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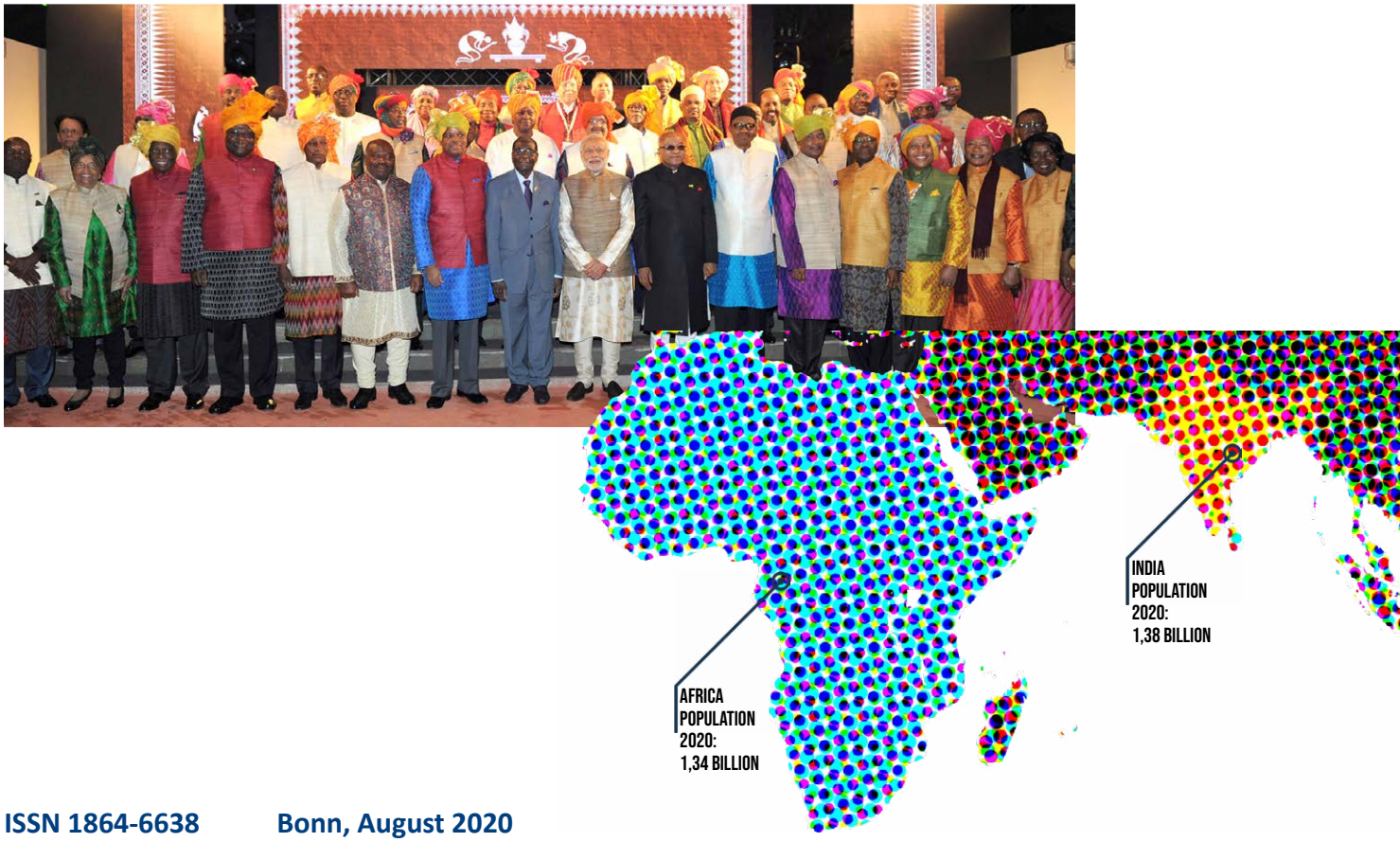
ASHOK GULATI AND SANDIP DAS

India-Africa Partnership in Trade and Investment: With focus on the Agriculture and Food Sector



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India-Africa Partnership in Trade and Investment

With Focus on the Agriculture and Food Sector

Ashok Gulati and Sandip Das

Abstract

India imports more from Africa than Africa does from India. A large share of Indian imports from Africa are oil and minerals. However, the India-Africa relations in food and agriculture are already important but have potentials for expansion. For complex reasons Africa had no transformation of its agriculture comparable to India's during its erstwhile Green Revolution in the 1960s and 70s. The African continent and the Indian Subcontinent still have a lot to learn from each other, especially as food systems and food value chains are modernizing and technologies in agriculture and food sectors are spreading. This paper looks at historical ties between India and Africa. It identifies trade and investment patterns in recent decades and describes the collaborations between India and several African countries in the field of agriculture. Finally, we point at potential areas for mutual cooperation in agriculture of the two regions in the future.

Keywords: India, Africa, agriculture, food, economics, trade, investment, innovation, economic cooperation

JEL codes: Q13, Q17, O19, O55

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Needless to say, the final responsibility for facts, figures, analysis and views expressed in this paper rests with the authors.

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1 Introduction

Global cooperation through trade and investments is a reality, yet there is also an important role for region-to-region cooperation arrangements. How should such regional cooperation be designed for mutual benefit and is there scope for such cooperation in the food and agricultural sector, whose transformation and growth are so critical in the development process? Also, it may be asked, to what extent has the India-Africa cooperation so far benefited Africa and vice versa?[1]

With these questions in mind, this paper looks at the India-Africa partnership in trade and investment in general, and in the agri-food space in particular since the beginning of 21st century. The paper aims at policy and industry practitioners. We broadly look at Government to Government (G2G) and Business to Business (B2B) or, one can also say, Private sector to Private sector (P2P) initiatives in the recent past and assess how to build on these initiatives that can benefit the people of both continents in the years to unfold, say towards 2030. Other actors, such as civil society organizations and NGOs may also play important roles in multi-actor partnerships in food systems between India and Africa.

Trade and investment relations are not just a matter of short-term response to incentives, and comparative advantages. Long-term institutional factors and cultural relations matter for economic development and partnership (Acemoglu et al., 2015). Therefore, before we launch our enquiry into the trade and investment sphere and how best they can be expanded in the years to unfold, we first look back at the cultural ties that India and Africa have developed over the last not just few decades but a few centuries. It will not be an exaggeration to say that understanding the cultural chemistry of people is an important building block in expanding economic relations. It is more so in agriculture, which is often strongly intertwined with culture.

Accordingly, this paper is organized as follows: In section 2, we look at the historical ties between India and Africa stretching back to at least a century or two, followed by trade and investments since 2000 in section 3. In section 4, we present the collaborations between India and several African countries in the field of agriculture, both on G2G basis as well as on P2P basis. In section 5, we summarize options for the way forward for the two regions that can bring greater prosperity to their people. The paper also has a long Annex that lists India's presence and role in specific African countries in greater detail, and gives country-wise details that have availed India's Line of credit for soft loans.

[1] See for instance https://www.brookings.edu/wp-content/uploads/2019/03/Are-Economic-Relations-with-India-Helping-Africa.pdf

2 A Brief Sketch of Historical Ties between India and Africa

India has shared cultural and economic ties with many African countries for centuries. These ties could be traced to those times when Indian traders used to sail to the East coast of Africa in search for trade in various products ranging from precious metals to agricultural items (EXIM Bank & Afrexim Bank, 2018). However, around 1820s, there were large inflows of Indian labourers (also referred to as Girmitias – derived from the Awadhi word "Girmit" meaning "agreement") from Uttar Pradesh, Bihar, and Tamil Nadu, etc. to the sugarcane plantations in Mauritius, Madagascar, and other colonies facilitated by the British and French. The construction of the Ugandan Railways (1896-1901), which connected Mombasa and the coast of Lake Victoria, led to further migration of Indian labourers to Africa. Kenya and Uganda, both British colonies, were dependent for their external trade on Mombasa port. In order to link the port with the mainland, a railway line was started to Nairobi in 1899. Many Indian labourers who were involved in the construction of the railway lines decided to settle down in East Africa and commenced agricultural and trade activities (Modi et al., 2019). The British replaced the Germans as the colonial power in East Africa in 1916 and encouraged Indians to grow cotton and share their farming techniques with African counterparts. Cotton was particularly encouraged during the World Wars' era as the British Cotton Growing Association wanted uninterrupted supply of raw material to the British textile industry. After the success with cotton, the British also encouraged Indians to develop the cotton and sugar industry in Africa.

Out of the 54 African countries, India has 'special ties' with countries like South Africa, Ethiopia, Kenya, Uganda, Nigeria, Ghana, and Mauritius to name a few. At present, people of Indian origin play critical roles in many sectors, from judiciary to education to businesses, etc. in many African countries (Salvadori, 1989). Several Kenyan citizens of Indian origin occupy senior positions as lawyers, judges, doctors and academics. Today, about 3 million people of Indian origin live in Africa, and about two thirds of these live in South Africa, Mauritius and Reunion (WEF, 2015).

In Ethiopia, e.g., Indians played a crucial role in the education sector in the 1960s, when there were sizeable numbers of Indian teachers in schools all over Ethiopia. Today, there are many Indian teachers serving in the rapidly expanding Ethiopian University system. It is estimated that currently, there are 2000-2500 Indian teachers and academics in 30 universities and higher educational institutions in Ethiopia.

In Uganda, Indians (including persons of Indian origin, PIOs) represent close to 1% of the population but contribute a much larger share to Uganda's tax revenue, as per data from Bank of Uganda and Uganda Revenue Authority (Ministry of External Affairs, 2019).

Nigeria is India's biggest trading partner in Africa. In Ghana, Indian origin businesspersons have presence in many businesses ranging from garments and textiles to pharmaceuticals and plastics. In Mauritius, persons of Indian origin constitute about 68% of the population. In South Africa, Indians constitute about 3% of the population. Needless to say, South Africa also marks the birth of the philosophy of 'Satyagraha' (quest for truth) and non-violent civil disobedience under the leadership of Mahatma Gandhi, which later on became a major political instrument for India's independence struggle from the British. It also influenced several leaders around the world from Martin Luther King in the USA to Nelson Mandela in South Africa (Box 1).

Box 1: Mahatma Gandhi in South Africa

Mohandas Karam Chand Gandhi – 'Mahatma Gandhi' travelled to South Africa in 1893 to serve as legal counselor to an Indian merchant Dada Abdulla. While travelling from Durban to Pretoria for legal work on June 7, 1893, Gandhi had booked a 'first-class' train ticket. During the journey, at the Pietermaritzburg station, he was thrown out from the first-class coach, as a white man objected to his presence in the first-class carriage. Gandhi spent the night in the station's waiting room. This incident was a turning point in his life. It laid the foundation for the launch of a movement against racism and gave birth to the philosophy of Satyagraha (quest for truth) and Ahimsa (non-violent civil disobedience) against the colonial British rule. Gandhi's philosophy inspired the civil rights movement in South Africa and subsequently, Gandhi came back to India in 1915 and launched a movement against British colonial rule. Indian and South African ties had been mainly built on the works and actions of leaders like Mahatma Gandhi and Nelson Mandela. It is widely believed that common colonial past and India's freedom struggle (led by Mahatma Gandhi) against the British rule inspired many African countries fight against colonial rule in Africa.

Source: South African History Online (2019).

3 India-Africa Bilateral Trade & Investment

Bilateral trade and investment ties between India and Africa are mainly a result of business activities undertaken by corporate players. But over the last two decades, the Indian government has also taken keen interest to build stronger ties with African countries. It launched a 'Focus Africa' campaign in 2002, which got a further fillip with the launch of the India-Africa Forum Summit (IAFS) in 2008.

The Export-Import Bank of India (EXIM Bank) initiated the 'Focus Africa' programme for enhancing trade with African countries. Initially, the programme was focused on Sub-Saharan Africa, but in 2003, it was expanded to cover North African countries as well.

In 2008, with the first India-Africa Forum Summit (IAFS), the Indian government launched a process of structured engagement with African countries. The Duty-Free Tariff Preference (DFTP) Scheme for Least Developed Countries (LDCs) was announced in the first IAFS. Thereafter, an annual dialogue of Trade Ministers of respective countries was launched on the side-lines of the second IAFS in 2011 to discuss bilateral trade issues. Also, in 2017, India hosted the annual meeting of the African Development Bank (AfDB) in Ahmedabad. The series of steps initiated by the Indian government in the last two decades broadly show India's efforts in enhancing economic cooperation with African countries (Beri, 2020).

Africa as a development partner of India first became visible with commencement of a focused engagement with Africa under the framework of IAFS. Till now, three editions of IAFS have been organised– 2008 (New Delhi, India), 2011 (Addis Ababa, Ethiopia), 2015 (New Delhi, India) – and the fourth edition is slated to be held in the later part of 2020 in Africa.

According to officials of India's Ministry of External Affairs (MEA)[2] India has made 29 visits to African countries at the level of President, Vice President, and Prime Minister since 2014. And in terms of ministerial-level visits, all 54 African countries have been covered from the side of Indian government. From the African side, over 32 heads of African countries have visited India from 2016 to 2019.

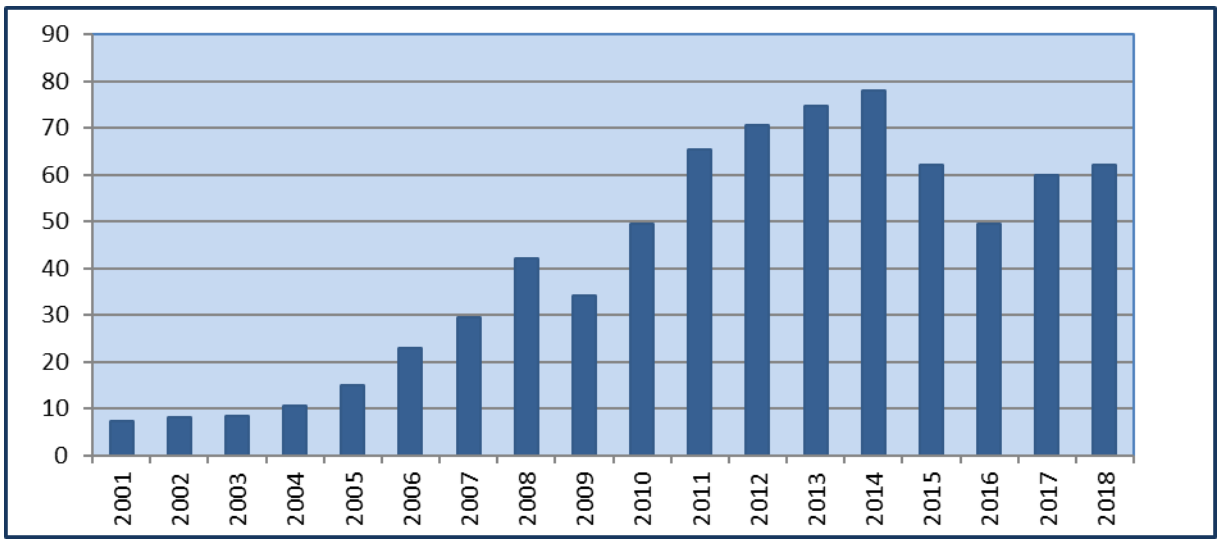
Industry associations like the Confederation of Indian Industry (CII) and the Federation of Indian Chambers of Commerce and Industry (FICCI), have also stepped up their efforts for increasing their presence in Africa. CII so far has organised 14 India-Africa Project Partnership Conclaves since 2005. These events provide platforms for business leaders from India and Africa to discuss collaborations and explore investment opportunities. The participation of African governments as well as businesses in these conclaves has increased significantly. CII organizes Chalo Africa (Let's go to Africa), while FICCI has been organizing initiatives such as Namaskar Africa, a series of business conferences.

It is interesting to note that since 2005, when India started witnessing a high growth of 7-8% per annum in its GDP, there has been a rapid increase in India's imports of minerals and fuels from Africa. An analysis of the African-Indian trade and investment by Afrexim Bank and EXIM Bank in their report (2018) states that "Trade development between the two sides has been anchored on the rise in crude oil imports from Africa, reinforced by simultaneous growth in India's exports of refined petroleum products in the other direction, creating a symbiotic relationship between the two development partners" (Afrexim Bank and EXIM Bank, 2018, p. 19).

As crude oil (petroleum products) occupies a significant share in bilateral trade, India's trade and economic cooperation had been strengthened with Western African countries. Economic collaborations with other regions of Africa – north and south – have also got a boost in the last decade.

[2] Based on interactions with MEA officials.

Figure 1: India-Africa Trade 2001-2018 (USD billion)

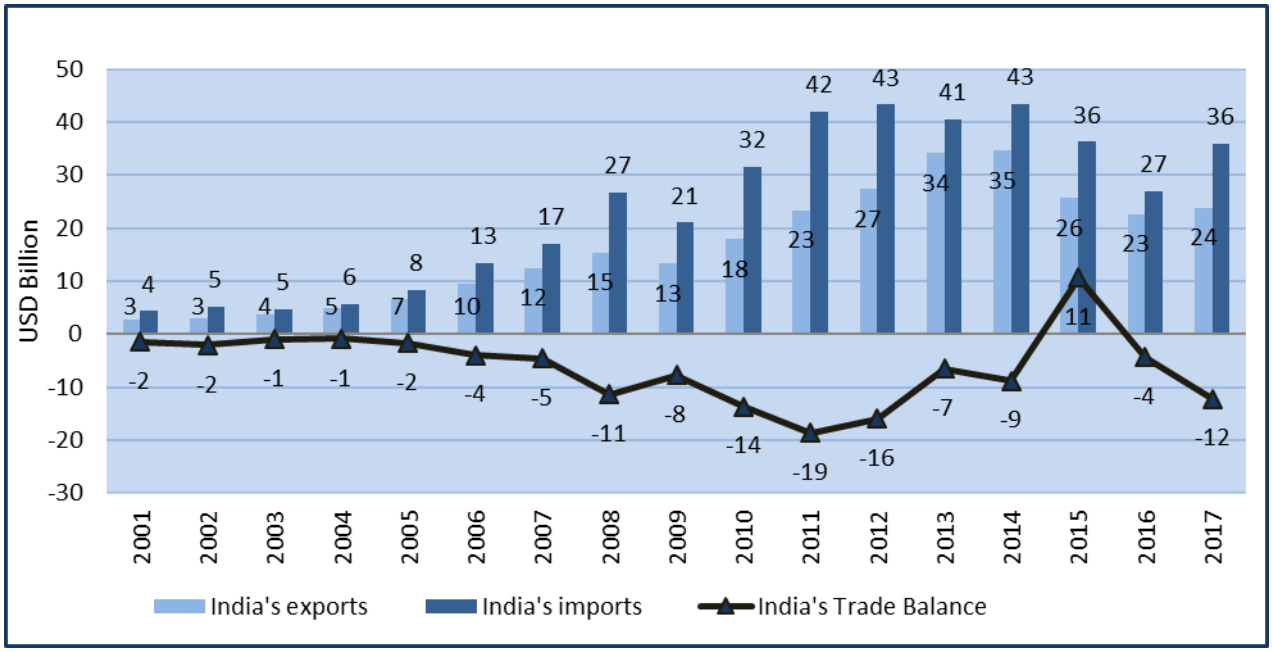


Source: Afreximbank & EXIM Bank (2018) and Beri (2020).

The India-Africa trade volume rose from USD 7.2 billion to USD 78 billion between 2001 and 2014. This is an almost tenfold increase within 13 years (Figure 1) and a tremendous growth story on the trade front which largely coincided with India's overall GDP growth. However, the volume of trade after peaking in 2014 staggered and in fact came down to USD 62 billion in 2018. This happened despite the fact that, overall, India's growth story between 2014-15 and 2018-19 remained more or less intact with a GDP growth of 7.4% per annum. Experts attribute this decline in trade volume in the post 2014 period basically to factors such as a fall in commodity prices and the slowing down of the global economy after the end of the commodity boom period in 2014 (Afreximbank & EXIM Bank, 2018).

Overall, the bilateral trade between India and Africa grew at an average compound annual growth rate (CAGR) of 14.2% over the period 2001-2017. India-Africa trade was 8% of India's and 6.4% of Africa's total trade in 2017. In 2001, it was 7.6% of India's and 2.7% of Africa's total trade. Thus, over a period of 17 years, India's presence in Africa's global trade more than doubled, while Africa's presence in India's global trade remained more or less the same. It is also interesting to note that India is a "net importer" from Africa. The net imports from Africa increased from USD 2 billion in 2001 to USD 19 billion in 2011 and then came down to about USD 12 billion in 2017 (see Figure 2).

Figure 2: India-Africa trade balance (USD billion)



Source: Afreximbank and EXIM Bank (2018).

Table 1: India's top five commodities exported to Africa

Year (% share of total exports)	2001	2005	2010	2015	2018
	Cotton (14)	Minerals fuels & oil (12)	Minerals fuels & oil (23)	Minerals fuels & oil (21)	Minerals fuels & oil (17)
	Pharmaceutical products (8)	Automotive & parts (10)	Automotive & parts (10)	Pharmaceutical products (12)	Automotive & parts (11)
	General Machinery & parts (7)	Cereals (9)	Pharmaceutical products (8)	Automotive & parts (11)	Pharmaceutical products (11)
	Automotive & parts (6)	General Machinery & parts (8)	General Machinery & parts (6)	General Machinery & parts (6)	General Machinery & parts (7)
	Iron & Steel (5)	Pharmaceutical products (7)	Electrical machinery (6)	Cereals (6)	Cereals (6)
Total value of exports (USD billion)	**2.81**	**6.73**	**17.88**	**25.64**	**26.95**

Source: Trade Map (2020).

It is also interesting to note that as India's trade with Africa increased, its composition also underwent significant changes over the period 2000-2017 (Table 1). In 2017, India's export portfolio was dominated by petroleum products, vehicles, medicine and pharmaceutical products. These items accounted for 38.8% of India's exports to Africa. The share of textile yarns (a product India used to export to Africa in the early 2000s) in overall exports has declined and was replaced by petroleum products. South Africa, Mozambique, Mauritius, Kenya, and Tanzania accounted for over 82% of India's exports of petroleum products to Africa in 2017 (Afreximbank & EXIM Bank, 2018).

Table 2: India's top commodity imports from Africa

Year (% share of total imports)	2001	2005	2010	2015	2018
	Precious metal and stones (41)	Precious metals & stones (39)	Minerals fuels & oil (70)	Mineral fuel & oil (56%)	Minerals fuels & oil (60)
	Organic/Inorganic chemicals (21)	Organic/Inorganic chemicals (19)	Precious metals & stones (14)	Precious metals & stones (20)	Precious metals & stones (18)
	Mineral fuels & oil (7)	Iron & Steel (9.3)	Organic & Inorganic chemicals (3)	Fruit & nuts (4)	Fruit & nuts (4)
	Cotton (5)	Fruit & nuts (4)	Slag & Ash (2)	Organic / Inorganic chemicals (3)	Organic & Inorganic chemicals (3)
	Wood articles (5)	Mineral oil & fuels (4)	Fruit & nut (2)	Slag & Ash (3)	Slag & Ash (2)
Total value of imports (USD billion)	**2.43**	**4.92**	**31.44**	**33.7**	**41.51**

Source: Trade Map (2020).

India's dependency on Africa's natural resources is amply indicated in the table on India's key commodity import from Africa (Table 2). The share of petroleum fuel (mostly crude) in India's imports from Africa increased from around one-third in 2001 to over two thirds in 2011. Subsequently, the crude oil import declined following a fall in crude oil prices. Nigeria and Angola were the major sources of petroleum products, supplying 61.6% and 20.3%, respectively, of India's total imports of the product from Africa in 2017 (Afreximbank & EXIM Bank, 2018). The share of gold, which is the second-largest import from Africa, remains high.

3.1 India's corporate sector presence in Africa

India also supported development initiatives in Africa under the broad banner of South-South Cooperation.

During the 1960s and 1970s, the trade and investment relations were small in volume. However, there were some Indian companies that invested in East African countries even in the 1960s, when India's domestic policies were highly restrictive in allocating scarce foreign exchange required for

companies to invest abroad. India was chronically short of foreign exchange between 1947 and 1991, largely due to an overvalued exchange rate and an import substitution policy. From 1959 to 1960, the Birla Group had set up a textile mill in Ethiopia under a joint venture. In 1974, Pan Paper was established, a joint venture between Orient Paper and Industries (part of the Birla Group), the Kenyan government and the World Bank's International Finance Corporation. Generally, the investments during that period were typically led by a handful of large Indian firms, but the amounts invested were typically smaller in size than contemporary flows (Chakrabarty, 2018).

The economic reforms in India in 1991 changed the whole scenario about foreign exchange. India unleashed sweeping reforms in 1991 in response to the foreign exchange crisis. India had foreign exchange reserves of just USD 1.4 billion in July 1991, sufficient for only two weeks of import bills. With massive adjustments in exchange rates (devaluation), de-licensing of much of the industry, and reducing high tariff walls on several industrial products, India chose a different growth trajectory. The foreign exchange gradually increased from USD 1.4 billion in July 1991 to USD 480 billion by the end of February 2020.

As a part of the sweeping economic reforms initiated in 1991, India changed the rules and procedures for investments outside India. By 2003, with growing reserves of foreign exchange, the ceiling on Indian investment outside the country was abolished. Companies were allowed to invest abroad without any regulatory restrictions. Consequently, both public sector enterprises and privately held and listed corporate entities invested in Africa in the last decade (Table 3).

Table 3: Indian companies' presence in Africa (2008-2016)

Companies	Investment (USD million)	Countries
ONGC Videsh	3019	Congo, Egypt, Ivory Coast, Libya, Mozambique and Sudan
Gujarat State Petroleum Corporation	319.7	Egypt
Interlabel Industries	121.4	Kenya
OIL	105.4	Gabon, Libya, Nigeria
Coromandel	97.5	Tunisia
Indian Hotels & company ltd	93.8	South Africa
Gujarat State Fertiliser & Chemical	92.9	Tunisia
Varun Beverages	74.7	Morocco
Tata Steel	65.3	South Africa
Tata International	63	South Africa
Tata Power	48.8	Zambia

Note: Figures for investment in Mauritius excluded.
Source: Chakrabarty (2018).

Chakrabarty (2018) suggests that 597 Indian companies invested in Africa between 2008 and 2016 with a cumulative investment of about USD 5 billion. The top 11 companies account for about 80% of the total Indian investment in Africa. With the exception of ONGC Videsh and OIL (Indian government owned public sector undertaking), the rest of the companies mostly have presence in only one country. Much of the investment from India is in East Africa (63%) and the North African region (22%). The investment in South and West Africa was only 9% and 5%, respectively. Countries in the Central African region attracted very little investment from India according to Chakrabarty (2018).

In 2010, India's major private telecom service provider Airtel acquired Zain Africa with an investment of USD 10.7 billion. Airtel has operations in 14 countries. There are Indian corporates such as the Kirloskar group, India's largest water pump makers which has presence in South Africa, Egypt, Nigeria, Zambia, Kenya and Tanzania. Tata Group, Reliance, Vedanta, Mahindra & Mahindra, Essar,

Shapporji Pallonji, and Shree Renuka Sugars also have their footprints in Africa. In the field of agriculture and allied sectors, there are several private sector Indian companies which have operations in African countries. For example, since 1998, the Rajkot (Gujarat) based enterprise "Captain Tractors" has manufactured and supplied several variants of mini-tractors which are being used by farmers with small- and medium-sized farms in Africa. The company has been exporting tractors to many countries in Africa – South Africa, Morocco, Ghana, Zimbabwe, Rwanda, Kenya and Ethiopia.

Jalgaon (Maharashtra) based Jain Irrigation Systems (JIS), which is India's largest micro irrigation system company and the second largest globally, has expanded its footprints in Africa, especially in the last decade. Based in Kigali, Rwanda, JIS has taken up several projects on behalf of many governments of various African countries. The company has presence in 34 countries in Africa including Algeria, Nigeria, Angola, Botswana, South Africa, Madagascar, Tanzania, Kenya and Ethiopia. JIS has been collaborating with the government of Kenya, Ethiopia, Rwanda, Mozambique, Tanzania, Ghana and Nigeria on the issue of promoting sustainable agriculture in Africa[3]. JIS has been awarded projects related to irrigation and water supply in Africa. For instance, in 2018, JIS was awarded a project worth USD 18.27 million by the Rwanda Agriculture Board, Kigali, Rwanda for irrigation and watershed development in the Mahama Sector under Export Targeted Modern Irrigated Agriculture Projects in Rwanda. The project is financed by EXIM Bank under the Indian government's Line of Credit (LOC) programme. The project is aimed at the development of infrastructure for various irrigation systems – sprinkler irrigation, centre pivot and pipe hydrant systems. Under the project, 1220 hectare of land will be brought under irrigation. There is a component of watershed development and capacity building for over 1752 hectare. In 2015, JIS was awarded a project worth USD 32.98 million by the Dar Es Salaam Water and Sewerage Authority for the Supply and Installation of Water Distribution Network in Dar Es Salaam, the financial capital of Tanzania. The project is also financed by EXIM Bank under the LOC programme. This was an integrated water supply project for reducing losses during water supply.

Mauritius has the highest share in India's FDI in Africa (see Box 2). Mauritius also accounts for the largest source of FDI to India indicating its use as a base for "tax avoidance". Therefore, FDI flows to Mauritius do not truly indicate a trend in India's real investment in the African continent. That is the reason why we have not included Mauritius in our earlier discussions on trade and investments.

Box 2: FDI through Mauritius route

During 2008-2016, India's Foreign Direct Investment (FDI) to Mauritius was US $ 47.6 billion, while only US $ 5 billion went to the rest of Africa which represents only two percent of global Indian FDI and 9.6% of Indian FDI flows to Africa. However, FDI to India through Mauritius route during April 2000 to March 2019 was USD 134.46 billion (32% of total FDI inflows over this period). According to Ministry of External Affairs (MEA), Mauritius was the largest source of FDI into India during 2017-18, with FDI equity inflows amounting to USD 15.94 billion. It is officially acknowledged that a large share of Indian FDI to Mauritius is "round-tripped" back to India due to island nation "tax haven" status. This is facilitated by the double taxation avoidance agreement with India signed in 1983. The treaty was renegotiated in 2016.

Source: Ministry of External Relation (2019e).

Job creation was significant as the case of Indian corporate engagement shows for South Africa (Box 3).

[3] Personal communication with Jain Irrigation.

Box 3: Job creation in South Africa by Indian corporates

Large Indian companies have established a presence in various sectors in South Africa. Indian companies have invested especially in sectors like pharmaceuticals, automotive, financial services, information technology, mining and green economy. India and South Africa have continued their economic collaborations using multilateral platforms such as BRICS and IBSA (India, Brazil, South Africa).

In 2017, the Confederation of Indian Industry (SA) in collaboration with the Consul General of India in Johannesburg had carried out a survey amongst 140 Indian companies which have presence in South Africa. The purpose of the survey was to measure the footprint of Indian industry in South Africa. Information was collected on the basis of key indicators like total investment in South Africa, number of people employed, number of local South Africans employed, training and skills development programs and corporate social investment initiatives. The survey revealed that a total of Rs 33000 Mio. had been invested by 45% of the companies surveyed. These companies employed around 11 000 people, out of which 70% are South African nationals.

The report titled "Indian industry's inclusive footprint in South Africa", by CII & PWC in 2018 stated that as per conservative estimate Indian industry has invested Rs 50000 Mio. in South Africa and created direct employment opportunities for more than 18,000 South African workers.

Source: CII & PWC (2018).

3.2 India's line of credits through EXIM Bank to Africa: Key areas of credit flow

In a bid to enhance India's trade and economic ties with African countries, the instrument of Line of Credits (LOCs) is being used by the government for many years. The key governing guidelines of LOCs is referred to as Indian Development and Economic Assistance Scheme (IDEAS). IDEAS had been developed by the MEA and the Department of Economic Affairs of the Ministry of Finance. The LOCs are in operations since 2003-04. LOCs through EXIM Bank allow African countries to import goods and services from India on deferred credit terms.

LOCs are not treated as grants but as 'soft loans' provided on concessional interest rates to developing countries. The repayments of these loans are the responsibility of the government of the respective countries.

The time duration of credit under the LOCs framework ranges between 20 and 25 years. There is also a provision of a moratorium ofr 5 years for repayment of loans under LOCs. The interest rate under LOCs ranges from 1.5% to 1.75% per annum. Under LOCs, there are provisions such that goods and services and 75% of the value of contracts must be sourced from India. Another vital aspect of this credit arrangement is that LOCs are not subjected to any taxes or levies in the borrowing country. LOCs are meant for projects in sectors – agri-mechanization, rural electrification, power generation and distribution, sugar, cement, rail/road infrastructures, etc. (EXIM Bank, 2020).

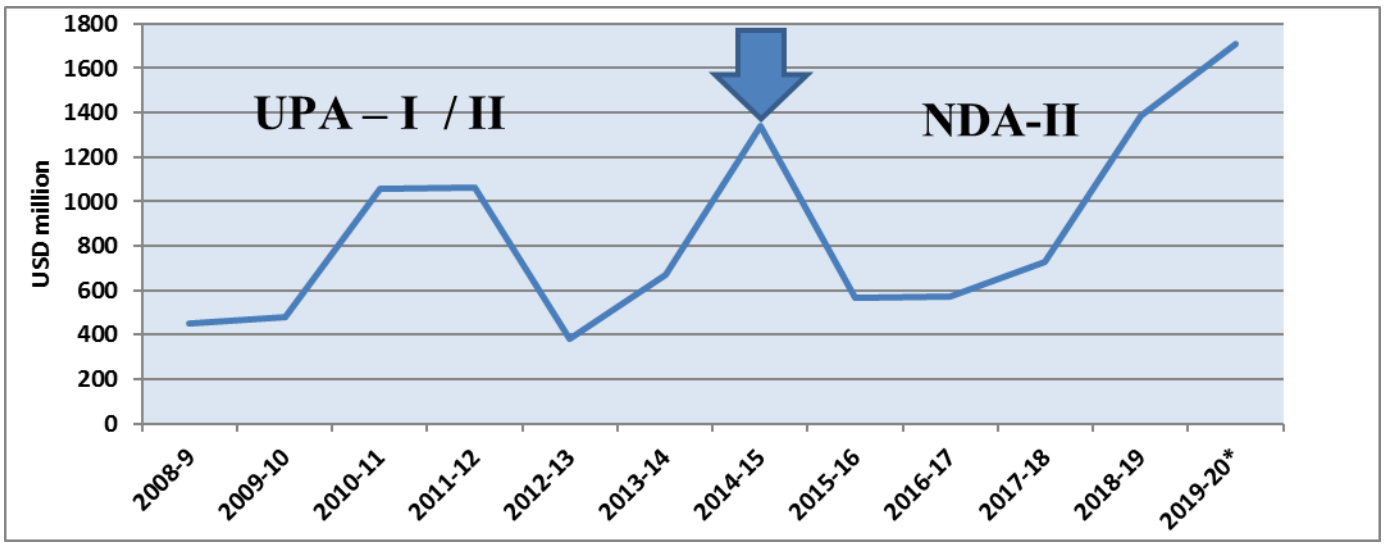
Table 4: LOCs between 2014-2015 and 2018-2019

Year	LOCs (USD million)	No of projects – countries	Focus Areas
2014-15	1340	14, Congo, Ivory Coast, Gambia, Ghana, Mauritius	Power, electrification, sugarcane development, water supply, agri mechanization services centre
2015-16	569	9, Gambia, Kenya, Malawi, Mauritius, Sierra Leone, Tanzania, Zimbabwe	Agriculture mechanization, water supply, textile mill upgradation, power transmission line
2016-17	573	3, Ivory Coast, Madagascar, Tanzania	Fertilizer plant, water supply, military hospital
2017-18	728	6, Mozambique, Rwanda, Senegal, Zambia	Construction of bore wells with hand pumps, vocational training centres, health care system
2018-19	1384	15, Burundi, Democratic Republic of Congo, Ethiopia, Malawi, Mauritius, Mozambique, Rwanda, Uganda, Zimbabwe	Solar, drinking water, Special Economic Zones (SEZs), irrigation, development of infrastructure for the agriculture and dairy Sector, thermal power
Total	4594		

Source: EXIM Bank (2020), see Annexure for details of the projects.

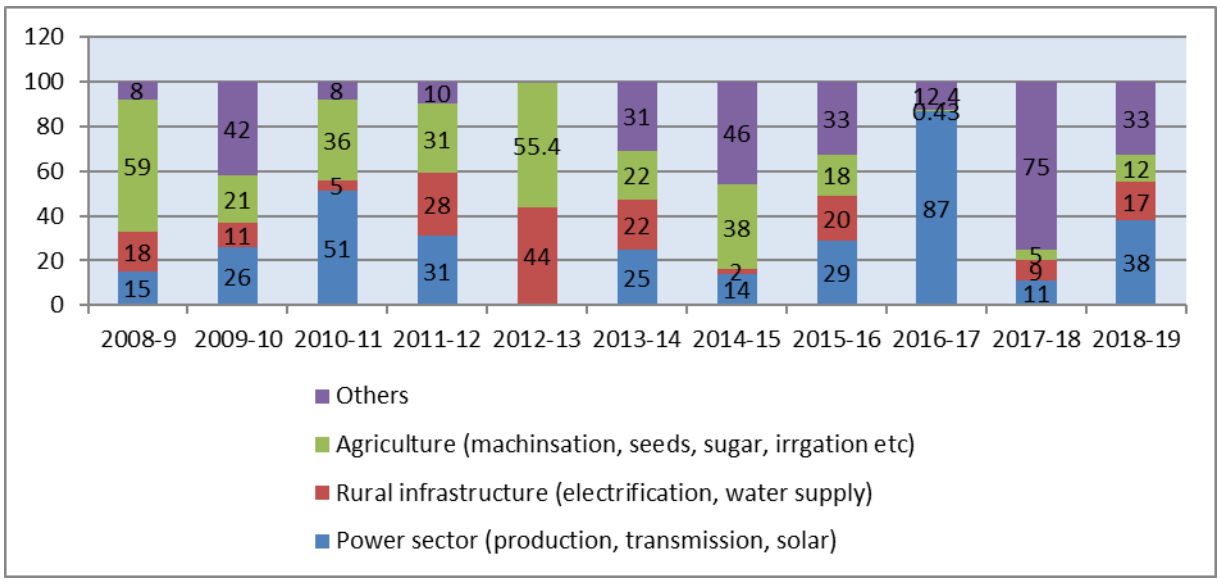
During 2019-20, there were 20 projects in the pipeline under the LOCs extended to Africa. The projects relate to sectors such as solar power, power transmission, irrigation, farm mechanization, rural broadband network, tractors and infrastructure for the dairy sector, which together are worth USD 1.71 billion. Many countries like Democratic Republic of Congo, Ethiopia, Gambia, Ghana, Madagascar, Malawi, Mali, Sierra Leone, Uganda & Zimbabwe will get benefits of LOCs in the current fiscal.

Figure 3: Line of credit to Africa (USD million)



Source: EXIM Bank (2020), *in the pipeline.

Figure 4: Key sector wise: LOCs



Source: EXIM Bank (2020), line of credit statistics, refer Annexure – II.

Figure 4 indicates that most of the LOCs are in sectors such as power, agriculture, rural infrastructure and others. This demonstrates, in a way, India's support towards building vital infrastructure like power, irrigation and water supplies in many African countries. Figure 3 reflects the thrust of the current Indian government on expanding the scope of line of credits for Africa. Since the current regime came into power in 2014, the focus has been on extending credit to African countries which ensures investment in infrastructure sectors like power, water supply and agriculture.

4 Cooperation in the Field of Agriculture: G2G & P2P

The President of Tanzania and former Chairperson of the African Union, Mr. Jakaya Mrisho Kikwete had urged India to invest in capacity building in the area of agriculture at the India-Africa Forum Summit held in Delhi in 2008. India and Africa have established cooperation in the field of agriculture and allied sectors through several initiatives such as training programmes and providing concessional credits in areas of farm mechanization and technology, irrigation, soil quality assessment and conservation. The collaboration with Africa in the field of agriculture has two distinct aspects:

- Collaboration between the government of India and African countries (G2G)
- Collaboration amongst private sectors of respective countries (P2P)

Some of the ongoing collaborations of the Indian government's capacity building programme in Africa include:

- Setting up of agricultural research institutes and training programmes
- Promoting technical exchange in the agricultural, agro-processing and allied sectors
- Provisions for scholarships to African students to study in agricultural universities in India
- Sharing technology for climate smart agriculture between the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and arid regions in Africa
- Investment by Indian private sector.

4.1 Key aspects of G2G collaboration

Following the India-Africa Forum Summit in 2008, a number of fellowships have been offered to African students. The fellowship programme is being coordinated by the Ministry of External Affairs (MEA), India. The focus of the fellowship programme is to help African countries develop their own human resources, which in turn would help them develop their agriculture sector. The Department of Agricultural Research & Education (DARE) affiliated with the Ministry of Agriculture & Farmers' Welfare in India, has the responsibility of providing "agricultural education" to African countries through various premier agricultural universities in states as well as institutes under the Indian Council of Agricultural Research (ICAR). The programme is titled "The India-Africa Fellowship Program". Students from African countries are provided admissions into Indian Agricultural Universities for B.Sc., M.Sc. and Ph. D. programmes.

At present, India offers 150 fellowships to African students for higher studies in AGRI-research. The fellowships are available in various agricultural universities such as Punjab Agricultural University, Indian Agricultural Research Institute (IARI) and other institutes which have international student hostels. Currently, 89 students are enrolled in various programmes in agricultural universities. The stipend of the fellowship amounts to USD 1200 per month per student[4].

The Indian Council for Cultural Relations (ICCR) provides 900 scholarships annually to students of African countries in the field of higher education. Under the Indian Technical & Economic Cooperation (ITEC), various short and medium training programmes are offered to working professionals of African countries for their capacity building and skill development (see Box 4). For African countries and Africa related multilateral agencies, India offers around 5000 of these scholarships annually.

[4] Based on interaction with A. Arunachalam, Assistant Director General (International Relations), ICAR.

As may be recalled, the second India-Africa Forum Summit, held in Ethiopia in May 2011, led to the formulation of the Addis Ababa Declaration. This declaration provided the blueprint for an enhanced India-Africa cooperation in the field of infrastructure development, human resources and institution building. At the third edition of the India-Africa Forum Summit held in New Delhi in 2015, India decided to extend collaboration in the agriculture sector through providing equipment like tillers, cultivators, harrowers and harvesters at concessional rates. The purpose was to support modernization of the agriculture sector in Africa. India plans to transfer modern technologies to boost agricultural production in African countries.

The government has approved Rs 11000 million (about USD 160 million)[5] worth of projects on agricultural research cooperation with Africa[6]. Some of the key projects approved include:

- Establishment of soil testing labs,
- Setting up agricultural extension systems on the lines of the Krishi Vigyan Kendra (KVK) model in India,
- PAN Africa institute of agriculture and rural development (Memorandum of Understanding (MoU's) have been signed).

However, substantial work remains to be completed by India in this regard.

Box 4: India-Africa Institute of Agriculture and Rural Development, Malawi

The Ministry of External Affairs has signed MoU with the National Bank for Agriculture and Rural Development Consultancy Service (NABCONS) for setting up the India-Africa Institute of Agriculture and Rural Development (IAIARD) in Malawi in April, 2019. IAIARD will develop training programs in vital areas like micro-financing, agro-financing, entrepreneurship development etc. and will be a Pan-African Institute wherein trainees would be drawn from all the African countries. India will bear the cost of course expenses for African students and other expenses initially for three years.

Source: Ministry of External Affairs (2019g).

One example of G2G cooperation is the contract agreement on the trade of pulses with Mozambique. In a bid to curb spiralling of pulse prices between 2014 and 2016, the Indian government had initiated discussions with various lentil growing countries especially in Africa to produce commodities for export to India. India signed a Memorandum of Understanding (MoU) with Mozambique on cooperation in the field of production and marketing of "pigeon peas" for a period of five years on the 7th of July in 2016. The MOU states that India will import 0.75 million tonnes of pulses from Mozambique over five years through private parties.

The total pulses production in India in 2015-16 was estimated at around 17 million tonnes while 5.79 million tonnes of pulses were imported from various countries to meet the domestic requirements. The MoU with Mozambique for imports of pulses was signed keeping in view the domestic prices and availability scenario at that time (in 2016). The objective was to promote the production of pulses in Mozambique and to export them to India. Under the MoU, there is a minimum quantity to be imported annually from Mozambique (pigeon peas and other pulses) to India till 2020-21. These imports are facilitated through private channels or Government to Government (G2G) sales.

The Indian government is committed to purchase pulses from Mozambique only to the extent of meeting the shortfall in targets of imports by private traders. Until now, no imports of pulses have

[5] As per the exchange rate: USD 1=Rs 68.49 on 15.7.2018.
[6] Based on interaction with MEA official.

been made from Mozambique on governmental account under the MoU, although imports are coming through private trade.

Table 5: Minimum quantities of pulses to be imported from Mozambique to India between 2016-17 and 2020-21

Year	Quantity for Imports in lakh metric tonnes (LMT)
2016-17	1.00
2017-18	1.25
2018-19	1.50
2019-20	1.75
2020-2021	2.00

Source: Shri Piyush Goel, Hon'ble Minister for Commerce and Industry, Lok Sabha, July 10, 2019 according to the Ministry of Commerce & Industry (2019).

According to DGFT data, out of a total target of 1.5 lakh tonnes of pulse imports in 2018-19, 1.49 lakh tonnes of pulses were actually imported from Mozambique through private trade. In 2019-20, against a target of 1.75 lakh tonnes of pulse imports, 1.15 lakh tonnes of lentils had been imported through private trade by the end of December 2019.

Africa's exports of pulses to India were valued at around USD 330 million in 2017 and represented about 5% of India's total imports of pulses. Tanzania and Mozambique roughly accounted for 60% of Africa's pulse exports to India. Other African countries which supply pulses to India include Ethiopia, Malawi, South Africa and Madagascar.

4.2 Key elements of P2P cooperation

A major chunk of India's non-basmati rice exports goes to Africa especially to the countries in the western parts of the continent. In 2018, an Analysis of Africa and India's Trade and Investment by the African Export-Import Bank (Afreximbank) and the EXIM Bank (India) found that rice trade is mostly driven by the private sector. India's exports of rice to Africa were valued USD 1.7 billion in 2017, which constitute about 26% of India's global rice shipments. Four Western African countries — Benin, Senegal, Guinea & Ivory Coast — account for over 50% of India's rice exports to Africa. According to an EXIM bank analysis, the Western African region has the greatest potential for India's rice exports, estimated at over USD 3 billion. There is also rice export potential from India to Eastern Africa. This is due to the production deficit in most African countries, resulting from low yields in the wake of rising consumption (Afreximbank & EXIM Bank, 2018).

Table 6: India's top ten export destinations for non-basmati rice to Africa (2019-20)

	2017-2018		2018-2019		2019-2020	
Countries	Volume (lakh tonnes)	Value (USD million)	Volume (lakh tonnes)	Value (USD million)	Volume (lakh tonnes)	Value (USD million)
Benin	7.78	314	6.99	264	5.35	195
Somalia	3.28	125	3.26	121	3.46	121
Togo	1.23	48	2.52	93	3.02	107
Ivory Coast	3.98	148	4.38	163	2.93	107
Liberia	2.64	100	3.01	117	2.19	80
Djibouti	2.2	80	2.67	91	1.92	68.5
Senegal	8.33	263	7.2	221	2.17	67.44
South Africa	1.42	55	1.49	54	1.49	51.8
Egypt	0.6	4	1.29	47	0.81	29.62
Sudan	0.58	23.74	0.56	21.91	0.74	27.73
Total*	86.48	3564	75.99	3047	50.40	2014

Note: *including other countries; 10 lakhs equal one million
Source: Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce & Industry (2020).

Out of its total non-basmati rice shipment, India has been exporting a major chunk of it to African countries mostly to the countries mentioned in Tables 6 and 7. India being one of the largest exporters of rice in the world, commerce ministry officials say that there is potential to increase rice (non-basmati) exports especially to the Eastern and Southern Africa regions. In terms of the volume, India's non-basmati rice exports to Africa constitute 38.5% (2017-18), 44% (2018-19) and 51% (2019-20) of India's total non-basmati rice shipments.

Table 7: India's top ten export destinations for non-basmati rice to Africa (2019-20) in terms of value in total exports

Countries	% share in total exports in terms of value
Benin	9.68
Somalia	6
Togo	5.3
Ivory Coast	5.3
Liberia	4
Djibouti	3.4
Senegal	3.34
South Africa	2.57
Egypt	1.47
Sudan	1.37

Note: India also exports non-basmati rice to other countries – Niger, Ghana, Ethiopia, Algeria, Gambia, Kenya, Angola & Mauritius.
Source: Agricultural and Processed Food Products Exports Development Authority (APEDA), Ministry of Commerce & Industry (2020).

Box 5: India & Morocco collaboration in fertilizer sector

India's business collaboration with Morocco goes back to more than two decades. Morocco has one of the largest reserves of phosphate rock. The country is one of the key producers as well as supplier of phosphatic raw materials, intermediates and finished fertilizers to the global market. India has been one of the major markets for Moroccan phosphates and its derivatives and imports a major chunk of rock phosphate and phosphoric acid which is a key raw material for the fertilizer industry. Morocco is also the biggest phosphate exporter.

Rock phosphate from Morocco is imported into India mainly by Paradeep Phosphate Ltd (PPL) which is controlled by Zuari Maroc Phosphate Ltd (ZMPL), a Joint-Venture between Chambal Fertilisers, Zuari Fertilisers and Office Cherifian des Phosphates (OCP). OCP is the world's largest supplier of rock phosphate and phosphoric acid.

According to MEA's country profile – Morocco, the Indian government has 19.55% of shares in PPL. PPL has a long-term contract with OCP for supply of nearly one million ton (MT) of rock phosphate annually. Chambal Fertilizers and Tata Chemicals have a JV with OCP- Indo Maroc Phosphore SA (IMACID) for production of 450,000 tonnes of phosphoric acid which is entirely imported by PPL and ZMPL. IMACID was set up in November 1999.

The MoU on cooperation in the field of agricultural research and education (2018-2020) was signed in May 2018, between the Indian Council of Agricultural Research and the Ministry of Agriculture, Marine Fisheries, Rural Development and Water and Forests of the Moroccan government.

Source: Ministry of External Affairs (2019f).

India's achievements in food security through its famous green revolution had some elements of inspiration in the founding of the Alliance for Green Revolution in Africa (AGRA) in 2006 upon a call by the UN Secretary General, Kofi Annan. The mandate of AGRA was to reduce poverty and hunger through investment in agriculture. AGRA collaborates with farmers, farmer producer organisations, governments, businesses, agri-researchers, civil societies, international organisations etc. The focus area of AGRA is on 11 countries which have potential regarding the reduction of poverty and hunger, including Ghana, Nigeria, Ethiopia, Kenya, Uganda, Rwanda, Tanzania, Malawi and Mozambique. In the last decade, AGRA has supported 15 million farm families in getting access to inputs, training, financing, and markets. It has supported 112 African seed companies in promoting local seed production and development of 640 new crop varieties with local traits. AGRA has provided support in reviving 1.6 million hectares of depleted croplands (AGRA, 2018; 2019).

"Africa has 60 per cent of the world's arable land, but produces just 10 per cent of the global output. We will work with you to improve Africa's agriculture," Prime Minister Narendra Modi had said in Uganda back in 2018 (Modi 2018).

5 Way Forward: Potential Areas for Cooperation Towards 2030

There are several potential areas of cooperation between India and Africa which could be harnessed to bring benefits to farmers on the African continent. This could also ensure food security for the countries in the next decade.

One of the areas of cooperation which could be strengthened is in the sphere of agricultural research, which remains a weak link in the India-Africa collaboration. It is acknowledged that the national agri research systems in many African Countries are not well advanced in comparison to the global standards (ICRISAT, 2019). The Consultative Group on International Agricultural Research (CGAIR) operates four research centres – the International Institute of Tropical Research (IITR) in Nigeria, the International Centre for Research in Agroforestry (ICARF) and the International Livestock Research Institute (ILRI) both in Kenya, and Africa Rice in the Ivory Coast. IITR has regional research stations in Nigeria, Benin, Cameroon, Ivory Coast and Uganda while ICARF has research units located across 10 countries of Western and Central Africa. ILRI has research units in 8 countries in East, South and West Africa, and Africa Rice has 4 regional research units in Ivory Coast, Nigeria, Senegal and Tanzania.

The International Food Policy Research Institute (IFPRI) has regional offices in Ethiopia and Senegal. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), which has its head-quarter in Hyderabad, has research hubs in various parts of the African continent. The partnership and convergence of research work carried out by CGIAR, the Indian Council for Agricultural Research (ICAR) and ICRISAT would bring benefits to the African continent. The national agri-research system in India, notably through ICAR, which coordinates one of the largest agricultural research works in the world, has demonstrated that the productivity of rainfed agriculture can be enhanced significantly through technology adoption with support of appropriate policies[7]. To share this experience with African countries can be very useful.

Many African countries are traditional cotton producers who are contemplating to give boost to cotton production through the use of hybrid genetically modified cotton. Thirty-seven countries out of fifty-four African nations spread across the continent produce cotton on 11 million hectares, nearly equivalent to the area under cotton in India. However, the average yield stands at 350 kg lint per hectare, which is much less than the world average. Except for South Africa, Burkina Faso and Sudan, none of the African countries have adopted the new biotech (Bt) cottons. Some of them have been conducting field trials including Cameroon, Kenya, Ethiopia, Ghana, Zambia, Nigeria and Malawi. But many of them have not even commenced the process of creating biosafety laws for adopting the new gene technologies. India could provide cooperation and share its own experience of Bt cotton with African countries[8]. It is worth noting that India adopted Bt cotton in 2002, and within 15 years or so, India became the largest producer of cotton (neck to neck with China) and second largest exporter of cotton in the world. Almost 95% of the cotton area in India, ploughed largely by small holders, is under Bt cotton. This 'gene revolution' in Indian cotton has been almost entirely driven by the private sector, and this could be a good lesson for cotton growing African countries.

Peter Carberry, Director General, ICRISAT, also talks of three key areas where India could cooperate with Africa in the adaptation of the Pearl millet production: India can support cultivation of pearl millet hybrids in sub-Saharan Africa. From a productivity of 0.2 tonnes per hectare in the 1960s, the current yield in India has now increased to around 1.2 tonnes per ha. This is mainly possible because of the adoption of hybrid seed technologies and public-private sector partnerships. In Africa, pearl millet is grown by smallholder farmers and they mostly rely on open pollinated varieties. Hybrid seed

[7] Peter Carberry, Director General, ICRISAT, at NASS foundation day lecture, June 5th, 2019.
[8] Based on interaction with ICAR scientists, December 2019.

usage is only about 10% of the total seed use. Africa could increase the adoption of hybrid seeds to bring to scale its pearl millet production.

Agricultural value chain development: In India, agri-services, start-ups in food processing, input supplies, manufacturing and value chain operations have boosted, because of conducive government policies and private sector investments. Africa could benefit especially with its large youth population and increasingly improved mobile telephone services.

Watershed management: India's experience and expertise in watershed management has helped millions of farmers. The lessons learnt can be highly relevant to many African ecologies and could provide opportunities to farmers.

Opportunities in the seed sector: A report by the Kenya based Seeds Systems Group (SSG) had expressed concern that the non-adoption of improved hybrid seeds keeps the productivity levels low, and therefore contributes to the persistence of hunger in the African continent. This has led to stalled economic growth and widespread hunger and malnutrition. The problem is compounded by increase in extremes of climate events which adversely impact many farming communities.

The report by SSG released in Ghana at the world's largest annual conference on African agriculture, the Alliance for Green Revolution Forum 2019, had stated that the reuse of seed for the same low-yielding and often disease-ridden crop varieties makes it impossible for smallholder farmers to improve their yield or the nutritional quality of their crops (Ibrahim, 2019). The SSG report had stated that 15 African countries with 315 million people and with average child malnutrition rates of 38% could significantly improve food security and nutrition by developing their seed industries.

The report also states that many countries on the African continent are struggling with their seed systems. In Chad, for example, 15 million people live across a country more than twice the size of France—with large areas suitable for food production. Chad ranks 118th out of 119 countries in terms of food security. In Benin, 1.3 million farmers grow maize, cassava, sorghum and other staples, yields of which average about 1.4 to 1.5 metric tonnes per hectare—about a tonne or more below what could be achieved with better seeds. Malnutrition rates are also high at 45%. Quality seed could help boost production of nutritious and leafy vegetables. At present, there have been no local, privately-owned seed companies operating in Benin. (Ibrahim, 2019)

In Togo, where agriculture accounts for about 41% of the GDP and employs roughly two-thirds of the population, maize yields are about 1.2 tons per hectare. This does not allow farming to be profitable. Yields for other crops such as sorghum are also low. However, the report also highlighted the achievement of countries like Ghana, Uganda and Burkina Faso for making progress with improved seeds, creating a model that other African countries can emulate. India has an expanding domestic seed market and seed companies have capacity for international expansion. At present, India is a relatively small player in seed exports to Africa. In 2014, the country occupied only the 14th place in the list of nations exporting seeds to Africa, equal to less than 2% of the total India-Africa trade volume (Glover, 2016). Even if India's seed exports to Africa increased, this needs to be supported by respective governments' investment in agriculture through policy support.

Africa has the advantage to learn from India's experience of the impact of Green Revolution and adapt the Indian model to suit their country specific conditions. Today, India is not only self-sufficient in food grains but also the largest exporter of rice in the world. Overall, India is also a net exporter of agricultural products.

India' experience in ensuring food security to its large masses could be replicated on the African continent to achieve self-sufficiency in food grains and allied sectors like poultry and dairy. In India, the poultry and dairy sectors have been growing at a steady pace in the last two decade which could be replicated in Africa. India's emergence as the world's largest milk producer (about 180 MMT in 2020) from a hugely deficit nation in milk in the early 1970s, holds lot of lessons for African nations. India's 'White Revolution' was driven initially by government support to cooperatives under 'Operation Flood' during the mid-1970s through the 1980s, and then was pushed further by the

private sector, especially after 2000. Interestingly, the charge is led by smallholders and states with low irrigation facilities and warm climate (like Gujarat, Maharashtra, Rajasthan, Karnataka, etc). Several African countries are in a similar situation, and there is ample scope to collaborate, launch pilots, and scale up with due incentives and technical, financial and institutional support.

In addition to India's white revolution in milk, which is an outstanding example of inclusive growth with smallholders, there is also a good scope in learning from India's poultry revolution. From 2000-2001 to 2018-2019, India's poultry (broiler) meat production has grown at an average annual growth rate of 9% and egg production (layers) at 6% per annum. The underlying model of growth is that large hatcheries (like Venkateshwara Hatcheries Group (Venky's), Suguna Hatcheries, etc.) tie up with thousands of small, medium and large poultry farms, give one-day-old chicks to their farmers and buy them back after about 35 days at a contracted price. This helps smallholder farmers to get best technology (chicks) from large players and also hedge their price risk. Today, about 80% of India's poultry production is under this vertically integrated model, which has also made India the third largest egg producer and fifth largest broiler meat producer in the world. This model of integrating with smallholders is purely driven by the private sector, unlike the milk revolution which was driven by cooperatives with lots of support from the government. There can be more cooperation and learning between Indian poultry business players and African businesses interested in poultry with involvement of small and medium poultry farms.

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7 Annex

7.1 Annex I

The information (data & historical events) mentioned in this annexure is largely drawn from the Ministry of External Affairs' country specific profile. This has been duly acknowledged.

India shares unique ties both in the context of culture and trade with most of the 54 countries on the African continent. These ties date back to more than a century. This section is an attempt to briefly elaborate the unique relationship which is built on both cultural and economic foundations.

7.1.1 South Africa

India played a vital role against the apartheid regime (racial segregation) in South Africa. In this vein, in 1946, India stopped ties with South Africa in the fields of economy, culture, and sport. India even extended the support to the anti-apartheid movement by mobilizing voice against the apartheid regime of South Africa at various global forums such as the United Nations (UN), the Commonwealth, and the Non-Aligned Movement (NAM).

In 1993, the South African government ended its apartheid policy and India re-established trade engagement with South Africa after a period of almost four decades. The South African Foreign Minister Pik Botha visited India the same year and the diplomatic relations between India and South Africa were re-established. In 1994, the Indian High Commission in Pretoria started operations. According to a note from MEA: "The South African Indian origin community numbers around 1.5 million and constitutes about 3% of South Africa's total population. About 80% of the Indian community lives in the province of KwaZulu Natal, about 15% in the Gauteng (previously Transvaal) area and the remaining 5% in Cape Town. South Africans of Indian origin are well-represented in Government, business, media, legal and other professions." (Ministry of External Affairs, 2019a, p. 7).

7.1.2 Ethiopia

India had historical trade linkages with Ethiopia which could be traced back to ancient times. Indian sailors used to travel to East Africa for trading commodities, most of all silk, spices, gold and ivory. Many people of Indian origin in Ethiopia trace their roots to Gujarat. People from Gujarat travelled to Ethiopia around the later part of the 19th century.

In the 1960s and 1970s, there were large numbers of Indian teachers in schools across Ethiopia. As per the MEA profile of Ethiopia, it is estimated that there are currently 2000–2500 Indian academicians associated with 30 universities as well as other institutions of higher education in Ethiopia (Ministry of External Affairs, 2017a). Gennet Zewide, who served as an Ethiopian Ambassador to India once said "In 1950-60 when we were expanding our education system, India came to our rescue because we did not have any teacher training colleges. Later, when our capacity grew, we started training elementary and high school teachers" (Gupta, 2014). It is estimated that the number of Indian origin people in Ethiopia is around 5000-6000 (Ministry of External Affairs, 2017a).

7.1.3 Nigeria

Following the struggle against colonialism, both India and Nigeria achieved independence. Nigeria's population is around 190 million people. Like India, the Western African country has people which belong to various religious, ethnic and linguistic groups. In 1958, India established a diplomatic house in Lagos, two years prior to Nigeria's independence. The Indian community is estimated at about 50,000 people (Ministry of External Affairs, 2019c).

7.1.4 Kenya

As mentioned earlier in the paper, Indian traders were sailing to East Africa since early historical times. There were Indian leaders who participated in Kenya's independence struggle. The Indian diaspora in Kenya is estimated at around 80,000 people. This includes around 20,000 Indian passport holders. Several Indians hold senior positions in judiciary, medical services and academics in Kenya (Ministry of External Affairs, 2019d).

India is the second largest investor in Kenya, according to the Kenya Investment Authority (KenInvest). According to MEA data, over 60 major Indian companies have invested in various sectors including manufacturing, real estate, pharmaceuticals, telecom, banking and agro-based industries. Indian pharmaceutical companies have a substantial presence in Kenya (Ministry of External Affairs, 2019d).

In recent years, Kenya has emerged as a key destination for Indian tourists. Around 3,500 Kenyan students currently study in 50 Institutions across India. Around 400 professionals from Kenya attained training and scholarships programmes in various fields under the Indian Technical & Economic Cooperation (ITEC) Programme in 2018-19 (Ministry of External Affairs, 2019d).

7.1.5 Uganda

About a century back, Indians started to travel to Uganda. India's freedom struggle also inspired many Ugandan activists to fight colonial occupation. Uganda achieved freedom from colonial rule in 1962. India established its diplomatic presence in Uganda in 1965. In the 1970s, during the President Amin regime, however, around 60,000 Indians or PIOs were directed to leave the country. In 1986, Indians were invited back after President Gen Yoweri Kaguta Museveni assumed power.

It is estimated that there are around 30,000 Indians in Uganda (Ministry of External Affairs, 2019b). However, their contribution to Uganda's economic growth is far more than their numerical strength. According to the country specific profile by MEA, "PIOs and NRIs [i.e., non-resident Indians] are estimated to have invested over US$ 1 billion in Uganda in the last two decades. Indian Nationals/PIOs who constitute less than 0.1% of Uganda's population, contribute about 70% of Uganda's direct taxes as per statistics of the Bank of Uganda and the Uganda Revenue Authority" (Ministry of External Affairs, 2019b, p. 11). An estimated 600 students from Uganda are presently studying in Indian universities. Over the years, a large number of Ugandans have studied in Indian colleges and universities. Those who studied in India also occupy senior official positions (Ministry of External Affairs, 2019b).

7.1.6 Ghana

Indians initially went to Ghana as traders, before entering other economic spheres. There are around 10,000 Indian Origin People in Ghana and a sizeable proportion of them are in the business of manufacturing garments, textiles and pharmaceuticals. Indian companies have made investments in Ghana in sectors such as manufacturing, constructions, services and tourism. Ghana's main exports to India constitute of gold, cocoa, nuts and timber products. India's major exports to Ghana include pharmaceuticals, agricultural machinery, transport vehicles, electrical equipment etc. (Ministry of External Affairs, 2019h)

7.1.7 Other African countries

There are several other African countries with which India shares cultural as well as economic ties. These countries include Egypt, Ivory Coast, Tanzania, Zimbabwe and Zambia. India and Egypt had close cultural ties decades back. Mahatma Gandhi and Saad Zaghloul fought for independence from the colonial rule in their respective countries. In the post-independence era, the India-Egypt tie was nurtured by Gamal Abdel Nasser and Jawaharlal Nehru. Both countries signed a Friendship Treaty in

1955. Egypt has been a key trading partner for India on the African continent for many years. In 1978, both countries signed the India-Egypt Bilateral Trade Agreement. Under this trade agreement, both countries establish each other's status as 'Most Favoured Nation'. According to the MEA dossier on Egypt, over 450 Indian companies have operations in Egypt and they have made investment exceeding USD 3 billion in the North African country (Ministry of External Affairs, 2018).

In 1979, India established its Embassy in Abidjan, Côte d'Ivoire (in English referred to as Ivory Coast). Ivory Coast opened its Resident Mission in New Delhi in 2004. It is estimated that there are over 1500 Indian origin people and Indian nationals in Ivory Coast. Indians are engaged in sectors such as mining, manufacturing, trading etc. Many Indian pharmaceutical companies have their operations in Ivory Coast. As per the MEA note on Ivory Coast, "India imports cashews, manganese ore, cotton, wood, scrap metals, rubber, etc. […] The main items of India's exports are cereals (rice), pharmaceutical products, machinery, articles of iron, chemicals, plastics, rubber products, vehicles etc." (Ministry of External Affairs, 2017b, p. 2).

Tanzania and India have friendly ties for many decades. From the 1960s to the 1980s, the relationship was based on principles of anti-colonialism sentiment and a common agenda of strengthening the Non-Aligned Movement (NAM). It is estimated that there are around 60,000 Indian origin people in Tanzania. The ancestors of most of these IOPs came to Africa around the early 19th century as merchants, sailors and workers. According to a MEA note, "there are about 10000 Indian nationals (expatriates) mostly professionals, who live and work in Tanzania, mainly in industry and services" (Ministry of External Affairs, 2016, p. 6).

The leaders of the Zambian freedom struggle, such as Dr. Kenneth Kaunda, drew inspiration from Mahatma Gandhi. The Satyagraha movement inspired youth in Zambia and its leaders. Indian mining companies have been investing in Zambia, which has natural resources. As per the MEA dossier on Zambia, Indian investors have made investments of over USD 5 billion in Zambia. There are an estimated 25,000 Indian origin people in Zambia (Ministry of External Affairs, 2017c). The majority of them migrated from Gujarat. Indian origin people play a critical role in Zambia's economy, especially in sectors like trade, industry, hospitality and transport. Indians have fair representation in the government.

In the 1890s, Indian plantation workers from South Africa went to then Southern Rhodesia now named Zimbabwe. At present, the number of Zimbabweans of Indian origin, predominantly trace their origin to Gujarat. There are around 9,000 Indian origin people in Zimbabwe. India supported Zimbabwe's freedom struggle for decades. (Ministry of External Affairs, 2019i)

7.2 Annex II

Table 8: Lines of credit to Africa: Project details year-wise – 2008-2009 to 2018-2019

2008-2009					
S. No.	**Region**	**Country**	**Borrower**	**Amount of credit (in USD million)**	**Purpose**
1	Africa	Burkina Faso	Government of Burkina Faso	25	Rural electrification
2	Africa	Cameroon	Government of Cameroon	37.65	Maize farm plantation and rice farm plantation projects
3	Africa	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
4	Africa	Ethiopia	Government of Ethiopia	166.23	Development of sugar industry
5	Africa	Ghana	Government of Ghana	21.72	(i) Improved fish harvesting & fish processing project, (ii) Waste management equipment, and (iii) management support project
6	Africa	Madagascar	Government of Madagascar	25	Project for rice productivity and project for fertilizer production
7	Africa	Mozambique	Government of Mozambique	25	IT Park Project comprising construction of (a) incubator facility, (b) research and learning centre, and (c) technology park and administrative facility.
8	Africa	Mozambique	Government of Mozambique	30	Rural electrification projects in the provinces of Gaza, Zambezia and Nampula in Mozambique
9	Africa	Niger	Government of Niger	20	(i) Rehabilitation of six-power stations, (ii) Purchase of three power transformers, and (iii) Rehabilitation as well as erection of power lines between various places in Niger
10	Africa	Senegal	Government of Senegal	25	Rural electrification project and fishing industry development project
11	Africa	Sierra Leone	Government of Sierra Leone	15	Procurement of tractors and connected implements, harvesters, rice threshers, rice mills, maize shellers, etc.
12	Africa	Zambia	Government of Zambia	29.03	Itezhi-Tezhi Hydro power project

2009-2010					
13	Africa	Angola	Government of Angola	30	Setting up an industrial park
14	Africa	Angola	Government of Angola	15	Setting up a textile project (cotton ginning & spinning)
15	Africa	Benin	Government of Benin	15	(i) Railway equipment (USD 10.25 mio), (ii) agricultural equipment (USD 4.25 mio), and (iii) feasibility study for setting up a cyber city (USD 0.50 mio)
16	Africa	Cote d'Ivoire	Government of Cote d'Ivoire	30	Electricity interconnection project between Cote d'Ivoire and Mali
17	Africa	Cote d'Ivoire	Government of Cote d'Ivoire	30	Rice production programme
18	Africa	D. R. Congo	Government of D. R. Congo	25	Installation of hand pumps and submersible pumps
19	Africa	Djibouti	Government of Djibouti	14.57	Cement Plant Project
20	Africa	Ecowas Bank for Investment and Development (EBID), West Africa	Ecowas Bank for Investment and Development (EBID), West Africa	100	Financing exports of various equipment, goods and services
21	Africa	Eritrea	Government of Eritrea	20	Multipurpose agricultural projects and educational projects
22	Africa	Lesotho	Government of Lesotho	4.7	Vocational training centre for empowerment of youth and women
23	Africa	Mali	Government of Mali	36	Completion of Mali-Ivory Coast interconnection link for integrating the national power grids of both the countries
24	Africa	Mali	Government of Mali	15	Agriculture and food processing projects
25	Africa	Mauritania	Government of Mauritania	21.8	Potable water project and milk processing plant
26	Africa	Rwanda	Government of Rwanda	60	Power projects
27	Africa	Senegal	Government of Senegal	5	Supply of medical equipment, furniture and other accessories to four hospitals
28	Africa	Seychelles	Government of Seychelles	10	Procurement of goods and services for specific projects funded by Development Bank of Seychelles (DBS)

29	Africa	Sierra Leone	Government of Sierra Leone	30	Rehabilitation of existing facilities and addition of new infrastructure to supply potable water
30	Africa	Swaziland	Government of Swaziland	20	Information technology park project
2010-2011					
31	Africa	Burundi	Government of Burundi	80	Kabu Hydro Electric Project
32	Africa	Comoros	Government of Comoros	41.6	18 MW Power Project
33	Africa	D. R. Congo	Government of D. R. Congo	42	Execution of Kakobola hydroelectric power project
34	Africa	D. R. Congo	Government of D. R. Congo	168	Ketende hydroelectric project
35	Africa	Ecowas Bank for Investment and Development (EBID), West Africa	Ecowas Bank for Investment and Development (EBID), West Africa	150	Export of goods and services and project exports
36	Africa	Ethiopia	Government of Ethiopia	213.31	Development of sugar industry
37	Africa	Ethiopia	Government of Ethiopia	91	Development of sugar industry
38	Africa	Kenya	Government of Kenya	61.6	Power transmission lines
39	Africa	Malawi	Government of Malawi	50	Cotton processing facilities (USD 20 mio), Green Belt Initiative (USD 15 mio) One Village One Product (OVOP) (USD 15 mio)
40	Africa	Mauritius	Government of Mauritius	48.5	Supply of offshore Patrol Vessel
41	Africa	Mozambique	Government of Mozambique	25	Rural electrification of Cabo Delgado, Manica, Niassa Provinces
42	Africa	Mozambique	Government of Mozambique	20	Enhancing productivity of rice, wheat, maize cultivation
43	Africa	Senegal	Government of Senegal	27.5	Rural electrification
44	Africa	Tanzania	Government of Tanzania	36.56	Financing the purchase of 679 (earlier 723) vehicles
2011-2012					
45	Africa	Burkina Faso	Government of Burkina Faso	22.5	Low cost housing and economical buildings project

46	Africa	Cameroon	Government of Cameroon	42	Cassava plantation project
47	Africa	Central African Republic	Government of Central African Republic	20	Mining project
48	Africa	Central African Republic	Government of Central African Republic	39.69	Two hydro-electric projects
49	Africa	Chad	Government of Chad	15.9	Extension of spinning mill [addition of weaving and processing capacities]
50	Africa	Ethiopia	Government of Ethiopia	47	Development of sugar industry
51	Africa	Gambia	Government of Gambia	16.65	Completion of the National Assembly Building Complex
52	Africa	Ghana	Government of Ghana	35	Sugar plant
53	Africa	Malawi	Government of Malawi	76.5	(i) Development of irrigation network under greenbelt initiative, (ii) setting up of refined sugar processing equipment, and (iii) development of fuel storage facilities.
54	Africa	Mali	Government of Mali	100	Power transmission project Connecting Bamako and Sikasso via Bougouni
55	Africa	Mozambique	Government of Mozambique	13	Solar photovoltaic module manufacturing plant
56	Africa	Mozambique	Government of Mozambique	250	Improving the quality of power supply in Mozambique
57	Africa	R. Congo	Government of Republic of Congo	70	Rural electrification project
58	Africa	Senegal	Government of Senegal	19	Fisheries development project
59	Africa	Swaziland	Government of Swaziland	37.9	Agricultural development and mechanization of agriculture
60	Africa	Tanzania	Government of Tanzania	178.13	Augmentation of water supply schemes of Dar es Salaam and Chalinzi regions
61	Africa	Togo	Government of Togo	15	Rural electrification project
62	Africa	Togo	Government of Togo	13.1	Cultivation of rice, maize and sorghum
63	Africa	Zambia	Government of Zambia	50	Pre-fabricated health posts

2012-2013					
64	Africa	Benin	Government of Benin	15	Setting up of tractor assembly plant and farm equipment manufacturing unit
65	Africa	Burundi	Government of Burundi	4.22	Farm mechanization
66	Africa	Burundi	Government of Burundi	0.17	Preparation of detailed project report for an integrated food processing complex
67	Africa	Mozambique	Government of Mozambique	19.72	Rural drinking water project extension
68	Africa	Mozambique	Government of Mozambique	149.72	Rehabilitation of road between Tica, Buzi and Nova Sofala
69	Africa	Senegal	Government of Senegal	41.96	Setting up a modern abattoir, meat processing, cold storage, rendering and tannery plant, and market place
70	Africa	Sudan	Government of Sudan	125	Mashkour Sugar Project (IInd tranche of USD 150 mio)
71	Africa	Zimbabwe	Government of Zimbabwe	28.6	Up-gradation of Deka pumping station and river water intake system in Zimbabwe
2013-2014					
72	Africa	Benin	Government of Benin	42.61	Upgradation of water supply schemes in 69 villages
73	Africa	D. R. Congo	Government of D. R. Congo	82	Completion of Katende hydro-electric project
74	Africa	Djibouti	Government of Djibouti	15.13	Ali Sabieh cement project, Djibouti
75	Africa	Guinea	Government of the Republic of Guinea	35	Strengthening of health system
76	Africa	Liberia	Government of Liberia	1.35	Power transmission and distribution project
77	Africa	Mauritius	Government of Mauritius	46	Purchase of specialised equipment and vehicles
78	Africa	Mauritius	Government of Mauritius	18	Supply of specialised equipment
79	Africa	Mozambique	Government of Mozambique	47	Construction of 900 houses
80	Africa	Niger	Government of Niger	34.54	Solar electrification of 30 villages
81	Africa	Niger	Government of Niger	25	Potable water for semi-urban and rural communities

82	Africa	R. Congo	Government of Republic of Congo	89.9	Development of transport system
83	Africa	Rwanda	Government of Rwanda	120.05	Export targeted modern irrigated agricultural project
84	Africa	Sierra Leone	Government of Sierra Leone	30	Irrigation development in Tomabum, Sierra Leone
85	Africa	Togo	Government of Togo	30	Rural electrification project to cover 150 localities
86	Africa	Togo	Government of Togo	52	Setting up of 161 KV power transmission line
2014-2015					
87	Africa	Cote d'Ivoire	Government of Cote d'Ivoire	24	Electricity interconnection project between Cote d'Ivore and Mali
88	Africa	D. R. Congo	Government of D. R. Congo	34.5	Development of power distribution project in Bandundu province
89	Africa	D. R. Congo	Government of D. R. Congo	109.94	Transmission and distribution project in Kasai province
90	Africa	Gambia	Government of Gambia	22.5	Electrification expansion project
91	Africa	Gambia	Government of Gambia	22.5	Replacement of asbestos water pipes with UPVC pipes project
92	Africa	Ghana	Government of Ghana	24.54	Sugarcane development and irrigation project
93	Africa	Ghana	Government of Ghana	30	Rehabilitation and up-gradation of potable water system
94	Africa	Ghana	Government of Ghana	150	Strengthening of agriculture mechanization services centres
95	Africa	Mauritius	SBM [Mauritius] Infrastructure Development Co. Ltd. [a nominated agency of Government of Mauritius]	500	Equity participation for financing various infrastructure projects
96	Africa	R. Congo	Government of Republic of Congo	55	Greenfield 600 tpd rotary kiln cement plant project
97	Africa	Senegal	Government of Senegal	62.95	Rice self-sufficiency programme
98	Africa	Senegal	Government of Senegal	26	Acquisition of buses

99	Africa	Seychelles	Government of Seychelles	10	Procurement of goods and projects as per the specified needs of the Government of the Republic of Seychelles
100	Africa	Tanzania	Government of Tanzania	268.35	Extension of Lake Victoria pipeline to Tabora, Igunga and Nzega
2015-2016					
101	Africa	Gambia	Government of Gambia	92	Expansion of Banjul Port
102	Africa	Kenya	Government of Kenya	100	Agriculture mechanization project
103	Africa	Kenya	Government of Kenya	15	Development of various small and medium enterprises
104	Africa	Kenya	Government of Kenya	29.95	Upgrade of Rift Valley Textiles Factory (RIVATEX East Africa Ltd)
105	Africa	Malawi	Government of Malawi	23.5	Construction of a new water supply system from Likhubula river in Mulanje to Blantyre
106	Africa	Mauritius	Government of Mauritius	52.3	Project Trident
107	Africa	Sierra Leone	Government of Sierra Leone	78	Transmission line and substation
108	Africa	Tanzania	Government of Tanzania	92.18	Rehabilitation and improvement of water supply system in Zanzibar
109	Africa	Zimbabwe	Government of Zimbabwe	87	Renovation of Bulawayo Thermal Power Plant
2016-2017					
110	Africa	Cote d'Ivoire	Government of Cote d'Ivoire	71.4	Upgradation of military hospitals
111	Africa	Madagascar	Government of Madagascar	2.5	Completion of unfinished fertilizer plant project
112	Africa	Tanzania	Government of Tanzania	500	Water supply scheme in 17 towns
2017-2018					
113	Africa	Ecowas Bank for Investment and Development (EBID), West Africa	Ecowas Bank for Investment and Development (EBID), West Africa	500	Development projects
114	Africa	Mozambique	Government of Mozambique	38	Construction of borewells with hand pumps and small water systems

115	Africa	Rwanda	Government of Rwanda	81	Establishment of 10 vocational training centres and 4 business incubation centres in Rwanda
116	Africa	Rwanda	Government of Rwanda	66.6	Base-Butero-Kidaho road project
117	Africa	Senegal	Government of Senegal	24.5	Up-gradation and rehabilitation of health care system.
118	Africa	Zambia	Government of Zambia	18	Pre-fabricated health posts
2018-2019					
119	Africa	Burundi	Government of Burundi	161.36	Construction of a Parliament building in Gitega and ministerial buildings
120	Africa	D. R. Congo	Government of D. R. Congo	33.29	15 MW solar photovoltaic power project in Karawa province
121	Africa	D. R. Congo	Government of D. R. Congo	25.27	10 MW solar photovoltaic power project at Lusambo province
122	Africa	D. R. Congo	Government of D. R. Congo	24.55	10 MW solar photovoltaic power project in Mbandaka, province Equator
123	Africa	Ethiopia	Government of Ethiopia	147.43	Mekele Industrial Park 400 kV power transmission project
124	Africa	Ethiopia	Government of Ethiopia	133.7	New 230 kV interconnection between Ethiopia and Djibouti, 230 kV Combolcha II – Semera transmission line along with associated substations extension at Semera, Nagad and Combolcha II
125	Africa	Malawi	Government of Malawi	215.68	Drinking water supply schemes under Southern region water board
126	Africa	Mauritius	Government of Mauritius	100	Defence procurement
127	Africa	Mozambique	Government of Mozambique	95	Procurement of railway rolling stock including locomotives, coaches and wagons

Source: EXIM Bank (2020).

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