# A Study on 'Export Potential of Steel to Emerging Markets: Latin America & Africa'.

Joseph Durai Selvam\* and Chengi Prakash Prithvi Krishna\*\*

**Abstract**: Exports are vital for the growth of economy. As the countries depend on one another for one thing or other, exports and imports are essential to make an economy strong and vibrant. For India exports are important because they help in earning the much sought after foreign exchange. The export potential to the emerging markets were studied by analyzing secondary source of information and the results have been discussed in detail and it has been observed that there is a huge potential of exporting steel to these emerging markets.

## I. INTRODUCTION

By 2020, global steel production and consumption is estimated to be in the order of 2010 Mt and 1950 Mt respectively. The business is operating in a globalized economy where market is changing its shape and marketing become radical. Marketing is typically seen as the task of creating, promoting, delivering goods and services to consumers and business. Marketing people are involved in marketing have ten types of entities such as goods, services, experiences, events, persons, places, properties, organization, information and ideas. The marketing concept bears on the issue benefits to buyer to seller.

"Marketing is a societal process by which individual and groups obtain what they need and want through creating, offering, exchanging products and services of value with others."

As internal marketing deals with the pattern buying and selling, the international marketing deals with trade pattern of export and import. Export marketing is the performance of business activities that direct the flow of a company's goods and services to consumers or users in more than one Nation. Exports are vital for the growth of economy. As the countries depend on one another for one thing or other, exports and imports are essential to make an economy strong and vibrant. For India exports are important because they help in earning the much sought after foreign exchange.

Indian steel industry for a long time has not been allowed to export. The reason given was due to insufficient supply of steel in the domestic market. But as the time changed, government policies have also changed. In the lights of the New Economic policies adopted by the Government of India, Liberalization and Globalization took precedence and the steel industry has been allowed to export. If the same policy continues, according to one estimate, the share of developing countries in steel export market is going to be 25% of the world steel exports. To increase exports government is providing some incentives to the exporters like Advance License, DEPB and DFRC.

#### **II. NEED FOR THE STUDY**

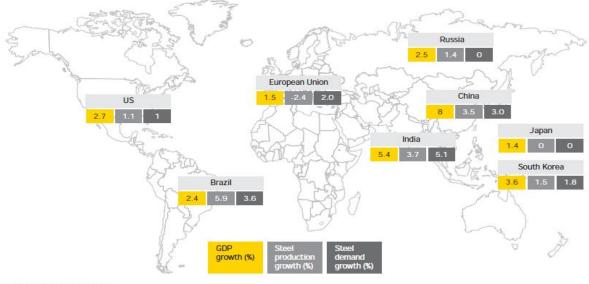
The existence of a need based philosophy like marketing resides with the truth of self-insufficiency. In other words, as no individual is self-sufficient or capable of satisfying all his/her needs with depending on any one, it is the same in the case of country. No country can live in complete isolation. Whenever such inequality arises there an opportunity is created for the resourceful person/country to encase the opportunity. The changed scenario of business left us with a huge market to explore. There is no restriction for place/market. It is the same for an industry like steel. Exports become essential in the present world scenario as the form a pathway for economic development of a country. Export is the easy way to enter the foreign market. There is a continuous effort made by companies to expand markets by increasing exports.

Steel industry being a major player in economic development needs to be facilitated and concentrated more. Plenty of opportunity available in this industry can be encased if planned and implemented properly. In the international market there is a cutthroat competition from the countries like China, Common Wealth of Independent States, Turkey etc. With a very strong positioning of price advantage as the steel market provides to be very price sensitive in the global market and with extensive price fluctuations, a strategic management approach essential for successful performance.

\* Associate Professor \*\*MBA Student, Institute of Management, Christ University, Bangalore.

### INDUSTRY ANALYSIS

### WORLD STEEL SCENARIO



Outlook for steel and economic growth in 2014 mapped against the location of major steel markets

Source: IHS Global Insight, BREE

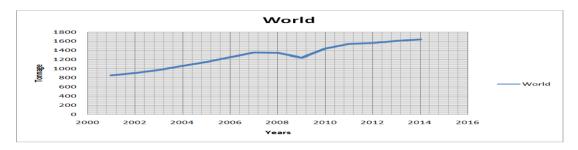
World crude steel production totalled 1,636 million tonnes (Mt) for the year 2014, a record high for the industry with a growth rate of 3.3%. The demand forecasts for 2015 provide an important insight to changing economic forces. The developing world is the primary driving force in steel demand ever since 2008 and also of global economic global growth.

The expectations are that developed economies will also contribute to growth in 2015, with developing economies showing a slower economic pace. Steel is the key to sustainable development for the world today and a key driver of tomorrow's world economy.

WSA has projected that global apparent steel use has increased by 2% to 1,562 mt in 2014 following growth of 3.8% in 2013 while in 2015; world steel demand will grow by 2% and will reach 1,594 mt.

The following table shows the total world steel production from 2001-2014

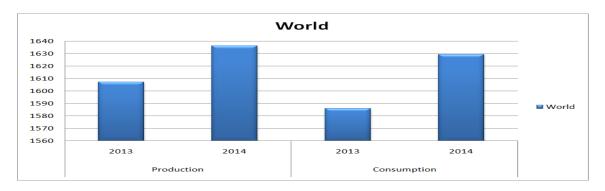
Years	World
2001	852
2002	905
2003	971
2004	1063
2005	1148
2006	1250
2007	1348
2008	1343
2009	1238
2010	1433
2011	1537
2012	1559
2013	1606
2014	1636



As we can see there was a consistent growth in the steel production over the years. The decline in the curve is due to the impact of global recession in 2008. Then the industry slowly revived from and is growing at a continuous basis.

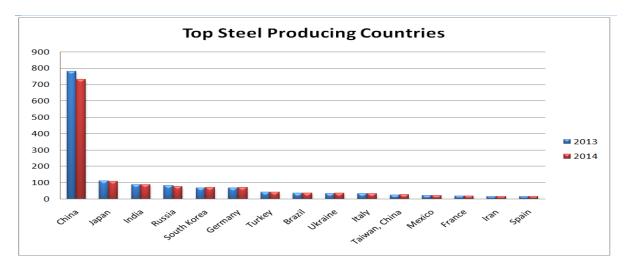
	Production		Consumption		Surplus	
	2013	2014	2013	2014	2013	2014
World	1607	1636	1586	1629	21	7
China	775	802	729	751	46	51
India	81	84	79	83	2	1
Japan	111	111	70	70	41	41
US	87	88	103	104	-16	-16
EU27	167	163	153	156	14	7

The follow table shows the World Steel Production and Consumption during 2013-2014

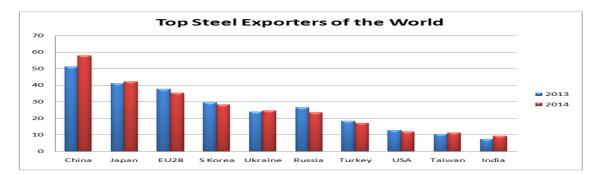


Countries that are top Producers	of Steel 2013 and 2014
Countries that are top i fouucers	01 Steel 2015 and 2014

Country	2013	2014
China	779	731
Japan	110.6	107.2
India	86.9	88.7
Russia	81.2	77.3
South Korea	68.7	70.4
Germany	66.1	69.1
Turkey	42.6	42.7
Brazil	34.7	35.9
Ukraine	34.2	34.5
Italy	32.8	33
Taiwan, China	24.1	27.3
Mexico	22.3	20.7
France	18.2	18.1
Iran	15.7	15.6
Spain	15.4	14.5
Source:		



Top Steel Exporters of the World							
Rank	Country	2013	2014				
1	China	51.2	57.8				
2	Japan	41.1	42.1				
3	EU28	37.7	35.2				
4	S Korea	29.4	28.1				
5	Ukraine	24	24.6				
6	Russia	26.5	23.5				
7	Turkey	18.3	17				
8	USA	12.8	11.8				
9	Taiwan	10.3	11.3				
10	India	7.4	9.3				

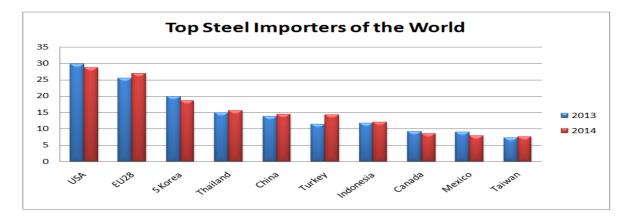


#### Top Steel Importers of the World

Rank	Country	2013	2014
1	USA	29.7	28.6
2	EU28	25.5	26.9
3	S Korea	19.9	18.5
4	Thailand	14.9	15.6

5	China	13.8	14.4
6	Turkey	11.4	14.3
7	Indonesia	11.7	12
8	Canada	9.2	8.5
9	Mexico	9	7.8
10	Taiwan	7.3	7.6

A Study on 'Export Potential of Steel to Emerging...



## Companies that are top producers of Steel 2014

Rank	Company	Tonnage
1	Arcelor Mittal	96.1
2	Nippon Steel & Sumitomo Metal Corp	50.1
3	Hebei Steel Group	45.8
4	Baosteel Group	43.9
5	Wuhan Steel Group	39.3
6	Posco	38.4
7	Shagang Group	35.1
8	Ansteel Group	33.7
9	Shougang Group	31.5
10	JFE	31.2
11	Tata Steel Group	25.3
12	Shandong Steel Group	22.8
13	U.S Steel	20.4
14	Nucor Corp	20.2
15	TanjinBohai Steel	19.3

#### Indian Steel Scenario

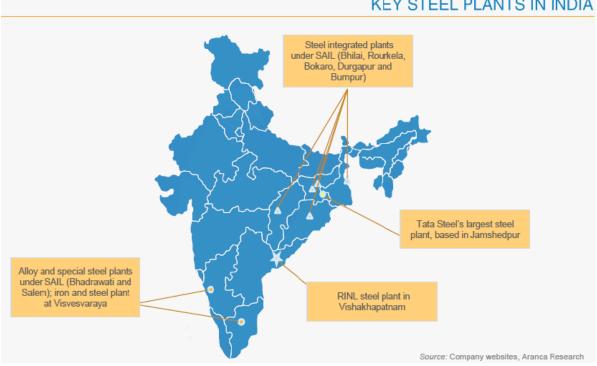
The global steel demand projections indicate that China alone might not be the engine of the World Steel Industry in the future. Other regions will step in, India being the forerunner. By 2020, global steel production and consumption is estimated to be in the order of 2010 Mt and 1950 Mt respectively.

The Indian steel industry has entered into a new development stage from 2007-08, riding high on the resurgent economy and rising demand for steel. Rapid rise in production has resulted in India becoming the 4th largest producer of crude steel and the largest producer of sponge iron or DRI in the world.

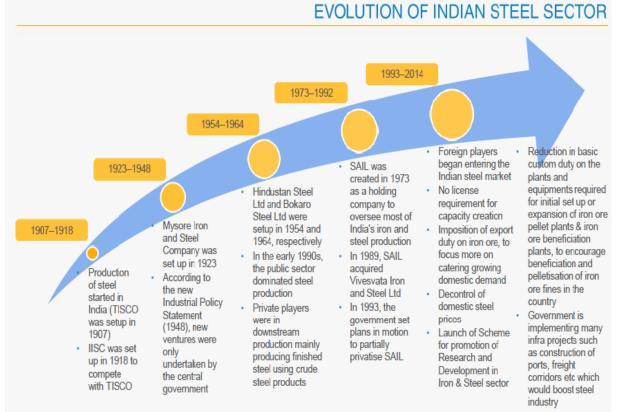
As per the report of the Working Group on Steel for the 12th Five Year Plan, there exist many factors which carry the potential of raising the per capita steel consumption in the country. These include among others, an estimated infrastructure investment of nearly a trillion dollars, a projected growth of manufacturing from current 8% to 11-12%, increase in urban population to 600 million by 2030 from the current level of 400 million, emergence of the rural market for steel currently consuming around 10 kg per annum buoyed by projects like Bharat Nirman, PradhanMantri Gram SadakYojana, Rajiv Gandhi AwaasYojana among others. At the time of its release, the National Steel Policy 2005 had envisaged steel production to reach 110 million tonnes (mt) by 2019-20. However, based on the assessment of the current on-going projects, both in greenfield and brownfield, the Working Group on Steel for the 12th Five Year Plan has projected that domestic crude steel capacity in the county is likely to be 140 mt by 2016-17 and has the potential to reach 149 mt if all requirements are adequately met.

The National Steel Policy 2005 is currently being reviewed keeping in mind the rapid developments in the domestic steel industry (both on the supply and demand sides) as well as the stable growth of the Indian economy since the release of the Policy in 2005. With stiff competition in the global market, the formation of giant companies to reduce cost, improve synergy and add to profitability has become a regular feature in the industry. Cross border mergers and acquisitions have become the order of the day. The focus is on technological improvements and development of new products suiting to the emerging needs. The recent acquisition of Arcelor by Mittal Steel is the best example. With this, Arcelor Mittal Steel has become the largest steel producer of the world with production capacity of about 110 Mt of steel per year, i.e. about 10 per cent of the global steel output. Another acquisition in the pipeline is that of Corus by Tata Steel. The Tata Steel, with a capacity of 5 Mt, is planning to acquire Corus, a UK based 19 Mt steel company. In case this acquisition fructifies, the position of Tata Steel in the top steel producing companies is expected to improve from 56 to 5.

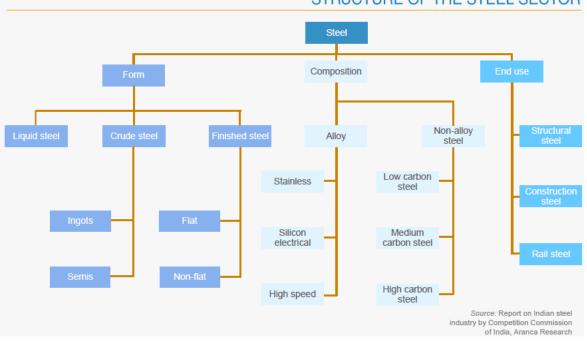
As per the National Steel Policy of GOI, the steel demand is projected to cross 110 Mt by 2020. Currently, various agencies are predicting that the steel demand in the country will be more than what is projected in the National Steel Policy. "India 2020 Project" being undertaken by IISI, which is now under preparation, projects steel demand in India at about 164 Mt by 2020. Presently, the installed capacity of steel in India is about 45 Mt. There is a tremendous opportunity for expanding the production capacity to meet the projected demand. Hence rightly, the most dominant feature in the domestic steel industry in the last two years has been expansion/capacity addition initiatives by existing steel plants and setting up of steel plants by global steel producers. Not only this, Indian steel plants are also acquiring steel plants abroad and entering into joint ventures and strategic alliances in mines in other countries.



# **KEY STEEL PLANTS IN INDIA**



Notes: TISCO - Tata Iron and Steel Company; IISC - Indian Iron & Steel Company; SAIL - Steel Authority of India Ltd

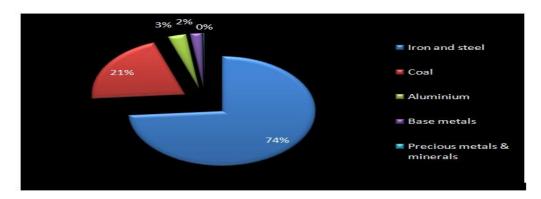


# STRUCTURE OF THE STEEL SECTOR

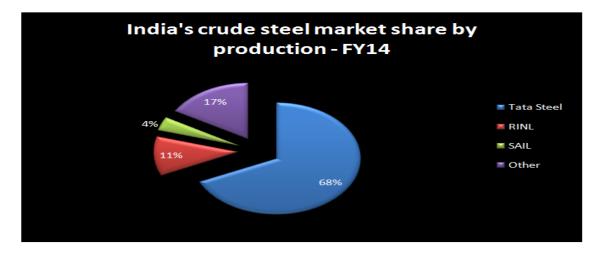
# Present Status and Trends of Indian Steel Industry

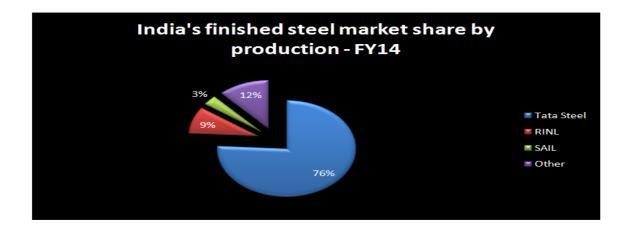
Iron and steel is the largest segment of the Indian metals and mining industry, accounting for 73.8 per cent of the overall industry value.

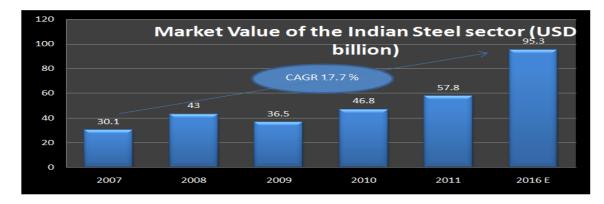
A Study on 'Export Potential of Steel to Emerging...



The Indian steel sector enjoys advantages of domestic availability of raw materials and cheap labour. Iron ore is also available in abundant quantities. This provides major cost advantage to the domestic steel industry. The steel industry reflects the overall economic growth of an economy in the long term as demand for steel is derived from other sectors like automobiles, consumer durables and infrastructure. While steel continues to have a stronghold in traditional sectors such as construction, housing and ground transportation, special steels are increasingly being used in engineering industries such as power generation, petrochemicals and fertilisers. The Indian steel industry is very modern with state-of-the-art steel mills. It has always strived for continuous modernisation and up-gradation of older plants and higher energy efficiency levels. These features of the industry have made India the world's fourth largest producer of steel and the country is poised to move to second position in steel production in the next 10 years.







## Market Size:

Steel production capacity of the country expanded from about 75 million tonnes per annum (MTPA) in 2009-10 to about 101.02 million tonnes (MT) in 2013-14, when output was 81.7 MT.

India produced 7.07 MT of steel in January 2015 reporting the fourth highest production level globally which was 1.7 per cent higher than the country's steel production in the same month last year.

The steel sector in India contributes nearly two per cent of the country's gross domestic product (GDP) and employs over 600,000 people. The per capita consumption of total finished steel in the country has risen from 51 Kg in 2009-10 to about 60 Kg in 2013-14.

#### Investments:

Steel industry and its associated mining and metallurgy sectors have seen a number of major investments and developments in the recent past.

According to the data released by Department of Industrial Policy and Promotion (DIPP), the Indian mining and metallurgical industries attracted foreign direct investments (FDI) to the tune of US\$ 1,669.49 million and US\$ 8,527.34 million, respectively, in the period April 2000–February 2015.

Some of the major investments in the Indian steel industry are as follows:

- JSW Steel has announced to add capacity to make its plant in Karnataka the largest at 20 MT by 2022.
- Tata Steel has planned to commission 3 MT of capacity in its Odisha plant and plans to add another 3 MT at the plant in near future.
- Iran has evinced interest in strengthening ties with India in the steel and mines sector, said ambassador of the Islamic Republic of Iran, Mr Gholamreza Ansari in his conversation with Minister of Steel and Mines Mr Narendra Singh Tomar.

#### Government Support:

The Government of India is aiming to scale up steel production in the country to 300 MT by 2025 from 81 MT in 2013-14.

The Ministry of Steel has announced to invest in modernisation and expansion of steel plants of Steel Authority of India Limited (SAIL) and RashtriyaIspat Nigam Limited (RINL) in various states to enhance the crude steel production capacity in the current phase from 12.84 MTPA to 21.4 MTPA and from 3 MTPA to 6.3 MTPA respectively.

The Ministry of Steel is facilitating setting up of an industry driven Steel Research and Technology Mission of India (SRTMI) in association with the public and private sector steel companies to spearhead research and development activities in the iron and steel industry at an initial corpus of Rs 200 crore (US\$ 31.67 million). Some of the other recent government initiatives in this sector are as follows:

- An Inter -Ministerial Group (IMG) has been setup in the Ministry of Steel for effective coordination and expediting implementation of various investment projects in the steel sector.
- A Project Monitoring Group (PMG) has been constituted under the Cabinet Secretariat to fast track various clearances/resolution of issues delaying the investments in the sector.
- To increase domestic value addition and improve iron ore availability for domestic steel industry, duty on export of iron ore has been increased to 30 per cent.
- Rates of custom duty on stainless steel flat products have been enhanced from 5 per cent to 7.5 per cent in the Union Budget for 2014-15.

National Steel Policy:

- In view of the sector's changed dynamics, globally as well as domestically, the Ministry of Steel has initiated the process of drafting a new National Steel Policy to replace the existing National Steel Policy of 2005
- The government has set up a committee headed by the Steel Secretary to monitor the formulation of the new National Steel Policy
- Four task forces have been constituted to study, analyse, consult and formulate draft policy documents on different aspects of the policy
- The current policy draft proposes allotment of captive iron ore mines to producers through open bidding and putting some mines in the general category
- Policy clarity and stability is expected in respect of mining leasing and forest clearances

## II. EXPECTATIONS:

India is expected to become the world's second largest producer of crude steel in 2015-16, moving up from the fourth position, as its capacity is projected to increase from 100 MT to about 112.5 MT in 2016. Also, India has set an output target of 300 MT of steel by 2025. India is the fourth-largest producer of crude steel (up from eighth in 2003) and is slated to become the second-largest steel producer by 2016, as large public and private sector players strengthen steel production capacity in view of rising demand. The market value of the Indian steel sector is expected to reach US\$ 95.3 billion by FY16. Driven by rising infrastructure development and growing demand for automotives; steel consumption is expected to reach 104 million tonnes (MT) by 2017. Infrastructure is India's largest steel consumer, accounting for 63 per cent of total consumption in FY12.

Steel production in India has increased at a compound annual growth rate (CAGR) of 7.9 per cent over FY09–14 to record 81.54 mtpa. The industry capacity is expected to increase to 112.5 MT by FY16. Total domestic demand for steel estimated at 113.3 million tonnes per annum (MTPA) by 2016-17. Moreover, 301 memorandums of understanding (MoUs) have been signed with various states for planned capacity of about 486.7 MT. The Government of India has also allowed 100 per cent foreign direct investment (FDI) under the automatic route in the steel sector. National Steel Policy (NSP) has been implemented to encourage the industry to reach global benchmarks. In addition, the government has also stepped up infrastructure spending from the current 5 per cent of gross domestic product (GDP) to 10 per cent by 2017. India is committed to investing US\$ 1 trillion in infrastructure during the 12<sup>th</sup> Five Year Plan (2012–17), from US\$ 428 billion in the 11<sup>th</sup> Five-Year Plan

# III. OBJECTIVES

To analyze the facts of steel industry.

To identify the export potential of Steel in Latin America and Africa.

To explore various upcoming potential projects in Latin America & Africa.

To examine the demand of exports in Latin America & Africa.

#### Methodology

Both primary and secondary source of data have been collected and analysed for this study.

# IV. DATA ANALYSIS & INTERPRETATION

To assess India's export opportunities with Africa and Latina American regions the following methodology has been adopted:

The import trends of Steel for all Major Latin American and African countries have been analysed for the years 2009 to 2015 and the corresponding growth rates computed. On the basis of the growth rates, high and low growth import countries have been identified.

#### LATIN AMERICA

## Introduction:

The Latin American region comprises of following 21 South American, Central American countries.

Latin America	Peru
Argentina	Guatemala
Brazil	El Salvador
Chile	Honduras
Uruguay	Belize
Paraguay	Guyana
Bolivia	French Guiana
Venezuela	Falkland Islands
Ecuador	Suriname
Colombia	Panama
Costa Rica	

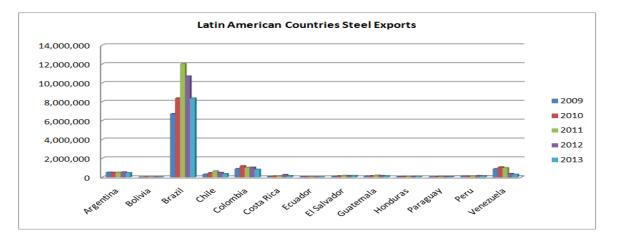
The Latin America of today has changed fundamentally and irreversibly. The Governments of Latin America have opened up their markets and reduced import tariffs. They are privatizing their state enterprises. They are according priority to the modernization, improvement of existing infrastructure and creation of new infrastructure for the growth and development of the region. The Latin American countries have reorganized India's export capabilities and the advantages of doing business with India and look forward to countries like India for imports at affordable prices.

To know about Export Potential of Steel to Latin America region first we see and analyze the Imports & Exports by various countries in this region from 2005-2013.

# **Exports**

Here we have the data of Export of Steel by major Latin American countries from 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Argentina	6,99,411	5,25,226	5,48,024	5,99,907	5,13,170	5,03,929	5,16,408	5,44,703	4,58,570
Bolivia	2,811	1,564	3,130	3,383	1,889	7,146	11,378	11,190	10,379
Brazil	85,48,64 9	87,93,26 6	95,34,40 1	1,28,45,90 7	67,23,33 7	83,85,69 2	1,20,13,88 9	1,07,11,04 4	83,72,28 4
Chile	5,37,718	6,46,021	8,41,314	9,34,725	3,08,451	4,62,447	6,51,267	4,93,041	3,57,085
Colombia	8,88,062	12,67,81 8	18,58,77 7	11,04,558	8,92,669	11,93,15 0	10,34,999	10,47,294	8,26,989
Costa Rica	70,714	53,227	1,10,978	1,83,589	75,004	1,22,304	1,46,021	2,65,374	1,53,029
Ecuador	13,436	23,191	35,663	52,810	23,060	16,690	23,380	17,511	17,320
El Salvador	1,01,228	1,06,192	1,38,880	1,75,507	1,01,373	1,30,385	1,79,785	1,66,390	1,68,370
Guatemala	1,08,053	72,202	1,30,546	1,70,411	1,24,728	1,48,169	2,03,914	1,58,063	1,29,678
Honduras	23,843	22,326	31,936	59,767	34,853	66,821	64,907	88,390	1,14,447
Paraguay	25,117	30,944	33,550	38,532	14,118	23,508	28,608	27,502	25,509
Peru	66,660	78,548	92,488	1,45,486	1,19,325	1,23,617	1,36,048	1,67,900	1,44,991
Venezuela	22,84,76 8	16,58,63 0	12,50,32 8	16,53,268	8,89,071	10,72,93 7	9,88,832	3,85,533	3,03,416



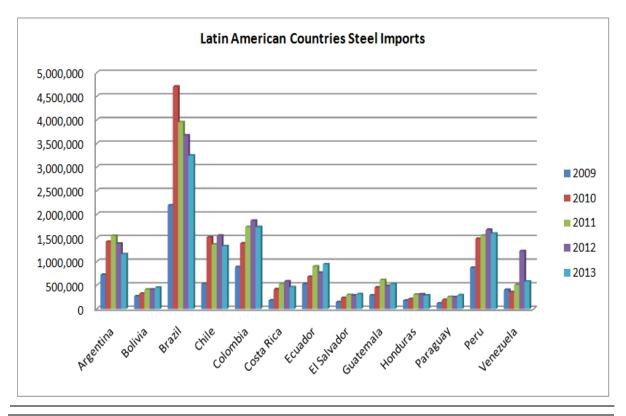
The above graph clearly shows that among all the major countries of Latin America Brazil has been the largest exporter of steel in the past 5 years and no other country is even close to it. This is because Brazil being the biggest economy among all the Latin American countries at high economic growth rate has enough resources to export steel. But the exports of Brazil also came down due to rise in domestic demand. The other countries lack in resources, expertise, low growth in steel sector, etc which lacks their ability to produce and export steel.

# <u>Imports</u>

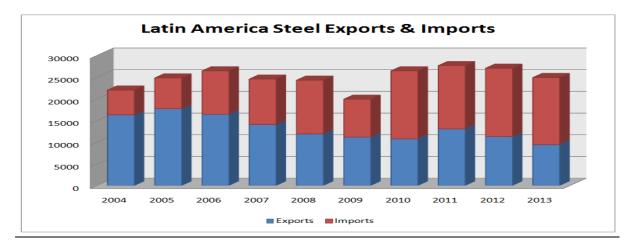
Ŧ

Here we have the data of import of Steel by major Latin American countries from 2005-2013

Imports of Ste	el in USD								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Argentina	7,16,089	8,32,238	11,46,333	16,92,421	7,24,653	14,22,615	15,47,116	13,85,380	11,61,292
Bolivia	1,21,147	1,42,093	1,93,733	3,22,608	2,69,968	3,22,220	4,10,005	4,12,062	4,50,932
Brazil	8,50,265	13,86,244	18,14,456	33,22,402	21,92,764	47,09,478	39,55,390	36,77,551	32,48,328
Chile	6,48,503	7,80,153	9,12,459	17,21,013	5,34,360	15,17,072	13,66,844	15,52,915	13,30,225
Colombia	9,33,273	10,65,629	14,53,916	18,63,063	8,86,680	13,87,071	17,36,004	18,69,390	17,34,983
Costa Rica	2,41,992	3,61,279	4,24,641	7,13,279	1,79,615	4,17,207	5,28,431	5,82,068	4,60,081
Ecuador	4,40,854	5,61,292	6,22,817	12,24,043	5,26,578	6,80,850	9,01,027	7 <b>,6</b> 7,025	9,46,112
El Salvador	1,88,557	2,65,185	2,71,258	4,02,276	1,46,603	2,32,322	2,94,855	2,86,122	3,11,563
Guatemala	3,44,080	2,81,853	4,95,922	6,46,893	2,85,556	4,53,602	6,12,204	4,86,893	5,26,591
Honduras	1,70,013	1,73,622	2,47,847	3,68,591	1,75,121	2,10,345	3,03,627	3,09,680	2,84,560
Paraguay	53,489	80,798	96,766	1,92,885	1,17,845	1,90,849	2,53,652	2,49,888	2,88,997
Peru	4,29,628	5,83,302	8,29,706	15,94,650	8,73,863	14,86,143	15,52,214	16,74,702	15,94,582
Venezuela	2,96,299	3,03,306	6,23,089	4,04,320	4,04,419	3,57,018	5 <mark>,09,</mark> 599	12,25,924	5,80,993



As the countries that don't have enough resources to produce steel from them they import them from other countries. We can see Brazil has been the major Importer of Steel to match its growing demand and consumption and it is followed by Colombia, Peru, Chile Argentina and the rest. The continuous increase in the import of steel shows that the economies are growing rapidly and to meet the growing demand there is a high growth seen in the import of steel from other countries. A high rise of investments in infrastructure sector is the main reason for increase in the imports and it's expected to increase further.



The graph shows fluctuations in the steel exports and imports of Latin American region in past ten years. The graph indicates that slowly the exports from this region have fell down over period and the imports have increased due to various reasons like rise in domestic demand, internal trade barriers, low growth in steel sector, etc.

# <u>AFRICA</u>

# Introduction:

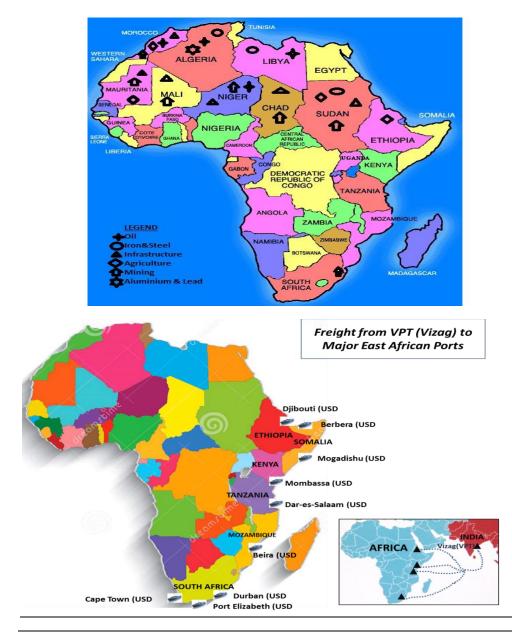
The African region is divided in to 5 regions geographically namely (i) East Africa (ii) Middle Africa (iii) North Africa (iv) South Africa (v) Western Africa and comprises of the following 58 countries

East Africa	Middle Africa	North Africa	South Africa	Western Africa
Burundi	Angola	Algeria	Botswana	Benin
Comoros	Cameroon	Egypt	Lesotho	Burkina Faso
Djibouti	Central African Republic	Libyan Arab Jamahiriya	Namibia	Cape Verde
Eritrea	Chad	Morocco	South -Africa	Cote d'Ivoire
Ethiopia	Congo	South Sudan	Swaziland	Gambia
Kenya	Equatorial Guinea	Sudan		Ghana
Madagascar	Gabon	Tunisia		Guinea
Malawi	Sao Tome and Principe	Western Sahara		Liberia
Mauritius				Mali
Mayotte				Mauritania
Mozambique				Niger
Reunion				Nigeria
Rwanda				Saint Helena
Seychelles				Senegal
Somalia				Sierra Leone
Tanzania				Togo
Uganda				
Zambia				
Zimbabwe				

Africa is currently considered as a mainland balanced for monetary development, the reasons of which lies profound established in economic, resource and operational components. Africa today is the third quickest developing monetary area on the planet. The rate of urbanization is higher than India and lower than China. It is the continent which includes a percentage of the world quickest developing economies. As per World Bank information, Africa is wealthier than India on the premise of GNI, and twelve African nations have a higher GNI every capita than China.

Africa offers among the world's best investment prospects. Likewise a movement of worldwide economic force to emerging giants benefits Africa. Substantial economies, for example, China and India are looking for assets from Africa along these lines pushing up commodity costs globally and giving investment opportunities in African nations. While barriers to entry in Africa are high, organizations that create solid distribution systems and have an understanding of the market can produce high margins.

A portion of the quickest developing economies on the planet are presently in Africa. The charts beneath demonstrates the main 12 quickest developing economies in the year 2013 and it is clear from this table that numerous amongst them are African economies. Ghana, Liberia, Angola, Ethiopia Mozambique are growing faster than numerous Asian economies. In next few years some more African nations, for example, Niger, Zambia, Uganda, and Tanzania are relied upon to join the alliance.

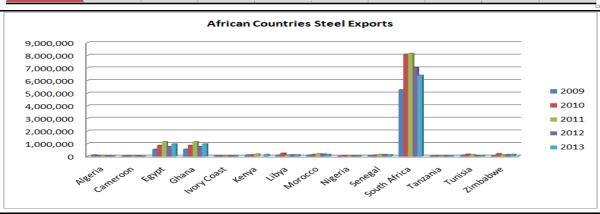


www.ijbmi.org

To know about Export Potential of Steel to African region first we see and analyze the Steel Exports & Imports of major countries in this region from 2004-2013.

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Algeria	1,62,265	2,62,942	2,58,975	3,12,559	1,05,003	77,453	58,725	34,870	21,769
Cameroon	12,224	12,776	28,294	38,526	15,682	19,076	31,815	35,870	1,774
Egypt	5,53,995	8,13,887	7,38,052	12,22,157	5,56,688	8,72,896	11,57,592	7,75,037	9,71,422
Ghana	5,53,995	8,13,887	7,38,052	12,22,157	5,56,688	8,72,896	11,57,592	7,75,037	9,71,422
Ivory Coast	21,937	17,538	32,199	41,805	36,048	32,589	41,371	49,934	32,995
Kenya	1,12,443	1,07,750	1,06,206	1,46,372	1,04,477	1,30,602	1,81,932		1,51,540
Libya			91,454	2,31,637	99,324	2,40,217	1,05,670	1,20,810	1,20,036
Morocco	91,795	2,08,478	2,03,100	2,49,230	99,835	1,49,538	2,08,608	1,74,591	1,45,250
Nigeria		9,732	24,750	3 <b>,9</b> 05	267	33,932	<b>39,81</b> 5	20,066	30,428
Senegal	29,792	40,241	59,468	1,15,273	84,275	99,638	1,50,424	1,37,316	1,18,300
South Africa	57 <b>,69,</b> 597	55,25,089	74,95,582	90,57,949	52,70,653	80,91,110	81,62,216	70,29,063	64,16,44
Tanzania	14,169	14,444	10,094	54,956	12,902	23,908	38,371	32,135	33,488
Tunisia	42,659	1,80,003	1,99,168	2,30,095	1,03,820	1,66,184	1,34,397	81,971	69,217
Zimbabwe	1,87,363	3,48,673	4,17,740	61,379	43,733	2,04,602	1,17,482	1,34,167	1,59,384

#### Exports

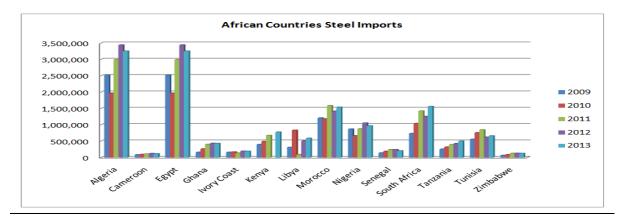


Almost the same scenarios is observe din Latin America. South Africa is the biggest steel exporter of the region and the rest of the countries are stand far behind. Because of the rise in domestic demand the exports of South Africa slowly came down. The other countries lack in resources, expertise, low growth in steel sector, etc which lacks their ability to produce and export steel.

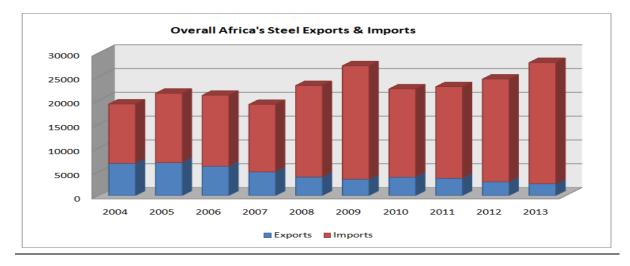
# **Imports**

Here we have the data of imports of Steel by major African countries from 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Algeria	10,34,330	12,76,366	16,64,318	33,55,906	25,24,127	19,67,294	29,96,391	34,40,810	32,55,466
Cameroon	58,679	62,909	84,432	1,22,147	81,656	96,270	1,07,603	1,20,449	1,13,454
Egypt	10,34,330	12,76,366	16,64,318	33,55,906	25,24,127	19,67,294	29,96,391	34,40,810	32,55,466
Ghana	1,20,562	1,01,567	2,15,447	2,66,200	1,57,641	2,62,749	4,00,061	4,31,291	4,27,581
Ivory Coast	99,444	1,06,887	1,49,251	1,96,279	1,59,899	1,66,722	1,34,697	1,92,971	1,87,147
Kenya	2,66,356	2,81,955	3,82,001	4,90,379	3,97,802	4,89,107	6,71,985		7,75,497
Libya			96,344	1,71,714	3,09,110	8,31,562	88,304	5,05,744	5,89,352
Morocco	9,38,505	11,17,387	13,96,643	21,81,295	12,07,908	11,80,405	15,82,976	14,13,450	15,37,181
Nigeria		8,16,407	15,16,881	10,54,290	8,68,585	6,62,063	8,75,542	10,53,205	9,69,202
Senegal	1,10,913	99,468	2,05,449	2,39,265	1,38,592	1,87,393	2,41,000	2,36,148	2,01,096
South Africa	6,24,542	8,81,056	12,29,225	11,17,295	7,35,281	10,41,645	14,22,037	12,55,790	15,60,925
Tanzania	1,42,084	1,74,207	2,14,891	3,59,209	2,53,322	3,17,388	3,94,470	4,26,218	4,99,909
Tunisia	4,49,244	5,60,923	8,19,324	11,45,376	5,56,611	7,57,181	8,44,665	6,20,910	6,59,421
Zimbabwe	7,995	42,671	54,686	37,981	62,923	86,407	1,27,770	1,29,190	1,24,757



We can see Egypt and Algeria dominating other countries in the import of steel to match their growing demand and consumption. Almost all the countries steel imports are increasing due to the growth in the economies. The continuous increase in the import of steel shows that the economies are growing rapidly and to meet the growing demand there is a high growth seen in the import of steel from other countries. A high rise of investments in infrastructure sector is the main reason for increase in the imports and its expected to increase further. Being an untapped market Africa is surely a high potential region for importing of steel.



As we can see there's a consistent fall in the steel exports and rise in the imports of entire African region. Though African region has huge natural resources they couldn't make the best of them and that are why their imports have increased.

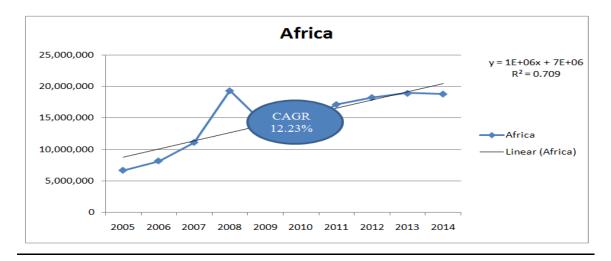
#### Analysis:

Latin America Steel Imports		
Year	Imports	
2005	1,25,00,096	
2006	1,53,66,915	
2007	1,79,90,567	
2008	2,61,07,399	
2009	1,40,48,081	
2010	2,24,79,003	
2011	2,44,57,962	
2012	2,65,89,391	
2013	2,35,17,129	
2014	2,44,66,142	
2015 P	19230000	
20101	17250000	



The past 10 years steel imports of data is used and CAGR if found. The CAGR of Latin American region is 7.75 % and a forecast of imports for 2015 is made by using the CAGR and previous data. The predicted imports of Latin America for 2015 is 19230000 USD.

Latin America Steel Imports		
Year	Imports	
2005	66,63,815	
2006	81,53,349	
2007	1,11,06,647	
2008	1,93,45,171	
2009	1,37,93,416	
2010	1,41,51,339	
2011	1,71,56,185	
2012	1,82,79,228	
2013	1,89,39,685	
2014	1,88,26,989	
2015 P	17740000	



The past 10 years steel imports of data is used and CAGR if found. The CAGR of Latin American region is 7.75 % and a forecast of imports for 2015 is made by using the CAGR and previous data. The predicted imports of Latin America for 2015 are 17740000 USD.

The fall in imports could be because of global excess production of Steel during 2014.

In order to find the potentiality of exports to these regions, average import growth rates of the major countries in these regions are considered and top 5 countries with highest mean import growth rate are considered for further analysis.

The following table shows the mean s	steel import growth rates	of major countries of	Latin America and Africa.
U	1 0	5	

Steel Imports growth rate of Latin America		
Countries	Mean	
Argentina	13	
Brazil	14.2	
Chile	33.8	
Paraguay	25.4	
Bolivia	14.8	
Venezuela	23.8	
Ecuador	11	
Colombia	19.6	
Costa Rica	30.4	
Peru	14.2	
Guatemala	17.6	
El Salvador	16	
Honduras	7.4	

From Latin America top 5 countries with highest mean steel import growth rate are

1) Chile	33.8
2) Costa Rica	30.4
3) Paraguay	25.4
4) Venezuela	23.8
5) Colombia	16

Steel Imports growth rate of Africa	
Countries	Mean
Algeria	9.6
Cameroon	8.4
Egypt	4.8
Ghana	25.2
Ivory Coast	5
Kenya	12
Libya	33.8
Могоссо	4.8
Nigeria	4
Senegal	11.2
South Africa	17.8
Sudan	-4.6
Tanzania	14.8
Tunisia	5.6

From Africa top 5 countries with highest mean steel import growth rate are

1) Libya	33.8
2) Ghana	25.2
South Africa	17.8
4) Tanzania	14.8
5) Kenya	12

The global export competitiveness of steel for these 10 countrieshas been identified based on the RCA index. A product in a country has been considered as export competitive if the RCA values are greater than 1 for at least 3 years. These countries with high RCA values and low growth for Steel have been identified as those having export opportunities for India. For these 10countries, the existing barriers have been looked into for identifying the constraints for export growth.

The following are the barriers faced to have trade with these countries

- Distance
- language barriers
- Inadequacy in the exchange of information
- Absence of direct shipping and air links
- Political & Trade Constraints
- Economic barriers

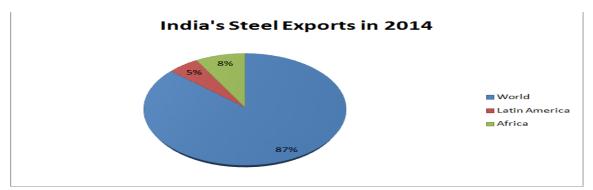
To identify the potential export opportunities for India, major Steel exporting countries from where Latin America and African countries import have been mapped with the steel exports of India to these regions.

The below table shows the Steel imports of Latin America & Africa and how much percentage India contributes to their Steel imports.

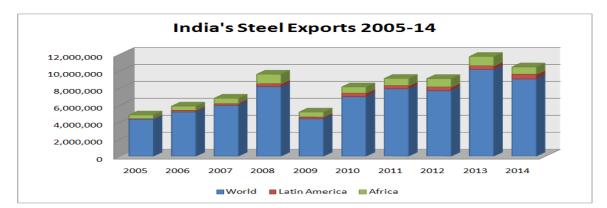
	Steel Imports o	f Latin America d	& Africa			
Year	World	India	% of Imports from India	World	India	% of Imports from India
2005	1,25,00,096	86,324	0.69	66,63,815	4,23,803	6.36
2006	1,53,66,915	1,90,249	1.24	81,53,349	5,06,932	6.22
2007	1,79,90,567	1,78,777	0.99	1,11,06,647	6,49,037	5.84
2008	2,61,07,399	3,25,333	1.25	1,93,45,171	11,14,275	5.76
2009	1,40,48,081	2,14,768	1.53	1,37,93,416	5,91,364	4.29
2010	2,24,79,003	4,18,257	1.86	1,41,51,339	7,31,992	5.17
2011	2,44,57,962	3,65,965	1.50	1,71,56,185	8,49,381	4.95
2012	2,65,89,391	4,30,458	1.62	1,82,79,228	9,94,035	5.44
2013	2,35,17,129	4,16,050	1.77	1,89,39,685	11,06,319	5.84
2014	2,44,66,142	5,49,967	2.25	1,88,26,989	8,61,573	4.58

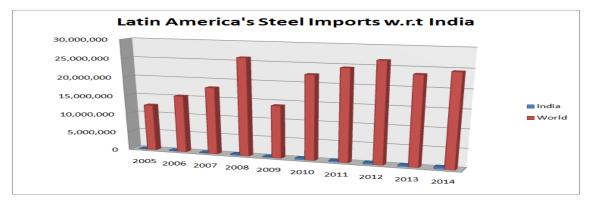
Given the above structure of Africa's and Latin America's steel imports from India, the possibilities for increasing India's steel exports will depend on the domestic demand conditions in these regions. If the growth in these regions world imports of steel is increasing then it would mean that domestic demand is rising and therefore, potential export opportunities for India would also rise, provided India has the supply capability.

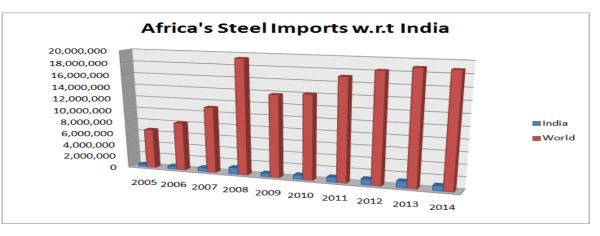
# IndianScenario:



The below table shows how much Latin American and African regions constitute of India's Steel exports when compared to the world.







## Trade Relation & opportunities for India with these markets:

#### Latin America:

#### The trade opportunities present in Latin America emanate from following facts:

• According to the Economic Commission for Latin America and the Caribbean (ECLAC) Latin America and the Caribbean grew by around 4.3 % in 2014. Growth for 2015 is projected at 3.2% for the region.

• The growth projection for major countries in the LAC region is as follows- Panama (9.5%), Peru (5.9%), Chile, Costa Rica and Venezuela (at 5% each), Colombia (4.5%), Mexico (4.0%), Argentina (2.0%) and Brazil (1.6%).

• The Latin American and Caribbean (LAC) region comprising 43 countries accounts for about 5.77% of the total world trade in 2013.

• India's exports to Latin America were US\$ 13.64 billion in 2013-14. While imports from this region during the same year was US \$ 18.61 billion.

• Brazil, Venezuela, Bahamas, Chile, Argentina, Colombia, Peru, Ecuador, Panama and Trinidad & Tobago are India's top ten trading partners constituting approximately 83% of the total trade with the LAC region in 2013-14.

• India has signed two Preferential Trade Agreement (PTAs) in LAC region one with MERCOSUR (trade bloc of Argentina Brazil Paraguay and Uruguay) on January 25 2004 (Annexes to PTA incorporated on March 19, 2005) and other with Chile on March 8, 2006.

• The Latin American countries are welcoming the entry of Indian companies in their markets. IT, pharmaceuticals, energy, steel etc. are the main sectors of Indian investments in the region.

• Activation of regional trade arrangements such as MERCOSUR (Southern Common Market) Andean Pact (Andean Common Market) CACM (Central American Common Market) CARICOM (Caribbean Community) EAI (Enterprise for the Americas Initiative) LAIA (Latin American Integration Association) and NAFTA (North American Free Trade Agreement) has been done.

• Traditionally relations between India and the countries of Latin America have remained close. However commercial relations have not grown commensurately. The main reasons affecting our trade with this region are: distance, language barriers, inadequacy in the exchange of information and the absence of direct shipping and air links.

The trade relation between India and Latin American Countries can be categorized under:

A. Institutional mechanism.

- B. Improved market access.
- C. Economic infrastructure facilities.

#### A. Institutional Mechanisms

1. Measures taken by the Government of India

- (i) Preferential Trade Agreement (PTA) with MERCOSUR
- (ii) Preferential Trade Agreement (PTA) with Chile
- (iii) Enhanced Interaction
- (iv) Joint Commission/Committee
- (v) Commercial Attaché
- (vi) Measures by ITPO

2. Measures by apex trade bodies: Joint Business Councils

#### **B. IMPROVED MARKET ACCESS**

- 1. Foreign Trade Policy initiatives
- 2. Market Development Assistance (MDA)
- 3. Market Access Initiative (MAI) Scheme
- 4. Information support

# C. Economic infrastructure facilities.

- 1. ECGC Cover
- 2. Lines of Credit

# Africa:

#### The trade opportunities present in Africa emanate from following facts:

- India's trade with Africa has doubled in the past four years, from \$24.98 billion in 2010–12 and expected to reach \$52.81 billion in 2015–2017. This steady upward path on the trade front is being supported by stronger investment ties, with Indian companies in Africa totalling \$1.52 billion in 2012–13. With the leadership on both sides committed to providing a business friendly environment, bilateral ties are expected to continuously grow in scope and significance.
- On India's side, economic growth is inevitably pushing the country to expand its footprint across Africa, including sourcing raw materials and energy to sustain industrial activities at home as well as securing new markets and consumers abroad for its expanding array of manufactured goods and value-added services. And on the African side, high commodity prices and robust external demand have provided more space for national governments to consolidate gains from improved macroeconomic management at home. This has enabled greater private capital flows, faster debt relief, and allocating greater resources to enhancing non fuel exports.
- The political and economic developments have substantially improved business opportunities for the international community and consequently, both trade and investment in Africa indicate a growing trend
- Africa today represents one of the largest untapped potential for investment as it is one of the richest natural resource regions in the world. Further, Africa has a middle class that is larger than India's, estimated at 350–500 million, with a rising per capita income and greater propensity to trade and to invest. The continent is today the third-fastest growing economic region in the world and its rate of urbanization is higher than India's.
- From India's perspective, the following sectors are seen to be of high importance: agriculture, healthcare and pharmaceuticals, textiles, automobiles including auto-components, metals (Iron and Steel) and minerals, IT &ITeS, banking and financial services, energy and infrastructure. To further expand India-Africa ties, a number of initiatives are underway to facilitate exchange of information, identify business related bottlenecks, expand business alliances, and facilitate technology transfers.
- In all these efforts, an enduring cementing role is being played by the vibrant and proactive Indian Diaspora. This community has not only been instrumental in building up the goodwill that India enjoys today in Africa, its entrepreneurial skills and love for closer bilateral ties will be an important ingredient in forging closer ties in the future, enabling both sides to enhance their economic wellbeing and their overall standing amongst the comity of nations.

#### Findings and Suggestions

From the analysis made it is observed that there is huge existing potential in both the regions, but there is lack of penetration by India into these markets.

- The very less contribution of Indian steel exports show how much scope there is for Indian companies to explore and expand in these regions with respect to steel.
- Both Latin America and African countries are growing rapidly and their demand for steel is growing at an equal pace.
- The Latin American Countries are growing at a faster pace and they have a huge requirement for steel products.
- Mainly in the countries like Brazil and Argentina high infrastructure development is taking place and as they don't have enough resources at a domestic level, they would prefer to import.
- As India has many trade treaties with the Latin American countries and is many trade councils Latin America can be considered as the best emerging market for immediate trade activities.
- Both the countries can mutual benefit from this.
- There are certain levies and special considerations provided for Indian Steel exports by Latin American Countries under the Latin American and Caribbean (LAC) Program, a trade initiative taken by Indian Government.

- Though the African countries are not so trade friendly they have started opening up and to fuel their growth they are participating in trade treaties and agreements.
- India has made trade agreements with many African countries in which export of steel was mentioned clearly mentioned and is given certain levies and considerations.
- They African market can also be considered for plant expansion in future as it has abundant natural resources.
- It is advised that the company can benefit from either setting up offices or to approach trade intermediaries in these regions to capture the market.
- A thorough look in to the customer's previous demand for certain products of steel can help in understanding the customer's preference and requirement.
- A constant updating about the investments in infrastructure activities of the countries in these regions can help immediate capturing of opportunities.

**References:** 

1 the land and an angle and Country College heat TS areas
http://www.trademap.org/Country_SelProduct_TS.aspx
http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?page=1
http://www.ibef.org/
- · · ·
http://www.tradingeconomics.com/
http://ieconomics.com/
http://www.indiantradeportal.in/
http://cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=9
http://www.ncti.gov.in/
http://www.worldbank.org/
www.steelworld.com
www.worldsteel.org
www.worldsteer.org
www.steelguru.com
www.seeiguru.com
www.imf.com
www.min.com
www.ministryofsteel.com
www.ministryofcommerce.com

# Webpages:

#### Articles:

Steel Statistical book 2014 by World steel Association
World Steel in figures 2014 by World steel Association
Global Steel 2014 by EY
Focus Lac Program by Ministry of Commerce
Steel March 2015 by IBEF
Highlights of the foreign trade policy 2015-2020 by Ministry of Commerce
Steel Scorecard by World Steel Dynamics
Modelling Africa's Demand for Iron and Steel Importation by Scientific Research.om
India's Export Opportunity in Africa by IIFT

#### Bibliography

- [1] Data RCA. (2012). Retrieved June 2015, from www.cepii.fr: http://cepii.fr/CEPII/en/bdd\_modele/presentation.asp?id=26
- [2] International trade policy. (2012). Retrieved June 2015, from www.commerce.nic.in: http://commerce.nic.in/trade/international\_tpp\_lac.pdf
- [3] worldsteel Short Range Outlook 2014-2015. (2014, October 06). Retrieved June 2015, from www.worldsteel.org: http://www.worldsteel.org/media-centre/press-releases/2014/worldsteel-Short-Range-Outlook-2014-to-2015.html
- [4] (2015). Retrieved June 2015, from www.trademap.org: http://www.trademap.org/Country\_SelProduct\_TS.aspx
- [5] (2015). Retrieved June 2015, from www.ibef.org: http://www.ibef.org/
- [6] *Foreign Trade Policy & Procedure.* (2015). Retrieved June 2015, from www.commerce.nic.in: http://commerce.nic.in/MOC/foreign\_trade\_policy2.asp
- [7] (2015). Global Steel 2014. EY.
- [8] Import Export Data Bank. (2015, May 03). Retrieved June 2015, from www.ministryofcommerce.nic.in: http://www.commerce.nic.in/eidb/
- [9] (2015). *Steel Scorecard 2014*. World steel Dynamics.
- [10] (2015). Steel Statistical Book 2014. World Steel Association.
- [11] (2015). Wordl Steel in Figures 2014. World Steel Association.
- [12] C. Veeramani. (2012). Capital Goods Imports and Economic Growth: Does composition of imports matter? Mumbai: Indira Gandhi Institute of Development Research.
- [13] Fidelys Ravelomanana, L. Y. (2014). Modeling Africa's Demand for Iron and Steel Importation: An International Market Estimation Method Perspective. *American Journal of Industrial and Business Management*.
- [14] Rakesh Mohan Joshi, B. N. (2012). India's Export Oppurtunity in Africa: Issues and Challanges in select sectors. IIFT.