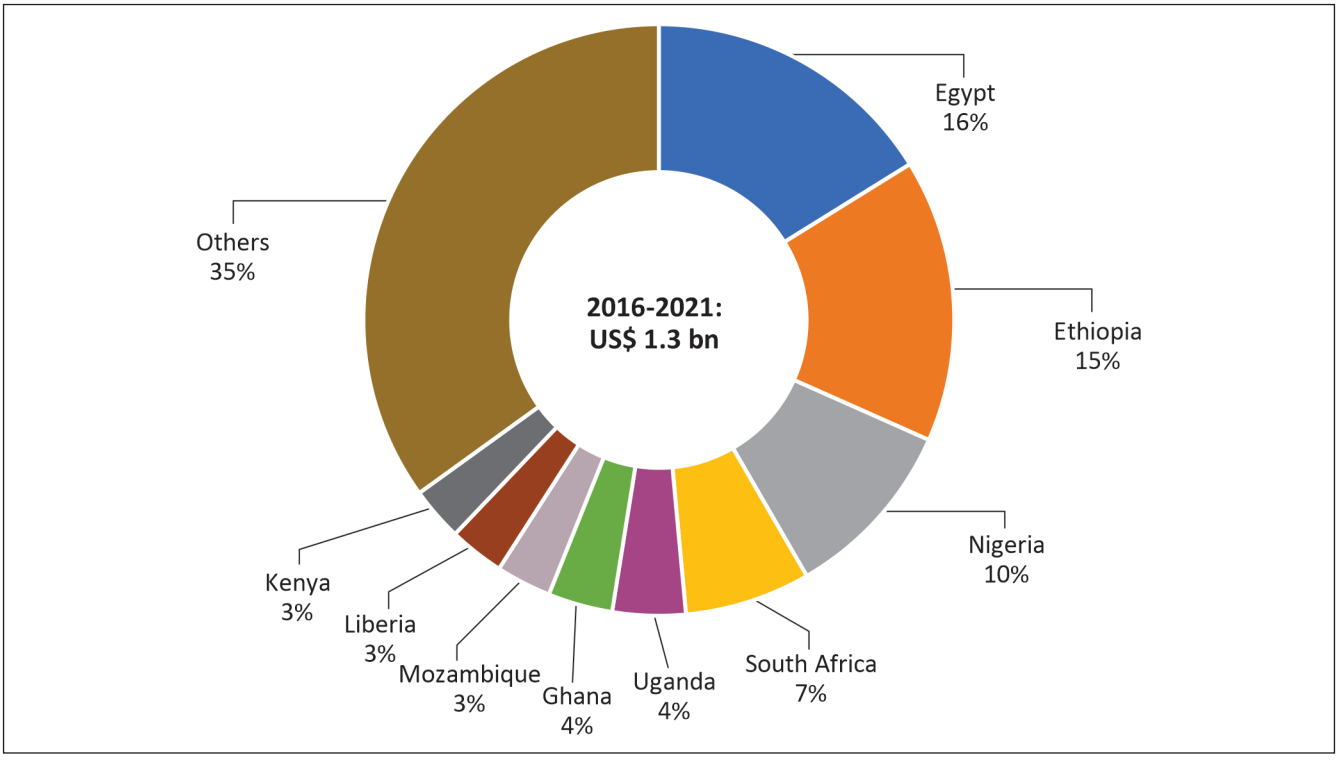
Chart 5.16: Sector-wise World Bank Funded Projects in Africa – By Value of Contracts Awarded



Source: World Bank and India Exim Bank Analysis

During 2016 to 2021, overall value of contracts secured by Indian project exporters in the World Bank funded projects in Africa stood at US$ 1.3 billion and number of contracts stood at 285. Egypt, with a share of 16 percent was the major recipient of contracts secured by Indian companies in Africa by value, followed by Ethiopia (15 percent), Nigeria (10 percent), and South Africa (7 percent) as shown in **Chart 5.17**.

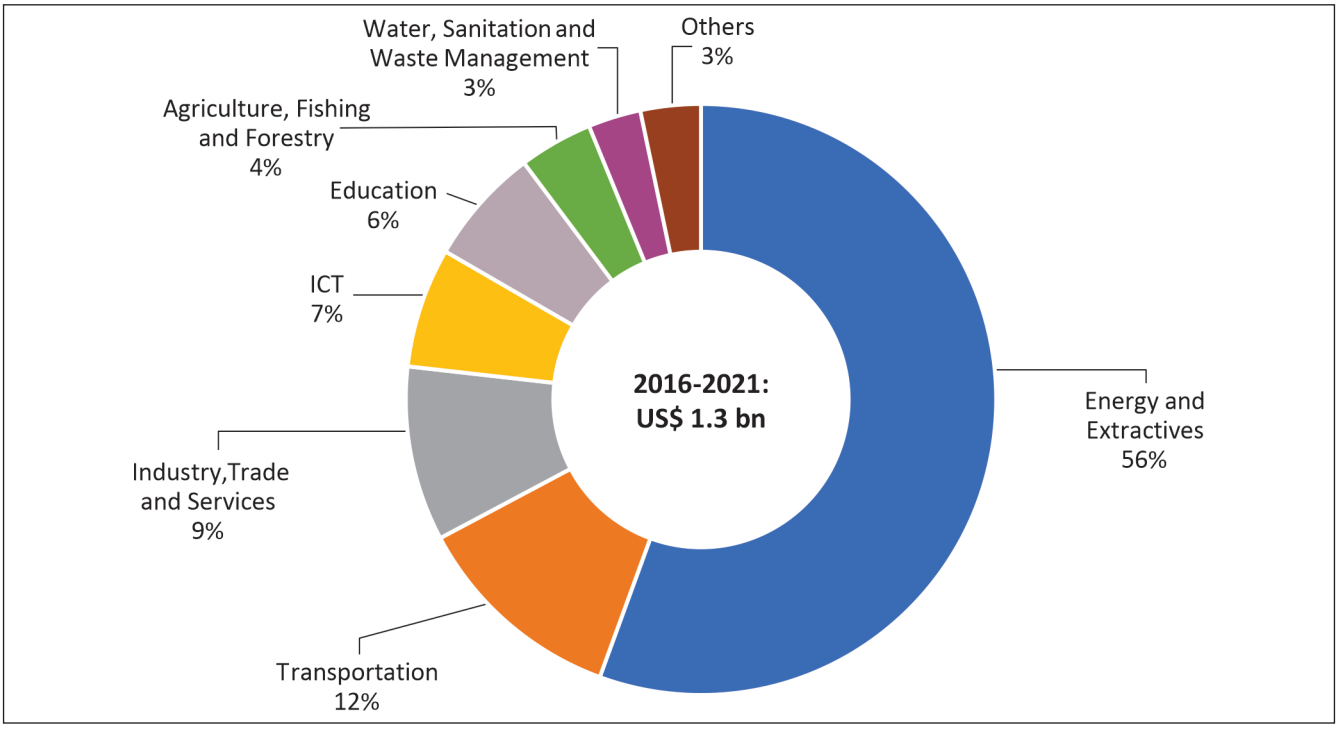
Chart 5.17: Country-wise Contracts Secured by Indian Companies in the World Bank Funded Projects in Africa – By Value of Contracts Awarded



Source: World Bank and India Exim Bank Analysis

In terms of the sectors, India secured the largest value of African contracts in the World Bank funded projects during 2016-2021 in energy and extractives sector (56 percent), followed by transportation (12 percent), industry, trade, and services (9 percent), and ICT (7 percent), among others (**Chart 5.18**).

Chart 5.18: Sector-wise Contracts Secured by Indian Companies in the World Bank Funded Projects in Africa - By Value of Contracts Awarded



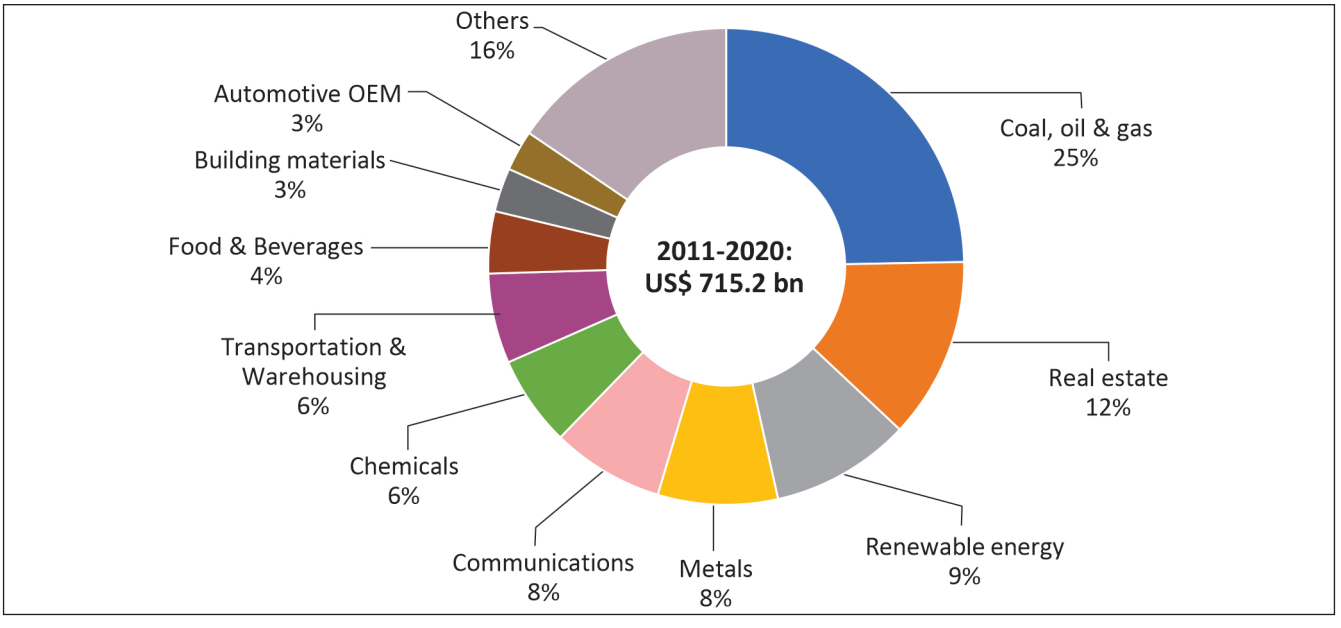
Source: World Bank and India Exim Bank Analysis

Chapter

6 STRATEGIES TO ENHANCE INDIA'S ROLE IN BUILDING A RESILIENT AFRICA

Africa has been receiving considerable investments during the past decade due to its abundant resources and growing markets, besides enormous development needs. **Chart 6.1** shows the major sectors where foreign capital expenditure has been announced during 2011 to 2020 in Africa.

Chart 6.1: Global Envisaged Capital Expenditure in Africa



Source: fDi Markets, Financial Times, and India Exim Bank Analysis

This chapter focuses on the various challenges faced by Africa and recommends strategies to overcome those challenges through enhanced India-Africa partnership across the select sectors.

Establishing Value Chains for Utilisation of AfCFTA

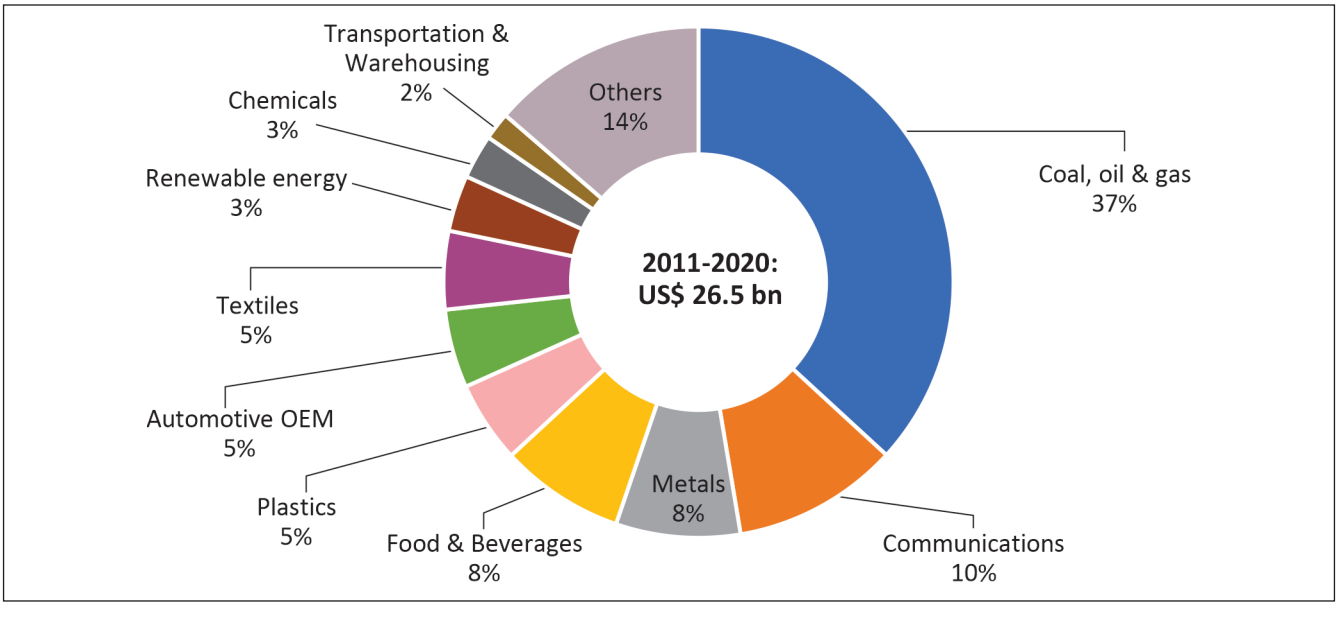
Africa's large working-age population, its growing middle class, and the significant share of services are all conducive factors for enhancing India's trade and investments in the region.

Consumer-driven goods related to agribusiness, apparel and clothing, pharmaceuticals, and automotive components are opportunities for India's FDI where Africa, through the African Continental Free Trade Area, is putting in place the appropriate rules of origin and eliminating tariff barriers. The AfCFTA Agreement, which is already operational, aims to enhance the development of value chains and industrialization across the region to boost the levels of trade and investment. The AfCFTA will provide a unified continental market that Indian firms can easily access, and potentially increase the scope and level of India's engagement with Africa.

Increased FDI in the manufacturing sector by Indian companies could catalyze the development of value chains by providing foreign capital and technical know-how. Africa's global value chain participation has remained relatively stagnant, accounting for 1.7 percent of participation in global value chains in 2019 compared to 1.5 percent in 2000. According to an OECD research, regional value chains account for only 2.7 percent of Africa's global value chain participation, as compared to 26.4 percent in Latin America and the Caribbean and 42.9 percent in developing Asia.

India was the 8th largest investor in Africa during 2011 to 2020, accounting for 3.7 percent of investment in Africa, reflecting the scope for enhancing investments to strengthen the partnership. **Chart 6.2** indicates the major sectors in Africa where Indian companies have envisaged capital expenditure during the period 2011 - 2020.

Chart 6.2: India's Envisaged Capital Expenditure in Africa



Source: fDi Markets, Financial Times, and India Exim Bank Analysis

India's strategy to enhance its trade and investment relations with African countries would entail an integrated approach comprising, inter alia, integrating Africa to the GVC, strengthening Africa's infrastructure and connectivity, and facilitating trade finance in Africa, among others. The pandemic has further called for increasing need for cooperation in vital sectors like agriculture and agro-processing, renewable energy, healthcare, and pharmaceuticals along with ICT to ensure sustainable growth and resilient supply chains across the continent. Currently, African countries largely participate in global value chains by exporting raw natural resources and agricultural commodities for further processing and value addition by other countries.

Agriculture and Food-processing

According to the OECD, in 2020, nearly two-thirds of African countries were net importers of basic food products, whereas the number of hungry people in the region has estimated to have risen to 250.3 million, roughly one-fifth of the population in Africa. India has an untapped export potential for rice of US$ 2.9 billion to Africa, besides untapped potential of meat at US$ 100 million and food products at US$ 300 million. Increasing Indian exports to the region could meet Africa's demand and boost India's supply capacity. However, in the long run, building the capacity to produce food locally would help African countries to lower their vulnerability towards natural calamities and foreign exchange shocks. Food and beverages accounted for 8 percent share in envisaged capital expenditure by India to Africa during 2011-2020 which is double the share of global envisaged capital expenditure in the sector for the region.

In order to achieve food security in the region, India could share its vast experience across the agro value chain in enabling Africa to become a net exporter of agriculture products. Most of the African nations have huge tracts of cultivable land; however, these lands are not having adequate infrastructure like connecting roads, transportation network, power transmission, communication channels, and irrigation canals, among others.[57] The bottlenecks in Africa in terms of inadequate agricultural infrastructure, and average productivity in spite of the availability of land and natural resources provide an opportunity for India to add the much-needed vigour to the region's agriculture sector. These interventions could be achieved through supply of tractors and agricultural equipment, investments in tractor manufacturing or agro-based implements, providing technology-based support for irrigation including solar operated pumps, joint creation of institutions focusing on marketing and finance that can help the sector to grow, amongst many others.

[57] Feed Africa: Achieving Progress through Partnership, India Exim Bank, May 2017

Box 6.1: Mitigating Effects of Climate Change on Agriculture

Agriculture and food system are key to global climate change responses. Food grain production is struggling to keep up in many parts of the World as crop yields and ocean health have declined, natural resources including soils, water, and biodiversity are over-exploited. As per Inter-Governmental Panel on Climate Change (IPCC), crop yield is expected to decline by 10-25 percent by 2050 due to climate change.

Worldwide, 500 million small-holder farms produce about 80 percent of the food consumed in Asia and Sub-Saharan Africa and provide livelihoods for more than 2 billion people. Dryland settlements are perceived as extremely vulnerable to climate change with regard to food security, particularly in developing countries and such areas are known to have low capacities to cope effectively with decreasing crop yields. In Africa alone, over 320 million people depend on dryland forests to meet many of their basic needs.

Climate Smart Agriculture (CSA) is an integrated approach for managing landscapes such as cropland, livestock, forests, and fisheries that addresses the interlinked challenges of food security and accelerating climate change. In order to reduce the climate risks to food systems in Africa, adaptive capacity of African countries need to be developed through knowledge sharing, expertise and enhanced research capabilities in agriculture. The information on best practices adopted by countries such as India towards minimising climate change impact on agriculture could be exchanged and disseminated amongst the stakeholders. Co-developing climate change resistant crop varieties as well as promoting resource saving agricultural practices may also be considered.

India has been increasingly using CSA Approach, which integrates the three dimensions of sustainable development (economic, social, and environmental) by jointly addressing food security and climate challenges. The Maharashtra Project on Climate Resilient Agriculture, with outlay of US$ 420 million is one of the largest CSA projects and is estimated to yield climate change improvements of US$ 386 million. As of June 2020, 3,09,800 project beneficiaries have adopted climate-smart agriculture practices, and 56,602 hectares of land have benefitted from improved irrigation and drainage technologies. Increased usage of Stress-tolerant varieties of rice such as Salt tolerant rice and Direct-seeded rice, setting up Climate Smart Villages across various districts in India, implementing climate-smart practices such as laser-land levelling and alternate wetting and drying of rice, are some of the recent innovations adapted by Indian farmers.

Indian farmers have also been receiving agro advisories on their mobile phones, with inputs from met departments, scientists, input dealers and farmers, which allow them to make timely decisions. The GOI's "Krishi Rath" mobile app to facilitate the farmers to hire trucks and transport agri produce to the markets showcases that both public and private sector cooperation will be valuable in ensuring sustainable agriculture. Farmers in several Indian states are also using clean energy sources like solar power for irrigation which benefits farmers in two ways, a) farmers are provided incentives by transferring excess electricity to the local grid, and b) smart farming enables crop diversification which helps farmers reduce their dependency on monsoon and ground water. India could share its experiences and learnings in this area with Africa with a view to implement and adopt digital practices and CSA in agriculture in African countries.

Healthcare

Foreign tourist arrivals from Africa to India decreased as a result of the pandemic by 75.1 percent in 2020 and stood at 90,296 as compared to 362,308 in 2019. Sudan, Kenya, Nigeria, Tanzania, Mauritius, South Africa, and Egypt are the leading African countries from where India receives maximum foreign tourist arrivals.[58] During 2020, out of the total tourist arrival from Africa, 19.5 percent arrived in India on medical visa as compared to 14.5 percent in 2019 clearly showing the demand for India's medical tourism. However, foreign tourist from Africa on medical visa during 2020 was 17,608 as compared to 52,390 tourists on medical visa during 2019, declining by 66.4 percent (**Table 6.1**).

Table 6.1: Foreign Tourist Arrivals from Africa to India on Medical Visa

Country/Region	2019	2020	y-o-y growth (%)	Share in 2020 (%)
Egypt	153	64	-58.5	0.4
South Africa	304	75	-75.2	0.4
Mauritius	3207	1095	-65.8	6.2
Tanzania	4916	1638	-66.7	9.3
Nigeria	6859	2028	-70.4	11.5
Kenya	6907	2045	-70.4	11.6
Sudan	8790	2762	-68.6	15.7
Others	21236	7862	-63.0	44.6
Africa	**52390**	**17608**	**-66.4**	**100.0**

Source: India Tourism Statistics 2020, 2021 and India Exim Bank Analysis

India has become an increasingly popular country among foreign tourists on medical visas because of the highly qualified doctors, state-of-the-art equipment, and the treatments that are approved by the WHO and the US Food and Drug Administration. In addition to quality medical services provided by its hospitals and doctors, patients come to India as medical costs in the country are much more cost-effective compared to that of the developed nations. Going forward, Africa needs to create regional and national medical hubs, and tap into pharmaceutical markets to produce and distribute generic drugs that will, to some extent, reduce dependence on overseas countries for medical treatment. The UNECA estimates indicate Africa's health financing gap at US$ 66 billion per annum.[59] However, the quantum

[58] India Tourism Statistics 2020 and India Tourism Statistics 2021, Ministry of Tourism, Government of India
[59] United Nations Economic Commission for Africa, "Healthcare and Economic Growth in Africa", February 2019

of resources required to meet the SDG 3 targets are much higher, ranging from US$ 108 billion to US$ 143 billion.[60]

While governments are constrained by limited fiscal space for increased government spending, investments by the private sector will be an important source to fill this gap. Accordingly, private sector investments could complement the existing government spending to enhance medical coverage across the continent. These could be done through a mix of measures including government participation, public private partnership (PPP), joint ventures, and FDI. FDI can play a significant role in filling the healthcare infrastructure gaps in Africa and India can partner with Africa in ameliorating healthcare challenges that the continent faces.

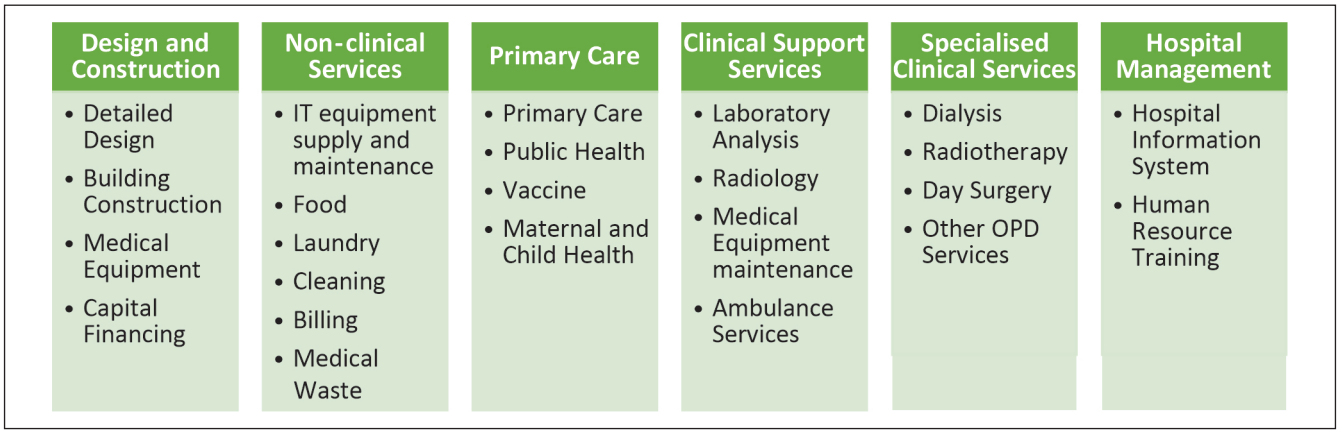
Healthcare infrastructure in Africa may be explored through two broad routes, either under the GOI-supported Lines of Credit that help India build a better relationship with the African nations or through the PPP model. Here, constructions of primary and secondary healthcare centres and hospitals can be under the LOC route, whereas constructions of tertiary healthcare centres and hospitals, can be through the PPP route. Indian hospital majors, who have gained significant experience in running hospitals under the PPP framework, could be ideal partners for Africa's healthcare infrastructure needs. PPPs could prove to be an efficient solution that reduces the investment risks, improves efficiency, and could lead to more inclusive outcomes. Twinning India's expertise in the construction and administration of hospitals could be a focused, win-win approach for enhancing Africa-India bilateral relations.

Indian hospitals can collaborate with African counterparts for installation of the entire digital hospital management system and can offer management services for a period of three to five years. Digitising healthcare would contribute to increased medical consultation and better access to healthcare. Service digitization including patient enrolment processes, network management, and a strong IT infrastructure is essential for running a hospital efficiently. African countries currently face challenges in terms of low investment in healthcare technology innovation despite demonstrating immense potential. African health technology firms suffer from inadequate funding and research facilities. Further, even with the growing number of innovations, the continent continues to suffer from unequal access to quality healthcare. To promote innovation, African countries could collaborate with their Indian counterparts to build on technological capabilities. A common e-marketplace for healthcare innovations in terms of new products could be developed. Africa is emerging as the fastest-growing mobile user market. With a rising middle class and improving broadband coverage, cities across

[60] Calculated using estimates from The Lancet Global Health, "Financing transformative health systems towards achievement of the health Sustainable Development Goals", July 2017

the continent could be tapped as potential markets for quality healthcare systems powered by digital innovations. Further, these innovations could be leveraged for last mile delivery of services to rural areas. Therefore, encouraging market-driven innovations and increasing access to finance for start-ups for promoting digital innovations in healthcare is the need of the hour. Opportunities for setting up healthcare hubs in Africa across various segments are shown in **Exhibit 6.1**.

Exhibit 6.1: Opportunities for Building Healthcare Hubs in Africa



Source: Derived from WITS-AfDB and India Exim Bank Analysis

Pharmaceutical Value Chain

Africa is critically dependent on imported medicinal and pharmaceutical products. Many Indian companies have already established local manufacturing units or joint ventures in Africa for supplying quality medicines at concessional rates for major diseases like HIV/AIDS, TB, malaria, and cardiovascular related diseases. Further opportunities exist in setting up pharmaceutical manufacturing units with upgraded technology, where the growing number of hospitals and other healthcare facilities create higher demand for the supply of pharmaceuticals. The PPP model could be explored for involving public sector collaborating with the private sector to support the development of the pharmaceutical value chain (for research and development, production, procurement, storage, and distribution). Large scale regional pharmaceutical or vaccine manufacturing plants and joint facilities could be established, which could also be utilised for research and cold storage. This would also contribute towards building a sustainable value chain in the region and ensure greater certainty and security of supply, especially in times of global epidemics or other crises. Loan assistance from regional development financial institutions could be utilised for establishing these common research facilities or laboratories.

Maritime and Defence Cooperation

In February 2021, India hosted the Indian Ocean Region Defence Ministers' Conclave on the sidelines of Aero India 2021. The broad theme of the Conclave was 'Enhanced Peace, Security and Cooperation in the Indian Ocean'. Among the Indian Ocean littoral countries (IOLC), 9 are in Africa. These include Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, and Tanzania. The presence of large coastlines in the Eastern and Southern African countries underlines the potential for cooperation in the maritime domain. A major shipping link for India, Indian Ocean remains the common factor for these countries and is pivotal in terms of both security and commerce for India and Africa.

According to the SIPRI International Arms Transfer Database[61], India was the 23rd largest defence exporter during the period of 2017 to 2021. Within Africa, Mauritius accounted for 6.6 percent of India's arms exports during 2017-2021, followed by Mozambique (5 percent) and Seychelles (2.3 percent). Ministry of Defence has been strengthening cooperation within the framework of Indian Ocean Rim Association (IORA) to undertake specific projects and has formalized frameworks of Defence cooperation with South Africa, Kenya, Tanzania, Mauritius, Seychelles, and Madagascar. Defence Research and Development Organisation (DRDO) has been exploring cooperation in Defence R&D with African nations and an MOU concerning cooperation in Defence R&D was signed with Nigeria.[62]

Some of the significant export items by the defence public sector units (DPSU's) include the export of an offshore patrol vessel (OPV) to Mauritius in 2014 by the Garden Reach Shipbuilders and Engineers Ltd (GRSE Ltd.)[63] The Hindustan Aeronautics Limited (HAL) has exported helicopters to Mauritius, Seychelles, and Namibia.[64] Increased cooperation in areas of aerospace, defence, maritime equipment and vessels can ensure security and enhance technological capacity of Africa and at the same time accelerate India's defence export target of achieving US$ 5 billion by 2025.

Financing for Clean Energy

Africa accounts for only 3.8 percent of global greenhouse gas emissions, in contrast to 23 percent in China, 19 percent in the US, and 13 percent in the European Union.[65] However, the

[61] Major weapons are classified as per SIPRI statistical data on arms transfer, which relates to the actual deliveries of major conventional weapons. To permit comparison between the data on such deliveries of different weapons and to identify general trends, SIPRI has developed a system to measure the volume of international transfers of major conventional weapons using a common unit, the trend-indicator value (TIV). TIV figures do not represent sales prices for arms transfers. Nonetheless, they can be used for calculating trends in international arms transfers over periods of time, and global percentages for suppliers and recipients

[62] Ministry of Defense, Annual Report 2018-19, Government of India

[63] https://www.mod.gov.in/sites/default/files/MoDAR2018.pdf

[64] Promoting Defence Exports, Manohar Parikar Institute for Defence Studies and Analyses, March 31, 2021

[65] CDP Africa Report: Benchmarking Progress Towards Climate Safe Cities, States, and Regions, March 2020

region remains highly vulnerable to climate change and continues to suffer its consequences in the form of regular droughts and floods, leading to food insecurity and threat to life and livelihoods. The surface temperature of the continent has already risen faster than the world average. Similarly, over 600 million Africans, the most of whom live in rural regions, lack access to electricity, and 900 million do not have access to clean cooking facilities. Apart from deforestation, four out of every five Africans cook with solid biomass, resulting in an estimated 600,000 fatalities per year due to indoor air pollution.

Africa has enormous energy potential to harness in addition to natural gas. It has significant quantities of other resources, including forests and minerals, arable land, water, and wind, and thus, the continent is capable of producing enough clean energy to meet the needs of its people and to industrialize, while supporting sustainable development. These resources, including the minerals and metals used in EV batteries such as lithium and cobalt, should be exploited to support the global energy transition and the sustainable development of Africa.[66]

The Sustainable Development Goal on energy (SDG 7) is incorporated in the social, economic and sustainability goals of Africa's Agenda 2063. Sustainable energy is at the forefront of the development plans of African nations, recognising its central role in achieving all SDG targets and mitigating and adapting to climate change. Out of the 53 African Nationally Determined Contributions (NDCs), 45 contains quantified renewable energy targets. This clearly acknowledges the abundant opportunities offered by Africa's vast renewable energy to put the continent on a clean development path.

According to IRENA's Report on Scaling Up Renewable Energy Deployment in Africa, the continent has the potential to install 310 gigawatts (GW) of clean renewable power—or half the continent's total electricity generation capacity, to meet nearly a quarter of its energy needs by 2030.[67] This corresponds to a seven-fold increase from the capacity available in 2017, which amounted to 42 GW. A transformation of this scale in Africa's energy sector would require average annual investment of US$ 70 billion by 2030, resulting in carbon-dioxide emissions reductions of up to 310 megatonnes per annum. It is therefore crucial for Africa to step up its efforts to generate significant investments and business opportunities to boost the growth of renewable energy in the continent.

In this context, the India led International Solar Alliance could play a major role in providing solar energy solutions to African countries. The total solar potential of all countries in Sub-

[66] Africa fully committed to harnessing its clean energy potential with the African Development Bank, AfDB Press Release, May 5, 2022
[67] The Investment Case for Energy Transition in Africa, IRENA, March 2020

Saharan Africa is about 10,000 GW. Solar potential is fairly distributed across all the countries, with an average of 6 kilowatt hours (kWh) of solar energy per sq m available per day. A significant portion of Africa currently uses solar energy to meet relatively basic needs like lighting, charging mobile phones, and powering low-capacity appliances. The biggest options for solar power generation in Africa are photovoltaic (PV) and concentrated solar power (CSP), as well as small-scale PV systems suitable for off-grid power generation. Both PV and CSP technologies are crucial for rural communities in Africa, given their diverse potential uses ranging from energy generation to agriculture, food processing, waste treatment, and water supply.[68]

However, installed capacity in African countries remain much lower compared to the potential. According to a World Bank study, the African continent has an average daily potential of 4.49 kWh/kWp with an installed capacity of just 4878.1 MW. On the other hand, Asia-Pacific has a slightly lower daily potential of 4.06 kWh/kWp, but an installed capacity of 282,046 MW, 58 times that of Africa. Europe has the lowest potential, at daily 3.39 kWh/kWp, but the second-highest installed solar capacity, which stands at 124,729.6 MW as of 2018.[69]

India, through the International Solar Alliance, is supporting the implementation of off-grid solar energy projects in Africa. ISA has partnered with the AfDB to develop 10,000 MW of solar power systems across the Sahel region, aimed at providing electricity to approximately half of the 600 million Africans who remain off-grid.[70]

The Government of India has earmarked concessional Lines of Credit worth US$ 2 billion for solar projects in Africa out of its US$ 10 billion concessional LOCs committed for Africa during India-Africa Forum Summit (IAFS)-III. However, the uptake of solar projects under India Exim Bank's GOI-supported LOCs in partner countries in Africa have remained relatively low. This is partially due to the lack of domestic capacities for supply of solar panels to fulfil the minimum mandatory Indian content requirement under the LOC program (goods and services for minimum 75 percent of the value of the contracts covered under these loans to be sourced from India). Solar modules account for about 65 percent of the overall cost of setting up a solar power project. Presently, India's domestic production accounts for 20 percent of the annual requirements of solar modules, with rest being imported mainly from China. The prices of imported Mono PERC PV modules in India have risen by over 35 percent from around 20 cents/watt in August 2020 to around 28 cents/watt in March 2022. This is primarily because of an increase in the polysilicon prices, which is a key input for

[68] India and the Global Commons: A Case Study of the International Solar Alliance, Oluwasem Oguntuase, ORF, March 2022
[69] Global photovoltaic power potential by country, World Bank, July 2020
[70] India's international solar leadership: Walking the talk?, ORF, December 2021

PV modules. Therefore, boosting domestic manufacturing of modules and setting up fully integrated supply chains remain crucial to reduce import dependence and increasing cost competitiveness, in addition to ensure enhanced access to financing.[71]

Exploring Alternate Solutions for Infrastructure Financing

Infrastructure financing accounts for a substantial amount of Africa's public debt and these loans are mainly financed by foreign creditors leading to burgeoning public external debt in the region. It poses financial risk to investors especially in countries with high political risks or countries vulnerable to foreign exchange risks. Focusing on alternative solutions like local currency financing or counter trade arrangements to finance project exports could be explored, especially in case of resource intensive countries to ensure future repayments and also assist low-income countries to achieve their development goals.

India and Africa can also jointly explore the potential for tripartite cooperation initiatives with third countries in critical areas such as transfer of skills, transfer of technology, and technical assistance. The North African countries being part of the Middle East and North Africa (MENA) region are strategically closer to the GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates). India could collaborate with the sovereign wealth funds of GCC countries for high-end infrastructure projects in these African countries. The trilateral partnership initiatives could be given further impetus by setting up a dedicated fund or agreements involving the development financial institutions of the respective countries for investing in infrastructure projects in Africa.

The Asia-Africa Growth Corridor (AAGC), a megaregional initiative by India and Japan aimed at improving ties between Asia and Africa, gives priority to development projects in health and pharmaceuticals, agriculture and agro-processing, disaster management and skill enhancement in Africa. The connectivity aspects of the AAGC will be supplemented with quality infrastructure. A 2017 Japan External Trade Organization (JETRO) survey shows that Japanese companies operating in India have a significant interest in the African market, which they see as the most important future destination. According to the report, India is a good springboard to enter the African market because of its geographical proximity to Africa compared to Japan, as well as India's widespread presence in the continent. Japan is a capital surplus nation and is renowned for its high-end technology. India, on the other hand, is relatively less capital-intensive, however, has strong labour resource. India also has

[71] Elevated Solar Module Prices: Rainy Days Ahead for Developers?, Care Edge, 2022.

its vast experience in executing several projects that are suitable for Africa. Collaborating under the AAGC by leveraging on these strengths, could be a win-win for all (Africa, Japan, and India).

Box 6.2: G20 Compact with Africa

The G20 Compact with Africa (CwA), launched in 2017 under the German G20 Presidency, is an initiative to promote private investment in Africa, including in infrastructure. The CwA's primary objective is to increase attractiveness of private investment in Africa, through substantial improvements of the macro, business, and financing frameworks. It brings together reform-minded African countries, international organizations, and bilateral partners from G20 and beyond to coordinate country-specific reform agendas, support respective policy measures and advertise investment opportunities to private investors. The initiative is demand-driven and open to all African countries. So far, twelve African countries have joined the initiative: Benin, Burkina Faso, Côte d'Ivoire, Egypt, Ethiopia, Ghana, Guinea, Morocco, Rwanda, Senegal, Togo and Tunisia. Along with this, reforms have been laid out by these countries for setting commitments to maintain macroeconomic stability and to undertake business and financing.

India, being a member of G20 is in a superior position to work with these countries in enabling investments, especially in infrastructure sector. India could also link the CwA initiative with the Asia Africa Growth Corridor initiative. As the AAGC aims to link economies from Asia and Africa not only through physical infrastructure, but also institutional, regulatory, and digital connectivity, there exist complementarities between AAGC and the CwA initiatives. India's involvement in the CwA initiative could be earmarked based on the potential of the CwA countries, while considering India's comparative advantage and interests. By engaging in the CwA initiative, India can have a positive impact on the G20's partnership with Africa and strengthen the India-Africa partnership in the process.

According to McKinsey research[72], the involvement of DFIs has a multiplier effect on private investment as the presence of DFIs ensure serious due diligence and the risk mitigation instruments in place, and can help improve the credit rating of the borrower. Therefore, greater collaboration between local development finance institutions and development financial institutions of the partner countries should be promoted. Africa remains one of the continents with a huge infrastructure deficit, which has proliferating adverse impacts on transaction costs for traders and investors alike, forming part of the non-tariff barriers that restrict trade within Africa and between its regions and other parts of the world. Exporters need access to local markets for their products, which requires adequate and well-functioning infrastructure, including road and other transport systems, export and storage facilities, and

[72] Solving Africa's infrastructure paradox, McKinsey & Company, March 2020

energy and water supply. According to a World Bank report, around US$ 100 billion will be needed to achieve universal access to broadband connectivity in Africa by 2030.[73] Therefore, investment in digital infrastructure also needs to be increased to harness innovation in digital technologies.

Access to Trade Finance in Africa

Financial markets continue to evolve due to the emerging country risks, uncertain economic outlooks and changing regulatory environments. Trade finance is a critical element for cross-border trade, and in many cases the movement of goods across borders, particularly in emerging markets, cannot occur without it. As trade finance provides essential short-term liquidity, additional trade finance will be urgently required when demand for traded goods begins to recover. According to the estimates from the AfDB and Afreximbank[74], the estimated value of unmet demand for trade finance in Africa was US$ 81.8 billion in 2019 and has averaged US$ 91 billion over the past decade. This is evident from the fact that 40 percent of Africa's trade remains bank intermediated as compared to 80 percent globally. Challenges with confirming banks is one of the major constraints for domestic banks engaged in trade finance in Africa.

According to SWIFT transactions data, Africa has undergone a decline of 18.6 percent in correspondent bank relationship between 2011 and 2017 compared to an average of 17.9 percent for all regions over the same period. In Africa, about 21 percent of private owned and 19 percent of public owned banks list challenges in building correspondent banking relationship as a major constraint to their trade finance activities, relative to 17 percent of foreign banks. As observed by the AfDB research, during 2011 to 2019, the major correspondent banks in Africa saw significant decline in their trade finance confirmation activities in Africa. Regulatory restrictions and higher compliance costs have been the major constraints cited for the retreat of international confirming banks from Africa.

Increased tightening of global financial conditions in the aftermath of the COVID-19 has resulted in central banks across the world consolidating their balance sheet. As a result, Africa might see capital outflows which in turn will lead to exacerbated liquidity constraints and undermine the capacity of banks to finance African trade, especially for SMEs. In order to fill this gap, development finance institutions could develop financial instruments like risk participation and transaction guarantee agreements to support non-traditional confirming

[73] Connecting Africa to Broadband: A Roadmap for Inclusive Growth, World Bank, October 2019
[74] Confirming Banks and Trade Finance in Africa, Africa Economic Brief, AfDB, 2022

banks from emerging markets, including Africa. Here, the role of DFIs like India Exim Bank becomes relevant.

To address the widening global trade finance gap, India Exim Bank initiated a new trade finance product - Trade Assistance Programme (TAP), under the aegis of which the Bank will provide support by way of various trade instruments to Indian banks engaged in international trade, by offering transaction-specific partial or full guarantees to cover payment risks on banks in least developed/developing countries. This programme envisages to augment India's exports whilst also helping importers abroad to engage in international trade whilst mitigating the risks involved and expanding their market/buyers for their products which were hitherto not addressed. Thus, TAP will provide enabling environment for counterparties in settlement of trade transactions. TAP at its initial stages of operations will be looking at 54 economies across globe including 26 countries from Africa that can seek risk mitigation support under the programme.

Box 6.3: India Exim Bank's Engagements in Africa

India Exim Bank has made significant efforts towards facilitating infrastructure development in Africa. As discussed in the earlier chapters, India Exim Bank has extended several GOI-supported LOCs to African countries. The projects financed under the LOCs cover a variety of sectors including infrastructure, ranging from energy - water sanitation - connectivity - digital infrastructure, thereby imparting a fresh resonance to development in several African countries. The Bank has also financed regional projects under the LOC program, an example of which is the electricity interconnection project between Côte d'Ivoire and Mali.

India Exim Bank also works very closely with development banks in the region, including the AfDB. India Exim Bank has extended its own commercial Lines of Credits to various regional financial institutions and parastatal entities in Africa, such as, PTA Bank (Eastern and Southern African Trade and Development Bank, covering 17 countries in the Eastern and Southern African region), Banque Ouest Africaine De Development (West African Development Bank, covering 8 countries in the West African region), Indo-Zambia Bank, Central Bank of Djibouti, Nigerian Exim Bank, East African Development Bank, Afreximbank, and EBID.

The Bank's strong emphasis on increasing project exports from India has been enhanced with the introduction of the of the Buyer's Credit under GOI's National Export Insurance Account (BC-NEIA) Programme. The BC-NEIA is a unique financing mechanism that not only provides a safe mode of non-recourse financing option to Indian exporters, but also serves as an effective mechanism to augment both physical and social infrastructure in host countries, thereby fostering the partner countries' developmental objectives. As on March 31, 2022, India Exim Bank has sanctioned an aggregate amount of over US$ 2.0 billion under BC-NEIA for 21 projects in Africa.

Additionally, in Africa, India Exim Bank has supported several ventures in countries such as Egypt, Ethiopia, Ghana, Kenya, Mauritius, Morocco, Nigeria, Senegal, South Africa, Sudan, Tanzania, Uganda, and Zambia, across a range of sectors like agriculture and food processing, agro-based products, auto and auto components, chemicals, construction, electronics, engineering goods, EPC services, mining and minerals, plastics and rubber products, packaging, pharmaceuticals, software and IT enabled services, and textiles. These ventures serve to promote value addition, as also contribute to capacity building and capacity creation in host countries. As on March 31, 2022, India Exim Bank through its overseas investment finance programme has supported 48 Indian companies in 13 countries in Africa with an aggregate sanction of ₹ 60.5 billion.

Further, to address the limited institutional capacity in Africa on conceptualisation, management, execution and imparting project development initiatives, India Exim Bank along with other Indian institutions have joined hands with the AfDB and promoted a Project Development Company (PDC) for infrastructure development in Africa. The PDC, named Kukuza Project Development Company, has been incorporated in Mauritius in July 2015, which will provide the entire gamut of project development expertise to various infrastructure projects, such as project identification, pre-feasibility/ feasibility studies, preparation of detailed project reports, environmental and social impact assessment, etc.

India Exim Bank has also been consciously forging a network of alliances and institutional linkages to help further economic cooperation with the African region. Towards this end, Exim Bank has taken up equity in Afreximbank, West African Development Bank (BOAD), and Development Bank of Zambia. These endeavours are supplemented by the various Memoranda of Cooperation/ Memoranda of Understanding, the Bank has in place, with key institutions in Africa.

Further, India Exim Bank has recently sanctioned a 10-year credit line to the Africa Finance Corporation (AFC) for financing / refinancing of goods and services imported from India under the Bank's programme for Export Credit Line to Overseas Financial Institutions. The long term credit line is expected to facilitate the infrastructure requirements of African continent.

ANNEXURE I

Select Macroeconomic Indicators of African Countries

Country/ Region	GDP at Current Prices (US$ bn)				Real GDP Growth (%)				Population (mn)			
	2019	2020	2021[e]	2022[f]	2019	2020	2021[e]	2022[f]	2019	2020	2021[e]	2022[f]
Africa	**2481.0**	**2396.6**	**2695.8**	**2964.5**	**3.3**	**-1.6**	**6.9**	**3.9**	**1265.2**	**1295.9**	**1327.1**	**1359.3**
Algeria	171.1	147.6	164.6	193.6	0.8	-4.9	4.0	2.4	43.4	43.9	44.5	45.1
Angola	84.5	58.3	74.5	124.9	-0.7	-5.6	0.7	3.0	30.1	31.0	32.0	32.9
Benin	14.4	15.7	17.5	18.4	6.9	3.8	6.6	5.9	11.8	12.1	12.5	12.8
Botswana	16.7	14.9	17.8	18.4	3.0	-8.7	12.5	4.3	2.3	2.4	2.4	2.5
Burkina Faso	16.0	17.4	19.1	19.6	5.7	1.9	6.9	4.7	20.3	20.9	21.5	22.1
Burundi	3.0	3.1	3.3	3.4	1.8	0.3	2.4	3.6	11.5	11.9	12.2	12.6
Cabo Verde	2.0	1.7	1.9	2.0	5.7	-14.8	6.9	5.2	0.6	0.6	0.6	0.6
Cameroon	39.7	40.9	45.0	45.7	3.5	0.5	3.5	4.3	25.9	26.5	27.2	27.9
Central African Republic	2.3	2.4	2.6	2.6	3.0	1.0	1.0	3.5	4.7	4.8	4.9	5.0
Chad	11.0	10.7	11.8	12.9	3.4	-2.2	-1.1	3.3	15.9	16.4	16.9	17.4
Comoros	1.2	1.2	1.3	1.3	1.8	-0.3	2.2	3.5	0.9	0.9	0.9	1.0
Côte d'Ivoire	58.5	61.4	69.8	73.0	6.2	2.0	6.5	6.0	26.3	27.0	27.7	28.4
DR Congo	50.4	48.7	57.1	64.8	4.4	1.7	5.7	6.4	87.9	90.8	93.8	96.8
Djibouti	3.3	3.4	3.6	3.8	6.6	1.0	4.0	3.0	1.0	1.0	1.0	1.0
Egypt	302.3	364.0	402.8	435.6	5.6	3.6	3.3	5.9	98.9	100.6	102.6	104.7
Equatorial Guinea	11.4	10.0	12.7	16.3	-6.0	-4.9	-3.5	6.1	1.4	1.4	1.5	1.5
Eritrea	2.0	2.1	2.3	2.6	3.8	-0.6	2.9	4.7	3.5	3.5	3.6	3.7
Eswatini	4.5	4.0	4.7	4.6	2.6	-1.9	3.1	2.1	1.1	1.1	1.1	1.2
Ethiopia	92.6	96.6	99.3	105.3	9.0	6.1	6.3	3.8	95.6	97.2	99.7	101.3
Gabon	16.9	15.3	19.2	22.5	3.9	-1.9	0.9	2.7	2.1	2.1	2.1	2.2
Ghana	68.4	68.5	76.4	73.9	6.5	0.4	4.2	5.2	30.2	30.8	31.3	32.1
Guinea	13.5	15.3	17.6	21.0	5.6	6.4	4.2	4.8	13.6	14.0	14.3	14.7

Country/ Region	GDP at Current Prices (US$ bn)				Real GDP Growth (%)				Population (mn)			
	2019	2020	2021[e]	2022[f]	2019	2020	2021[e]	2022[f]	2019	2020	2021[e]	2022[f]
Guinea-Bissau	1.4	1.5	1.6	1.7	4.5	1.5	3.8	3.8	1.8	1.8	1.9	1.9
Kenya	100.5	101.3	109.8	114.7	5.0	-0.3	7.2	5.7	47.6	48.7	49.8	50.9
Lesotho	2.3	2.1	2.5	2.6	--	-6.0	2.1	3.1	2.0	2.1	2.1	2.1
Liberia	3.1	3.0	3.5	3.8	-2.5	-3.0	4.2	4.5	4.6	4.7	4.8	4.9
Libya	39.5	19.2	32.4	48.8	13.2	-59.7	177.3	3.5	6.6	6.6	6.7	6.8
Madagascar	14.1	13.1	14.2	14.6	4.4	-7.1	3.5	5.1	27.5	28.5	28.3	29.0
Malawi	11.0	11.8	12.2	12.0	5.4	0.9	2.2	2.7	20.3	20.9	21.5	22.1
Mali	17.3	17.5	19.2	19.3	4.8	-1.2	3.1	2.0	19.7	20.2	20.9	21.5
Mauritania	7.9	8.1	9.1	9.3	5.8	-1.8	3.0	5.0	4.1	4.1	4.2	4.3
Mauritius	14.0	10.9	11.1	11.3	3.0	-14.9	3.9	6.1	1.3	1.3	1.3	1.3
Morocco	119.9	114.7	131.5	133.1	2.6	-6.3	7.2	1.1	35.6	36.0	36.3	36.7
Mozambique	15.4	14.0	16.1	18.1	2.3	-1.2	2.2	3.8	30.4	31.3	32.2	33.1
Namibia	12.5	10.6	12.3	13.0	-0.9	-8.5	0.9	2.8	2.5	2.5	2.6	2.6
Niger	12.9	13.8	15.0	15.6	5.9	3.6	1.3	6.9	23.3	24.2	25.1	26.1
Nigeria	448.1	429.4	441.5	510.6	2.2	-1.8	3.6	3.4	201.0	206.1	211.4	216.7
Republic of Congo	12.8	10.3	12.8	16.0	-0.4	-8.1	-0.2	2.4	4.6	4.7	4.8	4.9
Rwanda	10.4	10.3	11.1	12.1	9.5	-3.4	10.2	6.4	12.4	12.7	13.0	13.3
São Tomé and Príncipe	0.4	0.5	0.5	0.5	2.2	3.0	1.8	1.6	0.2	0.2	0.2	0.2
Senegal	23.4	24.5	27.6	28.4	4.6	1.3	6.1	5.0	16.3	16.7	17.2	17.7
Seychelles	1.7	1.2	1.5	1.8	3.1	-7.7	8.0	4.6	0.1	0.1	0.1	0.1
Sierra Leone	4.1	4.1	4.2	4.3	5.3	-2.0	3.2	3.4	7.8	8.0	8.1	8.3
Somalia	6.5	7.0	7.4	8.5	3.3	-0.3	2.0	3.0	14.4	14.8	15.2	15.6
South Africa	387.8	335.3	418.0	426.2	0.1	-6.4	4.9	1.9	58.8	59.6	60.1	61.1
South Sudan	5.3	6.7	5.2	5.7	0.9	-6.6	5.3	6.5	13.4	13.8	14.2	14.6
Sudan	33.6	34.4	35.2	31.5	-2.5	-3.6	0.5	0.3	43.2	44.3	45.5	46.7
Tanzania	60.8	64.4	70.3	77.5	7.0	4.8	4.9	4.8	56.3	58.0	59.7	61.5
The Gambia	1.8	1.8	2.0	2.2	6.2	-0.2	5.6	5.6	2.3	2.4	2.5	2.6
Togo	7.2	7.6	8.4	8.7	5.5	1.8	5.1	5.6	8.1	8.3	8.5	8.7
Tunisia	41.8	42.5	46.5	45.6	1.5	-9.3	3.1	2.2	11.8	11.9	12.0	12.1
Uganda	38.1	37.4	42.5	46.4	7.7	-1.4	5.1	4.9	39.8	41.2	42.5	43.7
Zambia	23.3	18.1	20.8	26.7	1.4	-2.8	4.3	3.1	18.3	18.9	19.5	20.0
Zimbabwe	23.0	23.1	32.6	36.4	-6.1	-5.3	6.3	3.5	14.9	15.2	15.5	15.8

Note: [e-] estimates; [f-] forecast; - not available

Source: Data Mapper, IMF, 2022; and India Exim Bank Analysis

ANNEXURE II

Vaccination Rates in African Countries (as on March 15, 2022)

Country	Fully vaccinated	Partially vaccinated	Total
Seychelles	80%	4%	85%
Mauritius	76%	3%	79%
Rwanda	61%	6%	67%
Morocco	63%	4%	67%
Cabo Verde	55%	9%	63%
Botswana	53%	8%	60%
Tunisia	53%	7%	60%
São Tomé and Príncipe	39%	12%	51%
Mozambique	41%	3%	44%
Egypt	30%	12%	43%
Comoros	34%	4%	38%
Lesotho	34%	3%	36%
South Africa	30%	5%	35%
Eswatini	27%	6%	33%
Angola	17%	15%	33%
Zimbabwe	23%	9%	33%
Mauritania	22%	10%	33%
Libya	16%	15%	32%
Uganda	17%	13%	30%
Ghana	16%	12%	28%
Côte d'Ivoire	17%	9%	26%
Guinea-Bissau	17%	9%	26%
Guinea	18%	7%	26%

Country	Fully vaccinated	Partially vaccinated	Total
Benin	20%	4%	24%
Kenya	15%	7%	21%
Sierra Leone	14%	8%	21%
Ethiopia	18%	3%	21%
Africa	15%	5%	20%
Liberia	20%	1%	20%
Central African Republic	18%	1%	19%
Togo	18%	0%	18%
Equatorial Guinea	15%	4%	18%
Namibia	15%	3%	17%
Algeria	14%	3%	17%
Djibouti	10%	4%	14%
The Gambia	13%	1%	13%
Zambia	10%	3%	13%
Gabon	11%	2%	13%
Republic of Congo	11%	1%	12%
Somalia	8%	4%	12%
Sudan	6%	5%	12%
Nigeria	5%	5%	10%
Burkina Faso	5%	4%	10%
Niger	6%	3%	9%
Senegal	6%	2%	8%
Malawi	4%	4%	8%
Tanzania	5%	1%	6%
Mali	5%	2%	6%
Cameroon	4%	1%	5%
South Sudan	4%	0%	5%
Madagascar	4%	0%	4%
Chad	1%	1%	2%
DR Congo	1%	0%	1%
Burundi	0%	0%	0%

Source: ourworldindata.org, University of Oxford and India Exim Bank Analysis

ANNEXURE III

India Exim Bank's Lines of Credit

- **List of Operational GOI-supported LOCs extended by India Exim Bank as on March 31, 2022**

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
1	Angola	Government of Angola	40.0	Railway rehabilitation
2	Angola	Government of Angola	30.0	Industrial park
3	Angola	Government of Angola	15.0	Setting up a textile project (cotton Ginning & spinning)
4	Benin	Government of Benin	15.0	Railway equipment, agricultural equipment and feasibility study for setting up a cyber city
5	Benin	Government of Benin	15.0	Tractor assembly plant and farm equipment manufacturing unit
6	Benin	Government of Benin	42.6	Rehabilitation and extension of 47 Water Supply schemes in rural areas
7	Burkina Faso	Government of Burkina Faso	30.0	Agricultural projects including acquisition of tractors, harvesters, agricultural processing equipment
8	Burkina Faso	Government of Burkina Faso	25.0	Rural electrification
9	Burkina Faso	Government of Burkina Faso	22.5	Low-cost housing and economical buildings project
10	Burundi	Government of Burundi	80.0	Kabu Hydro Electric Project

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
11	Burundi	Government of Burundi	4.2	Farm mechanization
12	Burundi	Government of Burundi	0.2	Preparation of DPR for an integrated food processing complex
13	Burundi	Government of Burundi	161.4	Construction of Parliament building in Gitega and ministerial Buildings
14	Cameroon	Government of Cameroon	37.7	Maize farm plantation projects and rice farm plantation projects
15	Cameroon	Government of Cameroon	42.0	Cassava Plantation Project
16	Central African Republic	Government of Central African Republic	29.5	Setting up a modern dry process cement plant of 400 TPD capacity, and procurement of 100 buses for internal transport
17	Central African Republic	Government of Central African Republic	20.0	Development of mining project
18	Central African Republic	Government of Central African Republic	39.7	Two hydro-electric projects
19	Central African Republic	Government of Central African Republic	7.0	Restructuring of overdues under existing LOCs
20	Chad	Government of Chad	50.0	Bicycle plant, plant for assembly of agricultural equipment, steel billet plant and rolling mill and cotton yarn plant agricultural projects including acquisition of tractors, harvesters, agricultural processing equipment
21	Chad	Government of Chad	15.9	For financing extension of spinning mill [addition of weaving and processing capacities]
22	Chad	Government of Chad	6.1	Restructuring of overdues under existing LOCs

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
23	Comoros	Government of Comoros	41.6	For installation of an 18 MW power project in Moroni
24	Côte d'Ivoire	Government of Côte d'Ivoire	26.8	Renewal of urban transport system in Abidjan and for agricultural projects in the field of vegetable oil extraction, fruits and vegetable chips production, production of cocoa, coffee
25	Côte d'Ivoire	Government of Côte d'Ivoire	25.5	Mahatma Gandhi IT and Biotechnology Park, fisheries processing plant and coconut fiber processing plant
26	Côte d'Ivoire	Government of Côte d'Ivoire	30.0	Transmission line between Côte d'Ivoire and Mali
27	Côte d'Ivoire	Government of Côte d'Ivoire	30.0	Rice production programme
28	Côte d'Ivoire	Government of Côte d'Ivoire	24.0	Electricity Interconnection Project between Côte d'Ivoire and Mali
29	Côte d'Ivoire	Government of Côte d'Ivoire	71.4	Upgradation of Military Hospitals
30	Djibouti	Central Bank of Djibouti	10.3	Restructuring of overdues under existing LOCs
31	Djibouti	Government of Djibouti (Restructured)	10.4	Restructuring of overdues under existing LOCs
32	Djibouti	Government of Djibouti (Restructured)	14.6	Restructuring of overdues under existing LOCs
33	Djibouti	Government of Djibouti	15.1	600 TPD Ali Sabieh Cement Plant Project, Phase III
34	DR Congo	Government of DR Congo	33.5	Setting up a cement plant, acquisition of buses and acquisition of equipment for MIBA
35	DR Congo	Government of DR Congo	25.0	Installation of hand pumps and submersible pumps

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
36	DR Congo	Government of DR Congo	42.0	Execution of Kakobola Hydroelectric Power Project
37	DR Congo	Government of DR Congo	168.0	Katende Hydro-electric Project
38	DR Congo	Government of DR Congo	82.0	Completion of Katende Hydro-electric Project
39	DR Congo	Government of DR Congo	34.5	Development of power distribution project in Bandundu province
40	DR Congo	Government of DR Congo	109.9	Financing transmission and distribution project in Kasai province of DR Congo for evacuation of electricity from Katende Hydroelectricity Power Project
41	EBID	Ecowas Bank for Investment and Development	250.0	Public Sector projects
42	EBID	Ecowas Bank for Investment and Development	100.0	Facilitate purchase of goods and services from India
43	EBID	Ecowas Bank for Investment and Development	150.0	Facilitate Purchase of Goods and Services from India
44	EBID	Ecowas Bank for Investment and Development	500.0	To finance various development projects
45	Eritrea	Government of Eritrea	20.0	Multipurpose agricultural projects and educational projects
46	Eswatini	Government of Eswatini (Swaziland)	20.0	Information technology park
47	Eswatini	Government of Eswatini (Swaziland)	37.9	Agricultural development and mechanization of agriculture
48	Eswatini	Government of Eswatini (Swaziland)	10.4	Construction of a Disaster Recovery Site
49	Eswatini	Government of Eswatini (Swaziland)	108.3	Construction of a new Parliament Building

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
50	Ethiopia	Government of Ethiopia	65.0	Energy transmission and distribution project
51	Ethiopia	Government of Ethiopia	122.0	Development of sugar industry
52	Ethiopia	Government of Ethiopia	166.2	Development of sugar industry
53	Ethiopia	Government of Ethiopia	213.3	Development of sugar industry
54	Ethiopia	Government of Ethiopia	91.0	Development of sugar industry
55	Ethiopia	Government of Ethiopia	47.0	Development of sugar industry
56	Gambia	Government of Gambia	5.8	Supply of tractors
57	Gambia	Government of Gambia	10.0	Construction of National Assembly Building Complex
58	Gambia	Government of Gambia	16.7	Completion of the National Assembly Building Complex
59	Gambia	Government of Gambia	22.5	Replacement of Asbestos water pipes with UPVC pipes project
60	Gambia	Government of Gambia	22.5	Electrification expansion project
61	Gambia	Government of Gambia	7.0	Restructuring of overdues under existing LOCs
62	Ghana	Government of Ghana	27.0	Rural electrification, agricultural and transportation projects
63	Ghana	Government of Ghana	60.0	Rural electrification project and construction of Presidential Office
64	Ghana	Government of Ghana	25.0	Foreign policy training institution, railway corridors and agro processing plant

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
65	Ghana	Government of Ghana	21.7	Improved fish harvesting & fish processing project and Waste management equipment and management support project
66	Ghana	Government of Ghana	35.0	Sugar plant
67	Ghana	Government of Ghana	24.5	Sugarcane development and irrigation project
68	Ghana	Government of Ghana	30.0	Rehabilitation and up-gradation of potable water system in Yendi
69	Ghana	Government of Ghana	150.0	Strengthening of agriculture mechanization services centres
70	Guinea	Government of Guinea	35.0	Construction and Establishment of 130 bedded Mother & Child Hospitals at Kankan and N'zerekore
71	Guinea	Government of Guinea	20.2	Two Solar Projects for (i) Supply of electricity and drinking water for 7 public universities and (ii) Solar Project for Electrification and Refrigeration in 200 Health Infrastructure
72	Guinea	Government of Guinea	170.0	Strengthening the drinking water supply of Grand Conakry-Horizon 2040
73	Guinea	Government of Guinea	20.5	For construction and up-gradation of Regional Hospitals in Kankan and Nzerekore
74	Guinea Bissau	Government of Guinea Bissau	25.0	Food processing and agricultural sector; and rural electrification project

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
75	Kenya	Government of Kenya	61.6	Power transmission lines and substation
76	Kenya	Government of Kenya	15.0	Development of various Small and Medium Enterprises
77	Kenya	Government of Kenya	30.0	Upgrade of Rift Valley Textiles Factory (RIVATEX East Africa Limited)
78	Kenya	Government of Kenya	100.0	Revitalization of coffee, cotton, and livestock sector
79	Lesotho	Government of Lesotho	5.0	General purpose: Export of pump sets, consultancy services and irrigation equipment
80	Lesotho	Government of Lesotho	4.7	Vocational training center for empowerment of youth and women
81	Liberia	Government of Liberia	144.0	Power transmission and distribution project
82	Madagascar	Government of Madagascar	25.0	Project for rice productivity and project for fertilizer production
83	Malawi	Government of Malawi	30.0	Irrigation, storage, tobacco threshing plant and one village-one project
84	Malawi	Government of Malawi	50.0	Cotton processing facilities, green belt initiative and one village one product (OVOP) project
85	Malawi	Government of Malawi	76.5	Development of irrigation network under greenbelt initiative; setting up of refined sugar processing equipment in Salima under greenbelt initiative, and development of fuel storage facilities

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
86	Malawi	Government of Malawi	23.5	Construction of a new water supply system from Likhubula river in Mulanje to Blantyre
87	Malawi	Government of Malawi	215.7	Drinking water supply schemes and other development projects
88	Mali	Government of Mali	20.6	Supply of railway coaches and locomotives from India
89	Mali	Government of Mali	27.0	Rural electrification and setting up of agro machinery and tractor assembly plant
90	Mali	Government of Mali	30.0	Electricity transmission and distribution project from Côte d'Ivoire to Mali
91	Mali	Government of Mali	45.0	Electricity transmission and distribution project from Côte d'Ivoire to Mali
92	Mali	Government of Mali	36.0	Completion of Mali-Ivory Coast Interconnection Link for integrating the national power grids of the two countries.
93	Mali	Government of Mali	15.0	Agriculture and food processing projects
94	Mali	Government of Mali	100.0	Power transmission project connecting Bamako and Sikasso via Bougouni
95	Mauritania	Government of Mauritania	21.8	Potable water project and milk processing plant
96	Mauritius	Government of Mauritius	46.0	Purchase, upgradation, servicing and maintenance of defence related equipment and vehicles for the Mauritius Police Force

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
97	Mauritius	Government of Mauritius	18.0	To finance the acquisition of Waterjet Fast Attack Craft
98	Mauritius	Government of Mauritius	52.3	Project Trident [Construction of berthing jetty and Head Quarter building for National Coast Guard of Mauritius]
99	Mauritius	SBM (Mauritius) Infrastructure Development Company Ltd	690.0	Equity participation in various Infrastructure projects
100	Mauritius	Government of Mauritius	100.0	For procurement of defence items from India
101	Mozambique	Government of Mozambique	20.0	General purpose - contracts approved include supply of water drilling machinery, equipment, accessories, components and spares, support vehicles, water and fuel tankers and electrical equipment's
102	Mozambique	Government of Mozambique	20.0	Electrification of Gaza province
103	Mozambique	Government of Mozambique	20.0	Transfer of water drilling technology and equipment
104	Mozambique	Government of Mozambique	25.0	To finance IT Park Project which will comprise construction of building and incubator facility, research and learning centre and technology park and administrative facility.
105	Mozambique	Government of Mozambique	30.0	Rural electrification project in the provinces of Inhambane, Zambezi and Nampula

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
106	Mozambique	Government of Mozambique	25.0	Rural Electrification of Cabo Delgado, Manica, Niassa Provinces
107	Mozambique	Government of Mozambique	20.0	Enhancing productivity of rice, wheat, maize cultivation
108	Mozambique	Government of Mozambique	13.0	Solar Photo Voltaic Module Manufacturing Plant
109	Mozambique	Government of Mozambique	149.7	Rehabilitation of Road between Tica, Buzi and Nova Sofala
110	Mozambique	Government of Mozambique	19.7	Rural drinking water project extension
111	Mozambique	Government of Mozambique	47.0	Construction of 1200 houses
112	Mozambique	Government of Mozambique	38.0	Construction of 1600 borewells with hand pumps and 8 small water systems
113	Mozambique	Government of Mozambique	95.0	Procurement of railway rolling stock including locomotives, coaches, and wagons
114	Mozambique	Government of Mozambique	250.0	Improving the quality of power supply
115	Niger	Government of Niger	17.0	Buses, automobiles, flour mills and motor pumps
116	Niger	Government of Niger	20.0	Rehabilitation of six-power stations; purchase of three power transformers; and rehabilitation as well as erection of power lines between various places
117	Niger	Government of Niger	34.5	Solar electrification of 30 villages and solar photovoltaic system of 5 MW

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
118	Niger	Government of Niger	25.0	Potable water for semi-urban and rural communities
119	Nigeria	Government of Nigeria	100.0	[i] 1x26MW 11/33 KV Gas fired Power Plant and Associated Gas Supply facility in Calabar, in the Cross River state supply and commissioning of transmission lines [ii] 132/33 KV substation, solar mini grid electrification and solar street lighting in the state of Kaduna [iii] Supply and commissioning of transmission lines in Enugu State
120	Republic of Congo	Government of Republic of Congo	70.0	Rural electrification
121	Republic of Congo	Government of Republic of Congo	89.9	Development of transport system
122	Republic of Congo	Government of Republic of Congo	55.0	Setting up a greenfield 600 tpd rotary kiln cement plant project
123	Rwanda	Government of Rwanda	20.0	Nyabarongo Hydropower Power project
124	Rwanda	Government of Rwanda	60.0	Nyabarongo Hydropower project
125	Rwanda	Government of Rwanda	120.1	Export targeted modern irrigated agricultural project; and extension of export targeted modern irrigated agricultural project

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
126	Rwanda	Government of Rwanda	81.0	Establishment of 10 Vocational Training Centres and 4 business incubation centres in Rwanda
127	Rwanda	Government of Rwanda	66.6	Projects in Energy Sector
128	Rwanda	Government of Rwanda	100.0	Development of two SEZs & expansion of the Kigali SEZ
129	Rwanda	Government of Rwanda	100.0	Two Agriculture Project Schemes Rweru Irrigation Project and Mugesera Irrigation Project
130	Senegal	Government of Senegal	17.9	Export of 350 buses and accessories and 85 pick-up vans
131	Senegal	Government of Senegal	7.1	Acquisition of railway coaches and locomotives from India
132	Senegal	Government of Senegal	27.0	Irrigation project
133	Senegal	Government of Senegal	11.0	Supply of 70 multipurpose oil presses, 70 mini bakeries and 70 cereal and fruit processing units for women poverty alleviation and supply of 320 pick up vehicles and 80 station wagons for support of decentralized administration.
134	Senegal	Government of Senegal	10.0	IT training projects
135	Senegal	Government of Senegal	25.0	Rural electrification project and fishing industry development project
136	Senegal	Government of Senegal	5.0	Supply of medical equipment, furniture and other accessories to four hospitals
137	Senegal	Government of Senegal	27.5	Rural electrification

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
138	Senegal	Government of Senegal	19.0	Fisheries development project
139	Senegal	Government of Senegal	42.0	Setting up a modern abattoir, meat processing, cold storage, rendering and tannery plant and market place
140	Senegal	Government of Senegal	63.0	Rice self sufficiency programme
141	Senegal	Government of Senegal	26.0	Acquisition of buses
142	Senegal	Government of Senegal	24.5	Up-gradation and rehabilitation of health care system
143	Seychelles	Government of Seychelles	4.0	Purchase of essential commodities from India
144	Seychelles	Government of Seychelles	4.1	Implementation of integrated health information system
145	Seychelles	Government of Seychelles	10.0	Procurement of goods and projects as per the specified needs
146	Sierra Leone	Government of Sierra Leone	15.0	Procurement of tractors and connected implements, harvesters, rice threshers, rice mills, maize shellers and pesticide spray equipment
147	Sierra Leone	Government of Sierra Leone	30.0	Rehabilitation of existing facilities and addition of new infrastructure to supply potable water
148	Sierra Leone	Government of Sierra Leone	78.0	Transmission Line and Substation

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
149	Sierra Leone	Government of Sierra Leone	30.0	Land and infrastructure development including hydraulics, water management system (irrigation) and provision of tractors
150	Sierra Leone	Government of Sierra Leone	15.0	Expansion of the ongoing projects for rehabilitation of existing potable water facilities in four communities
151	Sudan	Government of Sudan	50.0	General purpose: contracts approved include export of electrification equipment, photovoltaic cells, diesel coaches, rehabilitation of locomotives, textile machinery, copper rods etc.
152	Sudan	Government of Sudan	41.9	SINGA-GEDARIF transmission and sub-station project
153	Sudan	Government of Sudan	350.0	Setting up 4 x 125 MW Kosti Combined Cycle Power Plant
154	Sudan	Government of Sudan	48.0	Supply of agricultural inputs for the Sudanese Agricultural Bank, technical and laboratory equipment to higher educational institutions, scientific equipment for ministry of science and technology, solar electrification & meeting requirements of Sudan Railways
155	Sudan	Government of Sudan	37.4	SINGA-GEDARIF transmission line extension to Galabat, micro-industrial projects and development of livestock production and services

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
156	Sudan	Government of Sudan	25.0	Mashkour (earlier Elduem) sugar project at White Nile State (Ist tranche)
157	Sudan	Government of Sudan	125.0	Mashkour sugar project (IInd tranche)
158	Sudan	Government of Sudan	45.2	Restructuring of overdues under existing LOCs
159	Sudan	Government of Sudan	19.6	Restructuring of overdues under existing LOCs
160	Tanzania	Government of Tanzania	40.0	Export of tractors, pumps, and equipment from India
161	Tanzania	Government of Tanzania	36.6	Financing the purchase of 679 vehicles including trucks (512), buses (79) and Ambulances (40)
162	Tanzania	Government of Tanzania	178.1	Water supply schemes to Dar-es-Salam
163	Tanzania	Government of Tanzania	268.4	Extension of Lake Victoria Pipeline to Tabora, Igunga and Nzega
164	Tanzania	Government of Tanzania	92.2	Rehabilitation and improvement of water supply system in Zanzibar
165	Tanzania	Government of Tanzania	500.0	Water supply scheme in 17 towns
166	Togo	Government of Togo	15.0	Rural electrification project
167	Togo	Government of Togo	13.1	Farming and cultivation of rice, maize, and sorghum
168	Togo	Government of Togo	30.0	Rural electrification project to cover 150 localities
169	Togo	Government of Togo	52.0	Setting up of 161 KV power transmission line
170	Togo	Government of Togo	40.0	Electrification of 350 villages through solar photo voltaic systems
171	Zambia	Government of Zambia	29.0	Itezhi-Tezhi Hydro power project

Sl. No.	Country	Borrower	LOC Amount (US$ mn)	Purpose of LOC
172	Zambia	Government of Zambia	50.0	Pre-fabricated health posts
173	Zambia	Government of Zambia	18.0	Pre-fabricated health posts
174	Zimbabwe	Government of Zimbabwe	28.6	Up-gradation of Deka Pumping Station and River Water Intake System
175	Zimbabwe	Government of Zimbabwe	87.0	Renovation/Up- gradation of Bulawayo Thermal Power Plant
176	Zimbabwe	Government of Zimbabwe	19.5	Completion of Phase II: Up-gradation of Deka Pumping Station and River Water Intake System
177	Zimbabwe	Government of Zimbabwe	23.0	Up-gradation of Bulawayo Thermal Power Plant
178	Zimbabwe	Government of Zimbabwe	310.0	Repowering of Hwange Thermal Power Station

Note: Include only operational LOCs and not fully repaid LOCs

- **List of Operational Commercial LOCs extended by India Exim Bank (as on March 31, 2022)**

Sl. No.	Borrower	Region	LOC Amount (US$ mn)	Purpose of LOC
1	Ecowas Bank for Investment and Development	West Africa	4.0	Financing acquisition and implementation of Core Banking Solution [CBS] from India and other related expenses
2	Ecowas Bank for Investment and Development	West Africa	100.0	Financing and refinancing of goods and services imported from India

Note: Include only operational LOCs and not fully repaid LOCs

About India Exim Bank's Working Paper Series

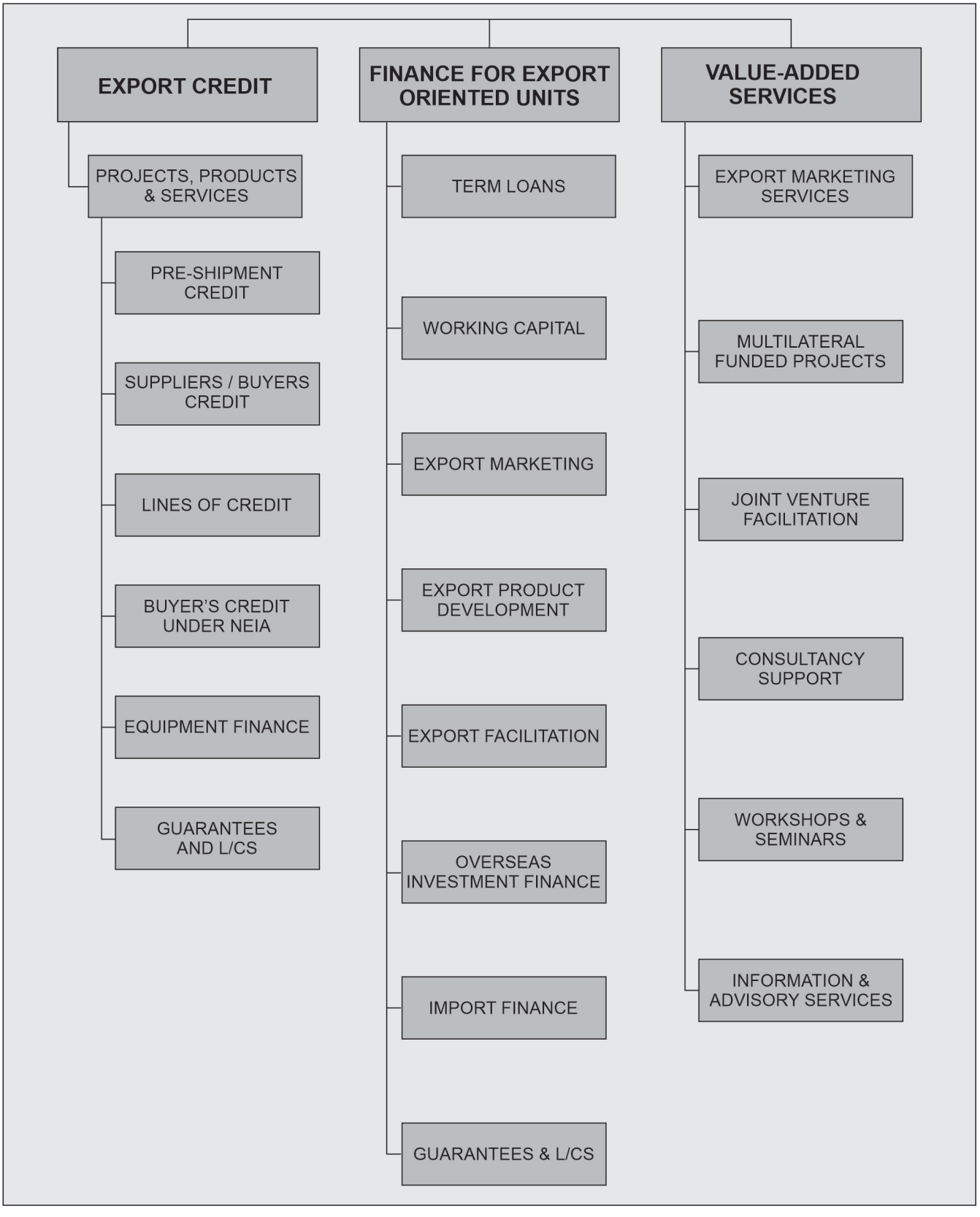
As part of its endeavour in enriching the knowledge of Indian exporters and thereby to enhance their competitiveness, Exim Bank periodically conducts research studies. These research studies are broadly categorized into three segments, viz. sector studies, country studies and macro-economic related analysis. These studies are published in the form of Occasional Papers, Working Papers and Books. The research papers that are brought out in the form of Working Papers are done with swift analysis and data collation from various sources. The research papers under the series provide an analytical overview on various trade and investment related issues.

Previous Working Papers brought out by India Exim Bank

Working Paper No. 72	Connecting Africa: Role of Transport Infrastructure, March 2018
Working Paper No. 73	Pharmaceutical Industry: Regulatory Landscape and Opportunities for Indian Exporters, March 2018
Working Paper No. 74	Indo-Sri Lanka Trade and Investment Relations: Current Trends and Prospects, March 2018
Working Paper No. 75	Indian Investments in Latin America and Caribbean- Trends and Prospects, March 2018
Working Paper No. 76	Enhancing India's Engagement in Healthcare Sector of CLMV Countries, May 2018
Working Paper No. 77	Act East: Enhancing India's Trade with Bangladesh and Myanmar Across Border, June 2018
Working Paper No. 78	Export Strategy for Madhya Pradesh, June 2018
Working Paper No. 79	India-Russia Trade Relations: Recent Trends and Potential, August 2018
Working Paper No. 80	Indian Handloom Industry: Potential and Prospects, September 2018
Working Paper No. 81	India- LAC Trade: Recent Trends and Opportunities in Select Countries, September 2018
Working Paper No. 82	Indian Investments in West Africa: Recent Trends and Prospects, October 2018
Working Paper No. 83	Enhancing Exports of Technical Textiles, December 2018
Working Paper No. 84	Indian Tourism Industry : Exploring Opportunities for Enhancing growth, February 2019
Working Paper No. 85	India-SADC Trade and Investment Relations: Harnessing The Potental, March 2019
Working Paper No. 86	Exports from Punjab: Trends, Opportunities, and Policy Insights, March 2019
Working Paper No. 87	Analytical Enquiry into inertia in India's Exports and Growth Prospects, March 2019
Working Paper No. 88	Promoting Exports From Bihar: Insights And Policy Perspectives, March 2019
Working Paper No. 89	India-Africa Partnership in Agriculture and Farm Mechanisation, June 2019
Working Paper No. 90	India-Myanmar Trade and Investment: Prospects and Way Forward, June 2019
Working Paper No. 91	Intensifying Trade Protectionism: Causes and Implications
Working Paper No. 92	Global Value Chain Integration: Enhancing India's Exports
Working Paper No. 93	Indian Automobile Industry : At The Crossroads
Working Paper No. 94	India's Bilateral Relations with the GCC Countries: Trends in Trade, Migration and Remittances
Working Paper No. 95	Indian Chemical Industry: New Directions
Working Paper No. 96	Promoting Exports from Kerala: Insights and Policy Perspective
Working Paper No. 97	India Securing Rare Earth Elements
Working Paper No. 98	Prospects for Enhancing India-Japan Trade Relations
Working Paper No. 99	Strengthening Exports from Karnataka
Working Paper No. 100	Countertrade Strategy: International Comparison and Indian Perspective
Working Paper No. 101	Promoting Agriculture Exports from India
Working Paper No. 102	India-Africa Healthcare: Prospects and Opportunities
Working Paper No. 103	Strengthening India-Bangladesh Partnership: Paving the Way for Regional Development
Working Paper No. 104	Indian Sports Goods Industry: Strategies for Tapping the Export Potential
Working Paper No. 105	Indian Solar Sector: Fostering Growth and Sustainable Development
Working Paper No. 106	india's Trade and Investment Relations with Australia: Recent Trends and Potential
Working Paper No. 107	India-United Kingdom Bilateral Relations: Trends, Opportunities and Way Ahead
Working Paper No. 108	Re-Connecting India and Central Asia: Prospects for Enhancing Trade and Investment
Working Paper No. 109	India-United Arab Emirates Bilateral Relations: Trends, Opportunities and Way Ahead

INDIA EXIM BANK'S MAJOR PROGRAMMES

Bank's Major Programmes



EXPORT-IMPORT BANK OF INDIA

HEAD OFFICE

Centre One Building, 21st Floor, World Trade Centre Complex, Cuffe Parade, Mumbai 400 005.
Phone: (91 22) 22172600 ● Fax : (91 22) 22182572
E-mail : ccg@eximbankindia.in ● Website: www.eximbankindia.in

LONDON BRANCH

5th Floor, 35 King Street, London EC2V 888 United Kingdom
Phone : (0044) 20 77969040 ● Fax : (0044) 20 76000936 ● E-Mail : eximlondon@eximbankindia.in

DOMESTIC OFFICES

Ahmedabad
Sakar II, 1st Floor,
Next to Ellisbridge Shopping Centre,
Ellisbridge P. O., Ahmedabad 380 006
Phone : (91 79) 26576843
Fax : (91 79) 26577696
E-mail : eximahro@eximbankindia.in

Bengaluru
Ramanashree Arcade, 4th Floor,
18, M. G. Road,
Bengaluru 560 001
Phone : (91 80) 25585755
Fax : (91 80) 25589107
E-mail : eximbro@eximbankindia.in

Chandigarh
C- 213, Elante offices, Plot No. 178-178A,
Industrial Area phase 1,
Chandigarh 160 002
Phone : (91 172) 4629171
Fax : (91 172) 4629175
E-mail : eximcro@eximbankindia.in

Chennai
Overseas Towers, 4th and 5th Floor,
756-L, Anna Salai, Chennai 600 002
Phone : (91 44) 28522830/31
Fax : (91 44) 28522832
E-mail : eximchro@eximbankindia.in

Guwahati
NEDFi House, 4th Floor, GS Road,
Dispur, Guwahati 781 006
Phone : (91 361) 2237607 /609
Fax : (91 361) 2237701
E-mail : eximgro@eximbankindia.in

Hyderabad
Golden Edifice, 2nd Floor,
6-3-639/640, Raj Bhavan Road,
Khairatabad Circle, Hyderabad 500 004
Phone : (91 40) 23307816
Fax : (91 40) 23317843
E-mail : eximhro@eximbankindia.in

Kolkata
Vanijya Bhawan, 4th Floor,
(International Trade Facilitation Centre),
1/1 Wood Street, Kolkata 700 016
Phone : (91 33) 68261301
Fax : (91 33) 68261302
E-mail : eximkro@eximbankindia.in

Mumbai
8th Floor, Maker Chamber IV,
Nariman Point,
Mumbai 400 021
Phone : (91 22) 22861300
Fax : (91 22) 22182572
E-mail : eximmro@eximbankindia.in

New Delhi
Office Block, Tower 1, 7th Floor,
Adjacent Ring Road, Kidwai Nagar (E)
New Delhi - 110 023
Phone : (91 11) 61242600 / 24607700
Fax : (91 11) 20815029
E-mail : eximndo@eximbankindia.in

Pune
No. 402 & 402(B), 4th floor, Signature Building,
Bhamburda, Bhandarkar Rd.,
Shivajinagar, Pune - 411 004
Phone : (91 20) 26403000
Fax : (91 20) 25648846
E-mail : eximpro@eximbankindia.in

OVERSEAS OFFICES

Abidjan
5th Floor,
Azur Building,
18-Docteur Crozet Road,
Plateau,
Abidjan,
Côte d'Ivoi re
Phone : (225) 2720242951
Fax : (225) 2720242950
Email : eximabidjan@eximbankindia.in

Addis Ababa
House No. 46,
JakRose Estate Compound,
Woreda 07,
Bole Sub-city,
Addis Ababa,
Ethiopia.
Phone : (251) 118222296
Fax : (251) 116610170
Email : aaro@eximbankindia.in

Dhaka
Madhumita Plaza, 12th Floor,
Plot No. 11, Road No. 11, Block G,
Banani, Dhaka, Bangladesh - 1213.
Phone : (88) 01708520444
E-mail : eximdhaka@eximbankindia.in

Dubai
Level 5, Tenancy IB, Gate Precinct Building No. 3,
Dubai International Financial Centre,
PO Box No. 506541, Dubai, UAE.
Phone : (971) 43637462
Fax : (971) 43637461
E-mail : eximdubai@eximbankindia.in

Johannesburg
2nd Floor, Sandton City Twin Towers East,
Sandhurst Ext. 3, Sandton 2196,
Johannesburg, South Africa.
Phone : (27) 113265103
Fax : (27) 117844511
E-mail : eximjro@eximbankindia.in

Singapore
20, Collyer Quay, #10-02,
Tung Centre, Singapore 049319.
Phone : (65) 65326464
Fax : (65) 65352131
E-mail : eximsingapore@eximbankindia.in

Washington D.C.
1750 Pennsylvania Avenue NW,
Suite 1202,
Washington D.C. 20006,
United States of America.
Phone : (1) 2022233238
Fax : (1) 2027858487
E-mail : eximwashington@eximbankindia.in

Yangon
House No. 54/A, Ground Floor,
Boyarnyunt Street, Dagon Township,
Yangon, Myanmar
Phone : (95) 1389520
E-mail : eximyangon@eximbankindia.in

Centre One Building, 21st Floor, World Trade Centre Complex, Cuffe Parade, Mumbai-400 005.

Ph.: (9122) 22172600 | Fax: (9122) 22182572

E-mail: ccg@eximbankindia.in | Website: www.eximbankindia.in, www.eximmitra.in

Follow us on