

A world map in shades of blue and white, centered on the Atlantic Ocean, serving as the background for the slide.

Exploring trade and investment opportunities between India and select African and Asian economies

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Objectives of the study

- Examine select African and Asian countries' (mostly LDCs) export opportunities in the Indian market and India's investment opportunities in these countries
 - Analysis of merchandise trade patterns and potential for the period average 2010-2012 and 2015-2017
 - Analysis of services trade patterns and potential for the period average 2000-2002 and 2010-2012
 - Analysis of India's cumulative greenfield investment in these countries over 2010-2018
 - Quadrant analysis to identify countries' goods and services' exporting opportunities based on Bilateral RCA and prevailing import shares in the Indian market
- The selected 41 African and Asian economies covered in this study are as follows:
 - **Africa (33):** Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, Tanzania, and Zambia (**LDCs+3**)
 - **Asia (8):** Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic (Lao PDR/Laos), Myanmar, Nepal, Timor-Leste (East Timor), and Yemen (**all are LDCs**)

Top sources of India's merchandise imports from sample countries

- **Top African countries from where India imported during 2010-2012**

Nigeria (USD 12.6 billion), Angola (USD 6.3 billion), Tanzania (USD 432 million), Ghana (USD 343 million), Senegal (USD 339 million), Guinea (USD 334 million), Benin (USD 256 million), Guinea- Bissau (USD 228 million), Sudan (USD 179 million) and Zambia (USD 173 million)

- **Top African countries from where India imported during 2015-2017**

Nigeria (USD 8.7 billion), Angola (USD 3.2 billion), Ghana (USD 2.5 billion), Zambia (USD 698 million), Mozambique (USD 586 million), Guinea (USD 454 million), Senegal (USD 371 million), Burkina Faso (USD 366 million), Sudan (USD 278 million) and Benin (USD 236 million)

- **Top Asian countries from where India imported during 2010-2012**

Yemen (USD 1.3 billion), Myanmar (USD 1.3 billion), Bangladesh (USD 533 million) and Nepal (USD 468 million)

- **Top Asian countries from where India imported during 2015-2017**

Myanmar (USD 996 million), Bangladesh (USD 690 million), Nepal (USD 460 million) and Laos (USD 217 million)



Snapshot of India's merchandise imports from sample countries [USD million, 2010-2012 (avg.) and 2015-2017 (avg.)]

Countries	Value (avg. 2010-2012, USD million)	Value (avg. 2015-2017, USD million)	Difference = (avg. 2015-2017) – (avg. 2010-2012)	Countries	Value (avg. 2010-2012, USD million)	Value (avg. 2015-2017, USD million)	Difference = (avg. 2015-2017) – (avg. 2010-2012)
Angola	6290.6	3187.0	(3103.6)	Mozambique	159.0	586.7	427.8
Benin	256.4	236.6	(19.8)	Niger	76.3	20.0	(56.3)
Burkina Faso	15.8	366.6	350.8	Nigeria	12645.6	8671.4	(3974.2)
Burundi	1.1	11.2	10.1	Rwanda	0.6	2.5	2.0
Central African Republic	2.1	1.6	(0.5)	Senegal	339.8	371.9	32.1
Chad	3.5	213.0	209.5	Sierra Leone	7.3	20.8	13.6
Congo	23.1	178.2	155.1	Somalia	8.6	13.0	4.4
Djibouti	4.4	5.4	1.0	Sudan	179.3	278.2	98.9
Eritrea	12.6	117.4	104.7	Togo	151.6	223.1	71.5
Ethiopia	41.6	63.2	21.7	Uganda	25.4	57.3	31.9
Gambia	27.8	44.1	16.3	Tanzania	432.5	987.6	555.1
Ghana	343.3	2492.8	2149.4	Zambia	173.2	698.1	524.8
Guinea	334.3	454.3	120.1	Bangladesh	534.0	690.3	156.3
Guinea-Bissau	228.6	226.5	(2.1)	Bhutan	198.5	195.9	(2.6)
Kenya	138.8	107.2	(31.7)	Cambodia	11.1	51.2	40.1
Lesotho	3.0	31.0	28.0	Laos	78.8	218.0	139.1
Liberia	27.7	60.7	32.9	Myanmar	1293.4	996.8	(296.7)
Madagascar	68.1	138.4	70.3	Nepal	468.2	460.7	(7.6)
Malawi	37.5	46.5	9.0	Timor-Leste	12.8	0.2	(12.5)
Mali	16.3	153.1	136.8	Yemen	1339.4	191.6	(1147.8)
Mauritania	4.9	23.5	18.6				

Source: UN Comtrade; own calculations

Note: The values highlighted in the table show countries whose merchandise exports to India have declined over time



Top commodities imported by India from sample countries

- **Top commodities imported from African countries (2010-2012)**

Petroleum oils, cashew nuts, ferrous and aluminium waste, wood, cotton, manganese and copper ores, oil seeds, wood, photographic flashlight, wrist watches, cathodes, tanned/crust skin of sheep/lamb, precious stones, iron ores, kidney beans, coal, wool, cocoa beans, cloven, natural gas, sesame seeds, and dried leguminous vegetables

- **Top commodities imported from African countries (2015-2017)**

Petroleum oils, cashew nuts, gold, diamonds, copper ores, iron ores, coal, unwrought lead, natural gas, sesame seeds, phosphoric seeds, cloves, tankers and dried leguminous vegetables

- **Top commodities imported from Asian countries (2010-2012)**

Jute, fish, nuts, ferro-silicon, copper wire, palm oil, natural rubber, trousers, wood, beans, copper ores, petroleum oil, natural gas, and non-alcoholic beverages

- **Top commodities imported from Asian countries (2015-2017)**

Jute, gold, beans, natural gas, nuts, non-alcoholic beverages, ferro-silicon, petroleum oil, and copper ores



Top sources of services exports to India

- **Top African countries which exported to India during 2000-2002**

Nigeria (USD 82 million), Liberia (USD 38 million), Senegal (USD 36 million), Tanzania (USD 34 million), and Kenya (USD 30 million)

- **Top African countries which exported to India during 2010-2012**

Nigeria (USD 542 million), Angola (USD 364 million), Senegal (USD 141 million), Kenya (USD 130 million), and Tanzania (128 million)

- **Top Asian countries which exported to India during 2000-2002**

Nepal (USD 61 million), Myanmar (USD 23 million), Yemen (USD 15 million), Bangladesh (USD 13 million), and Bhutan (USD 9 million)

- **Top Asian countries which exported to India during 2010-2012**

Nepal (USD 183 million), Yemen (USD 131 million), Myanmar (USD 104 million), Bangladesh (USD 86 million), and Bhutan (USD 59 million)

Snapshot of services exports to India from sample countries [USD million, 2000-2002 (avg.) and 2010-2012 (avg.)]

Countries	Value (avg. 2000-2002, USD million)	Value (avg. 2010-2012, USD million)	Difference = (avg. 2010-2012) - (avg. 2000-2002)	Countries	Value (avg. 2000-2002, USD million)	Value (avg. 2010-2012, USD million)	Difference = (avg. 2010-2012) - (avg. 2000-2002)
Angola	3.2	364.4	361.2	Mali	7.3	15.8	8.6
Benin	14.9	62.2	47.4	Mauritania	0.2	4.0	3.8
Burkina Faso	6.4	17.1	10.7	Mozambique	6.7	33.0	26.3
Burundi	0.1	1.1	1.0	Niger	0.5	6.6	6.1
Central African Republic	1.6	4.7	3.1	Nigeria	82.6	542.4	459.7
Chad	1.8	3.4	1.6	Rwanda	0.2	2.0	1.8
Congo	2.7	54.2	51.5	Senegal	36.6	141.6	105.0
Djibouti	5.2	24.1	18.9	Sierra Leone	1.0	5.5	4.5
Ethiopia	9.9	40.5	30.6	Sudan	5.7	23.2	17.5
Gambia	3.1	30.2	27.1	Togo	4.1	26.2	22.1
Ghana	8.3	75.8	67.5	Uganda	3.0	30.5	27.4
Guinea	1.4	21.5	20.1	Tanzania	34.4	128.1	93.7
Guinea-Bissau	4.3	25.3	21.0	Zambia	5.6	48.7	43.1
Kenya	29.9	129.8	99.9	Bangladesh	13.4	85.9	72.5
Lesotho	0.1	1.6	1.5	Bhutan	8.8	58.8	50.0
Liberia	38.3	90.8	52.5	Cambodia	1.3	13.9	12.6
Madagascar	2.6	35.5	32.9	Laos	0.6	34.2	33.6
Malawi	0.6	5.5	4.9	Myanmar	22.8	103.8	81.0
				Nepal	61.2	183.5	122.3
				Yemen	15.4	131.8	116.3

Source: OECD-WTO BaTIS; own calculations

Note: The figures highlighted in the table show countries which experienced the highest growth in the value of their services exports to India over time



Top services exported by sample countries to India

- **Top services exported by African countries to India (2000-2002)**
Travel, Transportation and Government Services
- **Top services exported by African countries to India (2010-2012)**
Travel, Transportation and Other Business Services
- **Top services exported by Asian countries to India (2000-2002)**
Travel and Transportation
- **Top services exported by Asian countries to India (2010-2012)**
Travel and Transportation

India's greenfield investment in sample countries and main sectors (USD million, cumulative 2010-2018)

African countries	Announced greenfield investment (USD million) over the period 2010-2018 (cumulative)	Asian countries	Announced greenfield investment (USD million) over the period 2010-2018 (cumulative)
Mozambique (coal, oil & gas)	6535.1	Bangladesh (textiles)	7467.7
Nigeria (chemicals, comm)	2775.9	Myanmar (coal, oil & gas)	1532.6
Ghana (chemicals)	2029.9	Bhutan (renewable energy)	354.7
Ethiopia (textiles)	1798.2	Yemen (renewable energy)	326.2
Kenya (real estate)	1210.3	Nepal (non-auto transport OEM, comm)	323.4
Zambia (chemicals, energy)	915.4	Cambodia (auto OEM)	276.3
Liberia (coal, oil & gas)	653.4	Laos (rubber)	91.7
Senegal (coal, oil & gas)	653.4	TOTAL	10372.6
Tanzania (ind. equip., comm)	649.5		
Uganda (comm)	508.8		
Madagascar (comm)	350.3		
Rwanda (health care, comm)	286.4		
Sierra Leone (metals, comm)	244.1		
DRC (comm)	197.7		
Malawi (comm)	129.1		
Niger (comm)	104.5		
Burkina Faso (comm)	98.6		
Chad (comm)	98.6		
Sudan (software & IT)	13.8		
Angola (ind. equip.)	3		
Burundi (health care)	2.9		
TOTAL	19258.9		

Source: fDI Markets; own calculations



Sectoral distribution of India's greenfield investment in sample countries (cumulative 2010-2018)

- India announced greenfield investment projects in only 21 of the 33 African sample countries over 2010-2018
- Of these, only 10 countries had information on the top 3 sectors
- Thus, India invested in only one or two sectors in the remaining 11 countries
- There may thus be untapped potential in these countries to attract more investment
- Restrictions placed by a number of these countries on investment in certain sectors could also be responsible for India's limited sectoral investment
- In the case of Asian countries, limited sectoral greenfield investment by Indian firms in Laos (two) and Yemen (one); more sectoral coverage in the other Asian LDCs

Quadrant analysis

- Uses two indices:
 - Bilateral Revealed Comparative Advantage (“BRCA”): measures a country’s comparative advantage in exporting products to partner markets
 - Normalized BRCA >0: exporting country is competitive in the concerned product in the partner market
 - Share in Indian Imports (“Share”): measures the demand for foreign goods in the Indian market

Exposition of Quadrant Analysis		
	<i>Share < Avg</i>	<i>Share > Avg</i>
<i>BRCA > 0</i>	Group B: BRCA > 0 and Shares < Avg.	Group A: BRCA > 0 and Shares > Avg.
<i>BRCA < 0</i>	Group D: BRCA < 0 and Shares < Avg.	Group C: BRCA < 0 and Shares > Avg.

Identifies products/sectors where comparative advantage exists but where import shares are less than the average: more opportunities can be created by appropriate policy measures such as export promotion policies

Represents already significant exports being competitively supplied by the sample countries to meet the prevalent demand in India for such products

Includes products where the sample countries lack comparative advantage in exporting to India, but at least possess a significant share in India’s total imports in Group C, which warrants some policy response towards building comparative advantage in the concerned exporting country

Quadrant analysis of merchandise trade (Africa)

- Majority of the goods at the HS 6-digit level during 2010-12 and 2015-17 for the 33 African countries belonged to Quadrants B and D
- During 2010-12, the number of goods in Quadrant B were relatively higher for several countries and have subsequently declined
- During 2015-17, the maximum number of goods were identified under Quadrant D
- Quadrant C (high import shares but BRCA less than zero) continued to record the least number of goods

Country	2010-12				2015-17			
	Quad. A	Quad. B	Quad. C	Quad. D	Quad. A	Quad. B	Quad. C	Quad. D
Angola	6	34	2	18	3	24	4	29
Benin	15	84	3	22	4	14	2	14
Burkina Faso	4	6	0	2	2	3	2	2
Burundi	1	10	0	1	1	3	0	1
C. Af. Rep	3	7	0	2	0	7	2	1
Chad	2	9	0	1	1	10	1	6
Congo (Dem. Rep.)	3	8	0	3	4	20	2	11
Djibouti	3	21	0	3	3	13	0	1
Eritrea	1	4	0	1	2	1	1	2
Ethiopia	9	168	6	55	8	92	3	70
Gambia	2	4	1	5	2	6	0	9
Guinea	5	51	2	51	1	19	1	13
Guinea-Bissau	1	4	0	21	1	4	0	2
Lesotho	4	20	0	7	2	2	0	2
Liberia	8	84	1	16	3	17	0	13
Madagascar	18	137	6	31	11	46	2	41
Malawi	4	48	2	10	4	34	2	24
Mali	8	28	1	8	2	7	0	8
Mauritania	3	16	0	3	4	8	0	3
Mozambique	15	85	3	31	5	31	2	31
Niger	0	23	3	18	2	15	2	27
Rwanda	2	6	0	0	2	10	0	6
Senegal	17	84	6	103	13	26	5	50
Sierra Leone	8	23	2	19	2	22	3	16
Somalia	4	15	0	1	1	10	1	3
Togo	7	43	2	22	6	18	0	11
Uganda	14	82	1	44	8	52	1	52
Tanzania	25	196	8	122	21	46	7	104
Zambia	3	34	2	25	2	38	2	54
Nigeria	25	245	16	277	13	50	13	203
Ghana	26	233	4	103	7	23	4	97
Kenya	39	254	9	243	16	98	7	182
Sudan	3	29	1	4	4	20	1	11

Source: UN Comtrade; own calculations



Quadrant analysis of merchandise trade (Asia)

Country	2010-12				2015-17			
	Quad. A	Quad. B	Quad. C	Quad. D	Quad. A	Quad. B	Quad. C	Quad. D
Bangladesh	109	541	52	232	87	485	83	304
Bhutan	2	6	0	17	7	38	1	28
Cambodia	9	124	16	61	35	131	40	151
Laos	6	20	1	16	7	19	2	36
Myanmar	40	373	11	167	25	71	4	245
Nepal	54	173	18	216	47	154	9	200
Timor-Leste	0	10	0	1	2	5	0	1
Yemen	8	38	4	21	5	21	1	13

Source: UN Comtrade; own calculations

- Majority of goods during 2010-12 belonged to Quadrant B followed by Quadrants D and A
- Quadrants B and D continued to be dominant even during 2015-17
- Quadrant C registered the least number of commodities in both time periods
- Number of products in Quadrant A declined over the two periods (except in the case of Bhutan, Cambodia, Laos and Timor-Leste)
- Some Asian LDCs may have lost comparative advantage while exporting goods to India



Quadrant analysis of services sectors (Africa)

Services	2000-2002				2010-2012			
	Quad. A	Quad. B	Quad. C	Quad. D	Quad. A	Quad. B	Quad. C	Quad. D
Communications	3	3	7	15	0	0	9	21
Computer and info	6	10	0	9	1	6	1	16
Construction	4	2	1	18	2	2	2	20
Financial	6	8	0	14	4	7	1	19
Government	5	0	19	7	3	0	20	8
Insurance	2	3	1	21	2	1	1	25
Other business	1	5	3	22	3	17	1	10
Personal, cultural and recreational	0	0	5	18	0	0	8	15
Royalties and license fees	0	0	0	20	0	0	0	22
Transportation	9	13	1	8	11	16	1	3
Travel	13	1	2	15	12	3	3	13

Source: OECD-WTO BaTIS; own calculations

Note: Figures indicate the number of exporting countries for each service under each quadrant

- A number of services (except personal and recreational services and royalties) lie in Quadrant A
- Travel and transportation are the main services where many African countries are already competitively exporting to India
- During 2010-2012, the major countries in Quadrant B were Mali and Mauritania
- Other services - mainly communication, computer and information, government, financial and construction - registered a greater decline in the number of competitively exporting countries over time



Quadrant analysis of services sectors (Asia)

Country	2000-02				2010-12			
	Quad. A	Quad. B	Quad. C	Quad. D	Quad. A	Quad. B	Quad. C	Quad. D
Communications	1	2	1	3	0	0	2	5
Computer and info	0	4	0	1	0	2	0	3
Construction	1	2	0	1	0	0	1	3
Financial	0	1	0	4	0	1	0	6
Government	0	0	3	4	0	0	5	2
Insurance	0	0	0	4	0	0	0	5
Other business	0	1	1	5	1	2	0	4
Personal, cultural and recreational	0	0	1	3	0	0	0	4
Royalties and license fees	0	0	0	3	0	0	0	4
Transportation	1	3	1	2	1	2	1	3
Travel	5	1	1	0	3	1	3	0

Source: OECD-WTO BaTIS; own calculations

Note: Figures indicate number of exporting countries for each service under each quadrant

- For a majority of the Asian countries, most services sectors lie in Quadrant D in both the time periods, 2000-02 and 2010-12
- Quadrant A reports the least number of countries, lacking competitiveness in exporting a number of services to India as compared to merchandise exports

Policy recommendations

- Large number of trade and investment opportunities between India and the selected African and Asian countries
- Need to overcome barriers like limited finance, weak infrastructure, and lack of supportive policies etc.
- Invitation to more companies from the selected countries to showcase their products and services in international exhibitions held in India
- Need for African and Asian countries to diversify their export basket by especially moving to more sophisticated and even capital-intensive items
- Indian investment should be increased in sectors which are competitive but may lack supply-side capacities in the selected exporting countries
- India should tap its potential in soft power, in people-relations related investments such as health, and education, or even in investments in start-ups and new technologies that are likely to be more suitable for the vulnerable economies of the sample LDCs



Thank you!

