

Australia-India Relations:

Trends and the Prospects for a Comprehensive Economic Relationship

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Abstract

Today India is the fastest growing major economy in the world and offers immense opportunities for business and economic partnership. Many countries are reformulating their economic and foreign policies to engage India. Australia too has been taking steps to establish a comprehensive strategic partnership with India. One of the most standout components of this emerging Australia-India strategic partnership is the economic relationship which is noticeable mainly by the Australian resources and energy-driven export to India. However, the synergies and complementarities in other sectors provide huge opportunities for expansion and have yet to form a considerable chunk of Australia-India economic relationship. Given the political will shown at the top level from both the governments for a Comprehensive Economic Co-operation Agreement (CECA), it is imperative to study the trends and prospects for the investment and economic relationship between Australia and India. This paper examines the sectors that need to be synergised for a comprehensive Australia-India economic relationship, namely the resources and energy, agriculture and food, education and tourism, health and medical, and the manufacturing and infrastructure sectors.

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Introduction

Asia's rise as an economic hub of the global economy and the shifting nature of economic and military activities from the Atlantic to the Pacific region is driving many countries to involve strategically and economically in the Asia-Pacific region. This universal transformation is witnessing around 600 million people in the middle class, from India through to China, and all the countries in between. The resultant progress of China and India's international and growing economic influence go beyond the bilateral level with a significant bearing on the issues related to the Asia-Pacific region and global level. As a consequence, most of the countries are reformulating and readjusting their economic and foreign policies to position themselves in this seismic shift in the global trade and investment patterns. Australia too has been taking steps to position itself in this seismic transformation. After engaged in the Asia-Pacific region for decades, particularly the East Asian economic giants of Japan and South Korea, and more recently China, Australia is moving towards a comprehensive relationship with India.

Moreover, with the emergence of the 'Indo-Pacific' region as new geo-political construct, a shift from the 'Asia-Pacific' concept to deal with the strategic and economic scenario in the region amidst the rise of China and that brings India to the new strategic arc, the support for the Indo-Pacific orientation among Australia's foreign policy circle and the question of its viability¹ is further pushing Australia to engage India comprehensively on the economic front.

Today India is considered as one of the most preferred destinations for investment. Not long ago, India was not even in the top 100 destinations for doing business. The red tape, obstinate bureaucracy, rampant corruption and poor infrastructure used to degrade India's business friendliness image. Since the liberalisation and economic reforms began to unfold in 1990s, India has progressed, and is being recognised at the international stage economically, militarily and politically.

¹ Nick Bisley & Andrew Philips, "Rebalance to where?: US Strategic Geography in Asia," *Survival*, Vol.55 No.5(2013), Pp. 95-114.

However, despite its recent push to defence modernisation, expanding foreign policy and global aspirations,² it is the economic aspects of India that is attracting many nations. After more than two decades of economic liberalisation, backed by a strong domestic demand, a fast emerging growing middle class population, a young demographics of which more than 50 % are below the age of 25, on a path towards better governance, and regulations facilitating investment ensuring high returns have made India an attractive destination for foreign investors.

India has been rated as the most favourite equity market for the global investors for the year 2015 at 43 %, followed by China at 26 %. India is also well placed in the bull market.³ India was the 2nd best-performing stock market in 2014 with Bombay Stock Exchange leading as the exchange with the largest number of listed companies in the world – 5665, the 10th largest in the world in terms of market cap and the largest exchange in the world in terms of a number of currency options contracts traded. In addition, India's GDP growth projection in 2015-16 between 8.1 % and 8.5% will make it the fastest growing major economy in the world.⁴ The foreign investment institutions are gradually increasing their investments as Indian bonds are likely to outperform other emerging markets in the medium-term. There is an increasing confidence of investors in India as the Indian government pursues its economic reforms measures.

However, despite the economic progress made over the last two decades, India's march towards the development is stuck with many problems. India's economic growth went down to 4.8 % in 2013 from a double-digit growth rate of 10.5 % in 2010. But the Bharatiya Janata Party(BJP)-led National Democratic Alliance(NDA) Government under the leadership of Prime Minister Narendra Modi, which came to power in 2014 general election on the promise

² See Amitabh Mattoo, ed., *The Reluctant Super Power: Understanding India and its Aspirations* (Melbourne: University of Melbourne Press, 2012).

³ "Foreign Institutional Investment (FII) in India," India in Business, Ministry of External Affairs, Government of India, 20 June 2015, Available at <http://indiainbusiness.nic.in/newdesign/index.php?param=advantage/173>

⁴ "Indian economy to grow 7.7 per cent this year, says OECD," *Economic Times*, 19 March 2015, Available at http://articles.economictimes.indiatimes.com/2015-03-19/news/60286863_1_interim-economic-assessment-the-oecd-global-growth

of developmental agenda,⁵ is taking steps to revive Indian economy and address India's developmental issues, including basic infrastructure, energy security, agricultural production, waste and river management, skill development, education, health, electricity for millions of its population.

A developing India offers immense opportunities to Australia that has got resources and expertise to offer that India needs. In the coming decades, Australians who can deal with the culturally complex challenges of operating in India are going to be in strong demand as they will have the cultural competence and knowledge of India to take the relationship ahead.⁶ The need for a multi-level engagement with India has been acknowledged by successive Australian governments resulting in trade talks and dialogue between the leaders of Australia and India at the highest level. Over the past decade and a half, India's economic growth, its appetite for resources, energy demand, skill development, technical know-how and investment have made it an important trade partner and export destination for Australia. In their two summit-level meetings last year, Prime Minister Narendra Modi and Prime Minister Tony Abbott decided to prioritise and enhance the India-Australia relationship to a comprehensive level. Indeed the Australia-India relationship has moved well beyond the narratives of mutual fondness for Cricket and the shared values of Commonwealth. Now these two biggest naval powers of the Indian Ocean have started to forge a comprehensive bilateral relationship with the main focus on a sturdy economic, strategic and security partnership in the coming decades. The multilateral naval exercise between the US, Japan, Australia and India in the form of 'Quadrilateral Initiative'⁷ for tackling traditional and non-traditional security challenges and the recent steps by Australia and India to carve out a security partnership are some of the positive trends in this direction.

⁵ Ashok Sharma, "A Shift from Identity Politics in the 2014 India Election: The BJP towards Moderation" in Einar Thorsen and Chindu Sreedharan, eds., *India Election 2014: First Reflections*, (London: Centre for the Study of Journalism, Culture and Community at Bournemouth University, 2015), Pp, 15-30.

⁶ For detail on the views on Australia-India relationship, see Marlene Kanga & Amitabh Mattoo, eds., *HULABALOO: The Fuss About Australia-India Relationship* (Melbourne: Australia India Institute, 2014).

⁷ Ashok Sharma, "The Quadrilateral Initiatives: An Evaluation," *South Asian Survey* Vol. 17 No. 2 (2010), Pp. 237-253.

However, one of the most standout components of this emerging strategic partnership is the economic relationship. Looking at the steps taken by the two prime ministerial level meetings to enhance the Australia-India relationship and towards the free trade agreement, it is imperative to examine the synergies in Australia-India bilateral trade and investment relationship. The Australia-India bilateral trade is noticeable by the Australian resources and energy-driven export to India, but the complementarities in other sectors provide huge opportunities for a comprehensive Australia- India bilateral economic relationship. The political stability of the new government in India and the political will at the top level of Australian and Indian leadership augur well for a comprehensive partnership with expansion in the sectors which have yet to form a considerable chunk of Australia-India trade and investment relationship. Given the steps being taken towards a Comprehensive Economic Cooperation Agreement (CECA), this paper examines the trends and prospects in the investment and trade opportunities in India and collaboration in two-way trade between Australia and India in a range of sectors, namely the resource and energy, agriculture and food, education and tourism, health and medical, manufacturing and infrastructure.

I. The History of Australia –India Relationship: From Prickly to Partnership

The Australia-India trade link goes back to the colonial period. India was pivotal in the budding phase of Australia as a British colony in the 18th century. The link between Australia and India began after the European settlement of Australia in 1788. The trade became a core component in the dealings with the British East India Company in Bengal. Calcutta also came to the rescue of the new colony when in 1792 the ‘Guardian’ ship carrying food to Australia submerged leaving the colony without any food supplies. The Governor of Australia looked towards India for immediate help in dispatching the 'Atlantic' to bring back all the food and stores it could carry. The 'Atlantic' came back to Australia with a cargo of rice, wheat and lentils. Likewise, Bengal received its first shipment of Australian coal in 1799 from Newcastle. In the first half of 19th century, as British bureaucrats, merchants, chaplains and judges from the two colonies interacted directly; India became Australia’s first direct contact. The links began to grow further and a ship was visiting India from Sydney nearly every four days by 1840. It brought prosperity to Indian merchants as they supplied food,

spices Anglo-Indian furniture. Australia became a new settlement place for many British colonial families posted in India at the beginning the 19th century.⁸

The recent trade links between India and Australia began during the post-independence period. But due to the political and ideological dynamics, and the varying perceptions of the Cold War politics, both the countries were not able to establish the trade links. Despite sharing many political, cultural, and historical commonalities, India and Australia have long had a distant and uneasy relationship. For decades this was mainly because of the Cold War political dynamics and India's choice to pursue a foreign policy of Non-Alignment (later, siding with the Soviet Union); this contrasted with Australia's ANZUS pact alliance with the United States.

Until the 1980s, head of both the governments visited each other's countries. After Prime Minister Rajiv Gandhi's bilateral visit to Australia in 1986, there was no prime ministerial visit to Australia from the Indian side for almost three decades. A number of important ministers, heads of the state, and the Vice President of India visited Australia.

However, the end of the Cold War cleared the Cold War political and ideological divergences, and India's economic reforms in the 1990s began to change the perception of many Western developed countries about India. In the post-liberalisation phase and especially in the past decade and a half the increasing demands of mineral resources and energy for the Indian growing economy and the next destination for the opportunity for Indian professionals and students, Australia began to figure importantly among Indians. Australia too began to view India as the next big destination for the business and market. The enormous opportunities in Australia and India trade relations began to be noticed by both the nations.

However, from the Australian point of view, India's non-signatory status of Nuclear Non-Proliferation Treaty (NPT) remained an obstructing issue and Australia also lacked the confidence for doing business with India. While the sale of uranium to India remained

⁸ The High Commission of India in Australia, "Historical Contacts," Available at <http://www.hcindia-au.org/historical-contacts.htm> ; For a detail account of Australia-India relations, see Meg Gurry, *Australia and India: Mapping The Journey 1944-2014* (Melbourne: Melbourne University Press, 2015)

debatable for a long time,⁹ it could not stop the positive trends of Australia-India relationship. A cursory look at the past ten to fifteen years of Australia-India trade shows that it has been continuously moving forward.

II. Trade and Investment: Facts & Figures

i. The India-Australia Bilateral Trade:

A cursory look at following India-Australia trade reflects positive trends:

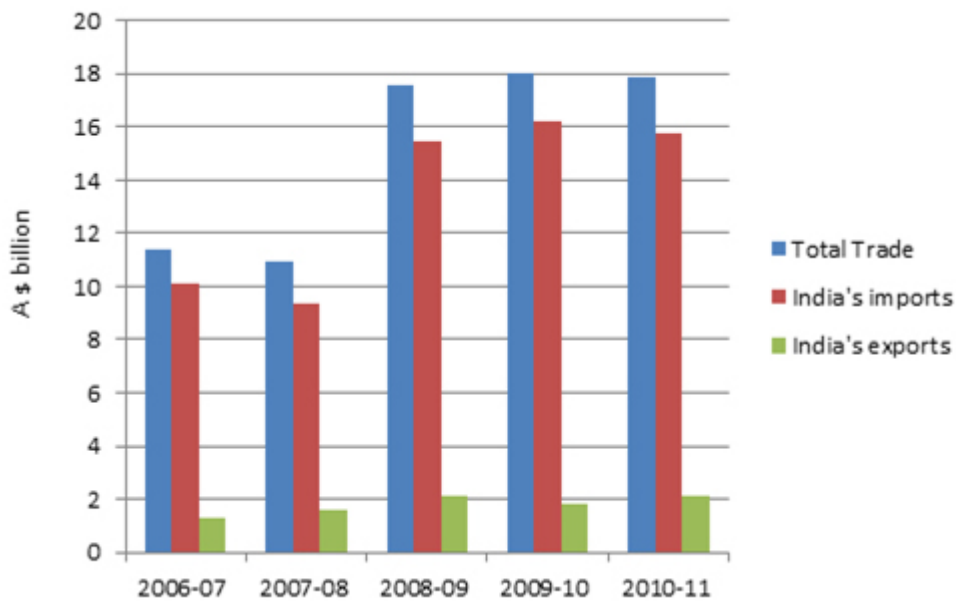
India - Australia Trade in Goods: 2005 – 2011, (all figures in A\$)¹⁰

| Year* | 2005 – 06 | 2006 – 07 | 2007 – 08 | 2008 – 09 | 2009 – 10 | 2010 – 11 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total trade | \$10.12 bn. | \$10.75 bn. | \$10.92 bn. | \$17.53 bn. | \$18.02 bn. | \$17.82 bn. |
| India's Exports | \$1.28 bn. | \$1.46 bn. | \$1.60 bn. | \$2.11 bn. | \$1.84 bn. | \$2.08 bn. |
| India's Imports | \$8.84 bn. | \$9.29 bn. | \$9.32 bn. | \$15.42 bn. | \$16.17 bn. | \$15.74 bn. |

⁹ Rory Medcalf, "Australia's uranium puzzle: Why China and Russia but not India?" *Fearless Nadia Papers*, Volume 1, 2011, Available at

<http://www.aii.unimelb.edu.au/sites/default/files/Fearless%20Nadia%20paper%201.pdf> ; Ramesh Thakur, "Selling Australian Uranium to India," *Australian Outlook*, 4 September 2014, Available at http://www.internationalaffairs.org.au/australian_outlook/selling-australian-uranium-to-india/; Ashok Sharma, "Australia and India's Nuclear Deal: A New Beginning in the India-Australia Relationship," *SAIS Review of International Affairs*, 22 October, 2014, Available at <http://www.saisreview.org/2014/10/22/australia-and-indias-nuclear-deal-a-new-beginning-in-the-india-australia-relationship/#sthash.Lg6lVXoO.dpuf>

¹⁰ "Bilateral Economic Relations," The High Commission of India in Australia, Available at <http://www.hcindia-au.org/bilateral-economic-relation.htm>



Australia's exports of goods to India grew by an annual average of nearly 24% in the period 2006-11. India's exports of goods to Australia grew by an annual average of 12.3%. India's main exports to Australia are gems and jewellery, machinery and textiles while India's major imports are non-monetary gold, coal, copper ores- the three products account for over 86 % of India's imports from Australia, with coal being the dominant import.¹¹ India tops Australia's export destination for gold and chickpeas and is the second largest export destination for the Australian coal and copper ores, the third largest export market for lead and wool, and a growing market for nickel exports.

The service trade between India and Australia amounted to \$US 3.5 billion in 2010-11 with Australian exports amounting to \$US 2.47 billion. India's main service exports to Australia are computer and information services and tourism.¹² Australia's main service exports are education, education-related services and tourism. Australian merchandise exports grew by 17.3% in compound annual terms to India, though from a low base in the period 2000-13. However, there have been significant down trend in two-way trade in the year up to 2013, accounting a 22% decline.

¹¹ The High Commission of India, n.8.

¹² Ibid.

In fact, Australia's trade relationship with India has been cautiously growing. A decade ago, India wasn't in the top ten destinations for Australian exports. At present, India is Australia's fourth largest export destination with a share of 5.3% of total Australian exports¹³ and the fifth largest trading partner in terms of goods and services. The two-way trade in goods and services has grown in value from \$A6.8 billion in FY2003-04 to \$A14.8 billion in FY2013-14. Overall, the Australia-India trade relationship has seen a remarkable growth in the past decade and a half and is backed by many complementarities between the two economies.

ii. The Australia-India Bilateral Investments

The Australia-India trade relationship is visible in the bilateral investment too. The Australian companies' presence in India is notable mostly in the energy, high-tech, telecommunication and finance sectors. The main Australian companies doing business in India include Telstra, BHP Billiton, Rio Tinto, MIM Holdings, Snowy Mountain Engineering Corporation, The Australian Wheat Board, P&O Australia, Clough Engineering, Lucent Technologies and ANZ Bank.¹⁴

According to the report titled 'G-20 Trade and Investment 2014' issued by the Australian Department of Foreign Affairs and Trade (DFAT), the investments by Australian companies in India grew by 13.7% in 2013, while the outlay of Indian firms in Australia remained flat in 2013 as compared to 2012. Australian companies invested A\$ 6.57 billion in 2013 compared to A\$5.78 billion in 2012, up 13.7 %. The Australian investment is projected to grow at 23.4%, making India the fourth fastest Australian investment destination, in the next five years trends.¹⁵

Australia can serve as a natural partner for India by providing the capital required for both social and physical infrastructure. The return on capital (real rate of interest) in Australia is low. Australian capital will have better returns when invested in physical infrastructure in

¹³ "Observatory of Economic Complexity," Available at <https://atlas.media.mit.edu/en/profile/country/aus/>

¹⁴The High Commission of India, n.8.

¹⁵Australian Department of Foreign Affairs and Trade (DFAT), "G-20 Trade and Investment 2014," Available at <http://dfat.gov.au/about-us/publications/Documents/australias-trade-and-investment-with-the-g20-2014.pdf>

India. As the level of capital already deployed in India is low, the return on additional capital investment will always be higher in India than in other ASEAN countries or in China.¹⁶

But, this is not a one-way story. India is not only an investment destination for Australia, but it is also the next big source of investment in Australia – which has reached \$11 billion.¹⁷ The Indian companies such as Tata Consultancy, Infosys, Mahindra Aerospace and Adani's mining venture have made significant investments in the Australian economy. The two-way trade has grown in value from A\$ 5.1 billion in 2003 to A\$ 15.2 billion in 2013.¹⁸

In recent years, the investments in Australia from India's wealthy, from traditional to neo-riches IT entrepreneurs are very much noticeable. They are visible in the Australian resources, consumer and service sector markets. In the resource sector, notable Indian industries are Sterlite Industries, the Aditya Birla Group, Adani, Jindal Steel & Power and GVK Power and Infrastructure. In the consumer and service sector markets, Indian presence in Australia is represented by Tata Power, Mahindra, Asian Paints, Reliance, NMDC, Infosys, TCS, HCL, State Bank of India, New India Assurance, Silverneedle Hospitality and IFFCO. The Jindal family, in May 2012 worth a total of \$US 26 billion, in Australian iron ore and coal mines through Jindal Steel & Power, a \$US 2 billion purchase of a coal mine by Gautam Adani in the state of Queensland in 2011, Silver needle Hospitality, purchase of a hotel in Brisbane for \$US 57 million and a chain of about 60 hotels in Australia and New Zealand in 2011 are some of the recent examples.¹⁹

¹⁶ Nilanjan Banik, "The G20: Challenges and Opportunities Ahead," *Chankya Papers*, Australia-India Institute, Available at <http://www.aii.unimelb.edu.au/sites/default/files/10689-Chanakaya%20Paper-G20-V3.pdf>

¹⁷ Foreign Minister Julia Bishop, "Address to Australia-India Business Council NSW," Ministry of Foreign Affairs, Available at http://foreignminister.gov.au/speeches/Pages/2014/jb_sp_140807.aspx

¹⁸ "Australia-India Comprehensive Economic Cooperation Agreement," Available at <http://dfat.gov.au/trade/agreements/aifta/pages/australia-india-comprehensive-economic-cooperation-agreement.aspx>

¹⁹ "India provides next wave of foreign investment," *Sydney Morning Herald*, 3 October 2012, Available at <http://www.smh.com.au/business/mining-and-resources/india-provides-next-wave-of-foreign-investment-20121002-26yat.html>

The foreign investments in Australia have doubled in recent years. Australia's relatively strong economic performance compared with its Western peers, its faultless triple 'A' rating with a stable economy outlook; attractiveness of its commercial properties, its abundant natural resources; its landscape with white sand beaches and climate; and Australia's uninterrupted annual growth for more than two decades having ducked the post-2008 global financial crisis have underpinned this trend.²⁰

India as an important investment source in Australia further gets enhanced by a range of synergies that both countries share. The Indian multinational firms are expanding their bases and are becoming more outward looking. In recent years, the Foreign Direct Investment (FDI) outflows from India have increased as Indian companies are looking for markets, technologies and resources, and want to minimise the risk and uncertainty at domestic level. India's substantial investment in Australia has been in the resource and energy sectors, but the Indian investments in Australia, particularly in innovation-led technology, innovative industries, including life sciences, advanced materials, clean technology and the digital economy have huge prospects.

iii. Australia –India Trade: A Comparison with the Australia-China Trade

However, these figures do not reflect the full potential of Australia-India trade relationship when compared with Australia-China relationship. A glance at the merchandise trade between Australia and India reveals that their bilateral trade is below its potential. In the year 2000, Australian exports to India were worth \$US1059.6 million comprising just 1.7% of Australia's overall merchandise exports. By 2013, the total merchandise from Australia to India had risen to \$US 8453.7 million, accounting for 3.4% of Australia's overall merchandise exports. Australia's exports of merchandise to China in 2000 (\$US 3474.5 million) accounted for 5.4% of Australia's total merchandise exports, rising extremely rapidly to reach \$US 87311 million in 2013 or 34.6% of Australia's total merchandise exports.²¹

²⁰ Ibid.

²¹ Anand Kulkarni, "INDIA & AUSTRALIA- MERCHANDISE TRADE ENGAGEMENT: PROGRESS OR PERIL?," Australia-India Institute, 23 September 2014, Available at

Australia's merchandise exports to the US and the UK fell between 2000 and 2013, signifying possibly Australia's "tilt" to Asia, especially China, and to the some extent India.²² The reason for this can be attributed to China's appetite for commodities and natural resources to modernise its economy, infrastructure and mounting energy demands. Obviously, these figures show that in comparison to the Australia-India trade and the Australia-China trade there is a big gap.

The Australia-India annual trade, which stands at around \$A15 billion, is just 1/10th of Australia-China trade. Obviously, there are immense potentials to increase the trade relationships. It's not only in terms of the market for goods, resources and energy but also in terms of huge opportunities in investment that India offers for Australian businesses.

From the above, it is obvious that despite the Australia-India trade relationship's upward trajectory over the last decade and a half, it remains untapped in terms of the volume of trade and in the diversification of bilateral trade in the various sectors as well.

III. Australia's Economic Strength–Resources and Expertise and India's Needs:

Australia's expertise and strengths lies the resources, energy and mining sectors including the sectors and services such as agriculture and food; education and tourism; health and medical research; and infrastructure. Australia is at the top of many in these sectors. These strengths and expertise of the Australian economy, by and large, have driven its trade relationship.

They also provide a great opportunity for Australia's two-way trade and investment relationship with many countries, including India. Not only India provides a market for these sectors for Australian businesses, but it also offers huge opportunities for Australia-India bilateral trade and investment in the coming years. The following section focuses on the main sectors where the future potential lies for the Australian business in India and a two-way trade relationship between Australia and India.

<http://www.aii.unimelb.edu.au/blog/india-australia-merchandise-trade-engagement-progress-or-peril>

²² Ibid.

i. The Resources and Energy Sector:

The resources and energy sectors have been Australia's main export to India and will continue to be the dominant component of Australia-India trade relationship. One fourth of India's more than 1.2 billion population still has insufficient access to electricity. This is further going to be accelerated by Modi Government's thrust on 'Make in India' campaign and the projection of India's growth rate of 8.1-8.5 % in 2015-16 and the years ahead. The demand for energy in the coming years will accelerate further as India looks towards modernisation with a massive push towards making India a manufacturing hub, and the consumer demands of the fast-expanding middle class in India.

According to the New Policy Scenario's, the central main scenario of World Energy Outlook 2011, projection India's energy demand will grow by a compound annual growth rate (CAGR) of 3.1% from 2009 to 2035, which is more than double the world's energy demand at a CAGR of 1.3% for the same period. India's share in world energy demand will increase by 5.5% in 2009 to 8.6% in 2035 and the growth would come from all fuels.²³

The demand for coal, nuclear and renewable energy are worth mentioning here as Australia will be a key player in meeting these demands in India. The demand for coal will almost triple from 280 Mtoe in 2009 to 618 Mtoe in 2035 at a CAGR of 3.1%. The renewable energy demand is projected to increase from 2 Mtoe in 2009 to 36 Mtoe in 2035. Nuclear energy demand would reach 48 Mtoe in 2035 from 5 Mtoe in 2009.²⁴ At present, nuclear energy makes up 3 to 4 % of India's energy mix and has the potential to become 20 to 25 %

²³ Sun-Joo Ahn and Dagmar Graczyk, "Understanding Energy Challenges in India: Policy, Players and Issues," *International Energy Agency*, 2012, Available at https://www.iea.org/publications/freepublications/publication/India_study_FINAL_WEB.pdf

²⁴ Ibid.

of India's energy mix by 2050.²⁵ The demand for oil, natural gas and coal will see the imports of these products constitute 38% of total energy requirements.²⁶

Despite Modi Government's emphasis on domestic production of coal²⁷ and efforts to diversify the sources of energy, the demand for Australian coal will continue. India's energy demand, both for consumer and industry, cannot be done in the near future without the help of imported coal. There is no substantial proof that India can address its energy demand without the use of imported coal to supplement its domestic supply. But the recently signed civilian nuclear deal will allow Australian uranium to be exported to India. Australia has 31% of the world's uranium reserves with global uranium market share of only 12%. The sale of Australian uranium can bring a meaningful change to India's energy security efforts and can tap into India's nuclear energy market estimated to be around \$ US 150 billion. Overall, India's energy market is supposedly the world's one of the biggest and Australia will continue to be an important player in this sector over the coming decades.

ii. The Agriculture and Food Sectors

India for many years has been self-sufficient in the food sector. For example, it has been the largest producer of rice, milk and pulses and also one of the largest consumers of these products. But India's growing population and prosperity might constrain India's food strength. Overall, India is faced with the challenge of sustaining agriculture production with depleting resources. The majority of India's population, around 70 %, is still involved in, and dependent on, agriculture and allied activities.

²⁵ Ashok Sharma, "India and Energy Security," *Asian Affairs*, Vol38, No.2, 2007, Pp.158-172; Ashok Sharma, "Abbott's visit to take Australia-India relations beyond cricket," *The Conversation*, 3 September 2014, Available at <https://theconversation.com/abbotts-visit-to-take-australia-india-relations-beyond-cricket-31056>

²⁶ Indian Planning Commission, 12th Five Year Plan, New Delhi, Government of India, 2012. Vol. 2, Table 14.5, p. 135.

²⁷ "India to stop coal imports 'possibly within 3 years'," *The Australian*, 14 November 2014, Available at <http://www.theaustralian.com.au/business/latest/india-to-stop-coal-imports-possibly-within-3-years/news-story/25254f2700c34da9c709a6e7feb22c5d>

Even in the post- reform era there is a near stagnation of productivity in Indian agriculture sector.²⁸ India is in need to increase productivity through modern agricultural techniques. India's Ministry of Agriculture aims at doubling of India's share in the global agri-food trade from 1 to 2 %. This goal is reliant on increasing India's annual agriculture production. The developments in India such as changing food habits – from cereal to animal protein, and from fresh produce to value-added products – and the surfacing of an organised retail sector have further created the need for achieving self-sufficiency and sustainability in productivity across the agriculture sector.²⁹ The government has taken steps to reform the agriculture sector to allow the entry of private firms which has paved the way for the introduction of modern technologies, process know-how and capacity building for a more competent pre and post-farm gate value-chain.

Given the challenges that India's agriculture sector is facing for maintaining a sustained productivity, competency and modernisation, there are huge prospects for Australian food products and modern technical expertise in the various segmentation of Indian agriculture sector. Australia is already one of the most significant agricultural exporters in the region, directly feeding 60 million people a year, and indirectly another 400 million. Australia can increase its productivity and play a much more significant role in helping to sustain a growing India. This can also lead to competitiveness and productivity. India offers a big market in the areas of food supply, collaboration in the water management system, the high-end manufacturing of tools and appliances, and agricultural practices.

The Australian food products such as wheat, milk, pulses and horticulture have entered the Indian market. Despite India being the largest producer and consumer of pulses in the world, its overall per capita consumption has been steadily declining as the domestic production has not been able to produce enough to meet the growing demands. Pulses comprise the main source of protein for the Indian vegetarian diet.

²⁸ For detail, see Raghendra Jha, "Food Security and Small Landholders in South Asia," ASARC Working Paper, No.3, Australian National University, 2015, Available at https://crawford.anu.edu.au/acde/asarc/pdf/papers/2015/WP2015_03.pdf

²⁹ Australian Trade Commission, "Agriculture to India: Trends and Opportunities," Available at <http://www.austrade.gov.au/export/export-markets/countries/india/industries/agriculture#.VabJxDSUer4>

The decline in domestic production of pulses, increased prosperity leading to a rise in consumer demand and the reluctance of farmers to grow pulses due to its seasonal nature and their shifting to crops such as wheat have all push India towards import of pulses.³⁰ Australia has become a major exporter and producer of a wide range of pulse products which include field peas and desi chick peas (exported to India in quantity), as well as lentils, faba beans and mung beans.

Despite India's efforts to meet its growing consumer demand, the requirements are still off a low base which gives Australian companies niche opportunities to enter the market. Though Australia envisions being the food provider in the 21st century, at present the Australian firms are well-placed with small-run capacity and are able to produce efficiently and competitively. The large US and European firms, in focusing on larger runs which are more economical for them may often overlook the smaller needs of the Indian market.

Australia is also one of the top five wheat exporting countries. India is relatively self-sufficient in wheat production and India's demand for wheat generally comes at times of shortfall in domestic supply or to stabilise upward swings in consumer wheat prices. Despite, self-sufficiency in wheat or pulses or other food grains Indian government can go for import of the food items and grains mainly under the following conditions:

- price differentials between the world price and domestic price;
- absolute domestic price; and
- size of the domestic crop which is largely dependent on the weather.

Australia's position in the Indian market is strong with the white wheat that has 'Roti' making compatibility. Australia has made inroads into the Indian food markets especially in the wheat and other food grains. The future prospects for Australian exports of food grains to India will depend on India's ability to produce sufficient wheat for its growing population. However, Australia will face competition from other competitors such as the United States in the Indian market.

³⁰“ OPPORTUNITIES FOR AUSTRALIAN TRADE ,”Available at www.aphref.aph.gov.au-house-committee-jfast-india-india_ch6.pdf

Australia is well placed in research in agriculture with its agricultural research and scientists whose work, per capita, is more widely cited than any others in the world and who also supplied the leaders of no fewer than five of the world's leading agricultural research centres.³¹ Australia is the potential food supplier at competitive prices for Indian demands in the future but can also collaborate in the modern practices of agricultural practices –ranging from food processing, water and land management, sustainable agricultural practices and modern technology and some of the best Australian agricultural practices.³² Australia's diverse climatic conditions provide it an advantage over many other nations to grow the food that India requires. With these attributes, Australia is well placed to play a significant partner in meeting India's agricultural sector's need and upliftment, with immense scope in agribusiness, food processing, and better agricultural practices.

iii. Service Sector: Education and Tourism

For a long time, the US and the UK have been the preferred destinations of the Indian students for higher and professional education. But the trend towards Australia as the destination for education for Indian students has increased in the past decade and a half. Today Indian students form a major chunk of Australia's foreign student population, ranked second after Chinese students.

Australia is ranked as the third top destination of Indian students abroad among the US, the UK, and New Zealand. But in recent years, Germany has also become an important destination for Indian students especially for Master and Ph.D. degree in engineering and science courses. The German government has taken steps to attract the India students and have got away with the policy of German language as a prerequisite to study in Germany or for the visa procedure.³³ In the coming years, Australia will have to compete not only with Anglosphere countries but with

³¹ Julian Cribb, "Can Australia save the world?" Available at <http://www.abc.net.au/science/slab/cribb/story.htm>

³² Ibid.

³³ M Ramya, "Indian students' enrolment in German universities up more than 100% in 5 years," *The Times of India*, 24 July 2014, Available at <http://timesofindia.indiatimes.com/home/education/news/Indian-students-enrolment-in-German-universities-up-more-than-100-in-5-years/articleshow/38942461.cms> [accessed 26 May 2015].

Germany also for the Indian education market. A glance at the factors and the opportunities that lies in the education sector in India reflects the positive trends for Australia.

It has been facilitated by the common historical, linguistic, love for cricket and geographical proximity. The middle class in India is growing, but there is a dearth of top class education institutions, both for higher and professional education. India's top ranked university and technological institutes are not able to accommodate the growing number of students wanting to get a high- end professional education. "India represents an enormous opportunity for Australian education and training providers in assisting India to address the challenge of ensuring that its 190 million people between the ages of 18-25 are equipped with the skills and education needed to accelerate national development and prosperity."³⁴ There are simply insufficient places in the current education system to support such an education load. Either India quickly develops this capacity, or Indian students will continue to go offshore in search of education opportunities. Those who can't afford to travel abroad will struggle to find satisfying, well-paid work.³⁵

After the lull phases of Indian students in Australia due to attack on India students in Australia in 2008-2009, Australia has again emerged as a popular destination for Indian students going overseas for higher and professional education. The enrolment of Indian students in the first four months of the year 2015 has spiked to 48,000 as compared to nearly 37,000 during the same period in the year 2014.³⁶ Australia's world-class high-quality universities in the global university ranking, closely linked with the industry, a high proportion of graduates gaining employment, its world-class cities, landscape and a rich economy all tend to attract the students towards Australia.

³⁴ Universities Australia, "Historic Australia-India trade deal offers huge education opportunity," *Media Release*, 24 June 2015.

³⁵ Michael Moignard, "Unfinished Business: Re-imagining the Australia-India Economic Relationship," *Fearless Nadia Papers*, Volume 2, 2013, Available at http://www.aii.unimelb.edu.au/sites/default/files/Unfinished%20Business_4.pdf

³⁶ Ishani Duttgupta, "Why Australia's fast-track residency is attracting Indian students," *The Economic Times*, 6 July 2015, <http://blogs.economictimes.indiatimes.com/globalindian/why-australias-fast-track-residency-is-attracting-indian-students/>

The option of a fast track to permanent residence for international students, the provision of a subclass 485 visa category, which enables students to work in Australia full-time for a period of 18 months to four years (depending on which level of studies they have undertaken) along with an option of applying for permanent residency have made it easier for the students. The acceptance of partners/ spouse of the student, the relaxation of English language requirements and India's up-gradation to assessment level 1 under the streamlined visa processing arrangements which enables students to apply for a visa with lower requirements for evidence that needs to be shown such as eligible funds, eligible sponsors, etc. – have increased the bracket of Indian students applying for Australian universities.³⁷

This trend is being institutionalised. Australian universities have over 300 agreements with their Indian counterparts to enable academic and student exchange and research collaboration. Many Australian universities have long-term partnerships to facilitate engagement and encourage greater depth of understanding and collaboration with India. Under the New Colombo Plan, more Australian students will be going for studying in India.

At present, both the governments support research collaboration between universities in Australia and India. Under the Australia-India Strategic Research Fund (AISRF), Australia's largest fund dedicated to bilateral research, Australian researchers collaborate with Indian scientists in cutting-edge scientific research projects. Prime Minister Tony Abbott announced a \$A 20 million extension of the AISRF on 5 September 2014, bringing the total Australian Government commitment to \$A 84 million over 13 years. While Australia exports \$A 2.1 billion in services to India (the bulk of which is education services), it is clear that this is far below the growing demand for higher education in India.³⁸

Despite a great history of intellectual tradition and education, very few Indian universities have been able to make in the top 400 universities ranking in the Times Higher Education University Ranking³⁹ in recent years. India's National Assessment and Accreditation

³⁷ Ibid.

³⁸ Universities Australia, n. 34.

³⁹ "The Times Higher Education University Ranking 2014-15," <https://www.timeshighereducation.co.uk/world-university-rankings>

Council's (NAAC) of the higher learning institutions also has graded an astonishing 89% of India's certified colleges and universities either 'average' or 'below average' raising serious doubts about their excellence.⁴⁰

India's demographic dividend is ideally suited to embark on a path of sustained high rate of economic growth for the foreseeable future if India can reap the benefits of rapid human capital accumulation. But the uphill task of providing skill and education to its young demography and enhances the quality of its education system.⁴¹ India also has to go for a massive expansion of its higher education institutions - it is estimated that more than 600 universities and colleges are required to meet the demands for vocational and higher education in India by 2022. Given the Australian universities' international standing and high-end research credentials, and their linkages with Indian universities, the education sector provides immense opportunities for Australia and India to collaborate. The Australian export and collaboration in the education sector will continue to be a standout component of Australia-India relationship for the foreseeable future.

iv. **Merchandise Trade: The High –End Manufacturing**

There is a considerable scope for the expansion of Australia-India trade ties in merchandise, especially in the higher value and more knowledge -intensive skills based goods in the high-end manufacturing sector, drawing on mutual need and capability.

Australia-India bilateral trade has made a constant progress in this sector. India's total merchandise exports to Australia grew by almost 15% compound growth between 2000 and 2013, which along with the growing exports of Australia to India (17.3 %), suggests a burgeoning relationship though from a small base.⁴² However, in the manufacturing sector,

⁴⁰ "Indian universities second-grade?," *The Times of India*, 21 February 2014, Available at <http://timesofindia.indiatimes.com/home/education/news/Indian-universities-second-grade/articleshow/30747157.cms>

⁴¹ Raghendra Jha, "Productive Employment and Empowering Education: An Agenda for India's Youth," ASARC Working Paper No.1, The Australian National University, 2014, Available at https://crawford.anu.edu.au/acde/asarc/pdf/papers/2014/WP2014_01.pdf

⁴² Kulkarni, "INDIA & AUSTRALIA," n. 21.

Australian exports of total manufacturing to India represented just 0.95% share of Australia's total manufacturing exports to the world in 2000 (\$US 136 million), rising only to 1.2% (\$US 346.1 million) 13 years later. In compound annual growth terms, this was a growth rate of 7.5% per annum, far below the growth rate of overall merchandise exports.

In the High Skill-Technology Intensive classification of manufacturing (which includes advanced machinery and specialist equipment), this embodies the higher value added, skills intensive products, where significant knowledge spillover exists. Australia's exports to India represented just 1.25% of Australia's total high-skill manufacturing exports in 2000 -falling slightly in share terms to 1.2% in 2013. In compound annual growth rate terms, while India's exports to Australia in the high-skill and technology category grew by 20.4% between 2000 and 2013, Australian exports to India in the same category grew by 6% per annum, well short of the overall Australian growth of merchandise exports of 17%.⁴³

Nonetheless, there are substantial opportunities for the expansion of Australia-India merchandise trade. For example, medical devices, drones for agricultural purpose, irrigation technology, high-quality tourism infrastructure, and the world-class leading mining and energy equipment are the areas where Australia can make a significant presence in India.

The Australian technology and scale offer comparative advantages in manufacturing sector. A good example, in this case, is the automotive sector which offers Australian automobile industry huge opportunities for collaboration with Indian automobile industry.

Australia is endowed with varied expertise in pre-production manufacturing services for R&D, design, product development and engineering. Australian industry strongly emphasises on research and development and innovative technology advancement. These R&D and technological innovations are supported by heavy investments by the private Australian firms and strongly backed by the Australian government and the world-class research organisations, such as the CSIRO and the AutoCRC.

Australia is reputed as a world class source for innovation and technology in the automotive industry. However, the Australian automotive industry has struggled due to volatile raw

⁴³ Kulkarni, "INDIA & AUSTRALIA," n. 21.

materials costs and fuel prices, growing environmental concerns, tighter regulations, increased competition, and consumers have preferred more reasonably priced, fuel-efficient cars from abroad.⁴⁴ During the last five years, the Australian automotive industry has been on decline except the year after 2008 financial crisis when the demand for new cars increased as the contained demand emerged from overdue acquisitions during the world financial crisis was released. As a result, the decline in automotive manufacturing in Australia is pushing Australian solution providers and technology companies for new markets.

India is set to become one of the largest and fastest growing automotive industries in the world. The Indian automotive industry witnessed an annual production of 21.48 million vehicles in FY 2013-14 with a share of 22 % of the country's manufacturing gross domestic product (GDP). India is also a substantial auto exporter, with solid export growth expectations for the near future. Various initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the Two Wheeler and Four Wheeler market in the world by 2020.⁴⁵

The Indian Government is taking initiatives in this sector including the 100 % FDI in the automobile sector, credits to farmers to enable to buy the tractors, reduction of excise duty, emphasis on eco-friendly cars in the country i.e. CNG based vehicle, hybrid vehicle, electric vehicle.

India is probably the most competitive country in the world for the automotive industry. The Japanese automobile company Maruti Suzuki makes out that the Indian passenger car market to reach four million units by 2020, up from 1.8 million units in 2013-14. The Automobile Mission Plan 2006-2016 foresee India, with output reaching a level of \$ US 145 billion; accounting for more than 10 per cent of the GDP and providing additional employment to 25 million people by 2016, to emerge as the destination of choice in the world for design and manufacture of automobiles and auto components.⁴⁶ The new fuel efficiency norms for vehicle manufacturers in India from 2016-17⁴⁷ and the Indian

⁴⁴ "PWC Australia Automotive Industry," Available at <http://www.pwc.com.au/industry/automotive-industry/index.htm>

⁴⁵ "Automobile Industry in India," *Indian Brand Equity foundation*, April 2015, Available at <http://www.ibef.org/industry/india-automobiles.aspx>

⁴⁶ Ibid.

Government's focus for technology development under the National Electric Mobility Mission Plan 2020⁴⁸ are creating an imperative for Indian automotive companies to pursue technology improvements through international collaborations.

An example of a step towards India's automobile industry international collaboration to facilitate co-development, technology transfer, joint R&D projects and commercial partnerships is between Australian and Indian automobile firms. The Australian Trade Commission (Austrade) in partnership with the Society of Indian Automobile Manufacturers (SIAM) and Automotive Component Manufacturing Association of India (ACMA) recently organised a delegation of Indian automotive companies interested in new technologies and solutions to Australia during the week 10-14 August 2015. The mission showcased Australia's diverse expertise in pre-production manufacturing services for R&D, design, product development and engineering. An expanding middle class, a young demography, India's 'Make in India' campaign and the Modi Government's policy initiatives in this regard provide opportunities in the various areas of manufacturing sector for the Australian firms to enter the Indian market and collaborate with India.

v. Health and Medical Research

Many of the infectious diseases that were long ago eradicated in developed countries are still rampant in developing countries, such as HIV/AIDS and other new diseases. Though India has been able to eradicate disease like Polio by a mass campaign, there are many infectious diseases such as HIV/AIDS and daunting disease such as tuberculosis that can be prevented or cured, continue to kill many people every day due to inadequate health care and medical facilities.

⁴⁷ "New fuel efficiency norms mandated by Indian government to be enforced by 2016-17," 15 February 2015, Available at <http://overdrive.in/news/new-fuel-efficiency-norms-mandated-by-indian-government-to-be-enforced-by-2016-17/>

⁴⁸ Government of India, Ministry of Heavy Industries & Public Enterprises, "National Electric Mobility Mission Plan," *Press Information Bureau*, 10 March 2015, Available at <http://pib.nic.in/newsite/PrintRelease.aspx?relid=116719>

India's expenditure on health care system is just 1.3% of GDP, one of the lowest rates in the world⁴⁹, which is far below the global median of 5% spending in the medical sector. India is aiming at the Universal Healthcare Coverage.

India's health care system, both public and private, needs a concerted streamlining and regulating efforts for ensuring medical care and health facilities for millions of its population. India's healthcare and medicals services need an appropriate supervision of the quality of medical services and the sufficient check by the regulatory bodies for a better quality and control of health-care cost. India's healthcare system is dominated by the private sector which is very costly for the families with illness. India is in dire need of expanding and strengthening of the public sector health services to deliver both public health and clinical related services, and a better coordination between the public and private sectors.

On the other hand, India is also known for its world-class doctors in India. The Indian doctors are very significantly represented in many Western countries, and are highly skilled and well-reputed. India is also fast becoming a medical tourism destination. By the global standards, the best diagnostic tests and procedures are done for about 1/10th of the Western medical costs. This has spiked medical tourism to India to an estimated \$US78.6 billion in 2012⁵⁰ to around \$ US 3 billion at value terms in 2014 to \$ US 6 billion with a compounded annual growth rate (CAGR) of 20% between 2014 and 2018.⁵¹ India is known mostly for its cost-effective medical treatments along with high standards in cardiology, orthopaedics, nephrology, oncology and neurosurgery, including alternative treatment options such as Yoga and Ayurveda. Many poor and developing nations have already turned to India for medical

⁴⁹ The World bank, "Healthcare expenditure ,public (% of GDP)," Available at <http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS>

⁵⁰ "India ranks among top 3 medical tourism destinations in Asia," *The Times of India*, 1 September 2014, Available at <http://timesofindia.indiatimes.com/business/india-business/India-ranks-among-top-3-medical-tourism-destinations-in-Asia/articleshow/41447360.cms>

⁵¹ Zubeda Hamid, "The medical capital's place in history," *The Hindu*, 20 August 2012, Available at <http://www.thehindu.com/news/cities/chennai/the-medical-capitals-place-in-history/article3796305.ece> ; Moulisree Srivastava, "India medical tourism industry to reach \$6 billion by 2018: report," Available at <http://www.livemint.com/Home-Page/NX5IF0yZtnkCFz4vzxtt5N/India-medical-tourism-industry-to-reach-6-billion-by-2018.html>

treatment, but the rising and unaffordable high medical treatment costs in Western nations including Australia will see a further rise in India's medical tourism industry.

Given the future requirement of India's overall medical sector and Modi Government's plan of universal healthcare, India's medical and health sector offers ample opportunity for Australia-India to collaborate on various aspects of the health sector. The proposed India's universal healthcare would potentially be the largest scheme in the world and tackle such silent epidemics as tuberculosis, which claims 300,000 Indian lives annually.

Today the health and medical sector are becoming a significant aspect of an increasing level of international endeavour. Australia has been an important contributor to a shared international commitment to reduce the burden of ill health, leverage scarce resources, and develop and promote the new knowledge in the health and medical sector.

Australia continues to be a world leader in developing new knowledge in health and medical research that helps improve the physical well-being of its own people, but also the people of other countries. Australia's National Health and Medical Research Council is involved in over a dozen international collaborative efforts; some multilateral, some bilateral. The NHMRC Strategic Plan of 2013-15⁵² delineates Australia as a good international citizen by contributing to the development of health knowledge worldwide and improving health in its region and emphasises the 'Priority Actions' including support for 'discovery research to create new knowledge', an important aspect of which is 'working collaboratively internationally'.⁵³

In recent years, Australia and India have taken steps to further expand in multiple areas of cooperation in the health sector. During PM Abbott's visit to India, Australia extended the Australia-India Strategic Research Fund (AISRF) for a further four years and also pledged

⁵² National Health and Medical Research Council, "NHMRC Strategic Plan 2013-15," December 2012, Available at https://www.nhmrc.gov.au/files/nhmrc/publications/attachments/nh160_nhmrc_strat_plan_201315.pdf

⁵³ Australian Government, National Health and Medical Research Council, NHMRC International Activities, Available at <https://www.nhmrc.gov.au/research/international-activities>

\$A 20 million for the initiative. During Abbott's visit, India and Australia decided to collaborate in the areas of preventive healthcare, trauma care, geriatric medicine, diabetes research and mental illnesses, potential malaria vaccine, treating injured people. In this regard, the partnership between Alfred Hospital and AIIMS is significant as part of Australia-India Science and Technology Strategic Research Partnership Programme. The existing Australia-India Trauma Systems Collaboration (AITSC) aims to reduce the burden of injury in both countries through development and piloting of improved systems of care. ⁵⁴

The Modi Government has a plan to make Indian health care system into a modern, affordable and accessible model before the developing world. India is also opening the advanced secondary and tertiary health care institutions in every state of the country. Prospects lies in India's medical expertise and gaining Australian knowledge in the training of health care workers and nurses in geriatric care and emergency medicine and in telemedicine.

The collaboration in the health sector is guided by their commitment to providing the well - being of human lives, but it also offers businesses for Australia to invest in India's medical infrastructure and facilities. India offers a big market in the health sector for an advanced country such as Australia.

vi. Infrastructure Sector

Today the Modi Government is faced with daunting task of reviving India's economy. But an inadequate and dilapidated infrastructure continues to be a hindrance to India's progress. Despite decades of planning and government initiatives, India's infrastructure remains disproportionate to its demand. The years of underperformance due to lack a long-term vision, strategy and underinvestment by the government have left India with a poor network of the transport system and unreliable and insufficient power grids for India's growing economy.

⁵⁴ India, Australia to collaborate on health care, *The Hindu*, 5 September 2014, Available at <http://www.thehindu.com/news/national/india-australia-to-collaborate-on-health-care/article6383782.ece>

The transport sector- roads, railways and airports, telecommunications, electricity generation remains a big challenge for a developing India. The World Economic Forum's Global Competitiveness Report for 2014-2015 ranked India at 87th out of 144 countries for its infrastructure index.⁵⁵ The report exposes India's inadequate and business unfriendliness transport, information and communication technology and energy deficient infrastructure.⁵⁶ The lack of trade facilitation and the lack of physical infrastructure push logistics costs in India at 13 % of GDP) which is the world's highest. India's GDP growth is stalled by roughly 2 % or \$ US 20 billion a year due to the lack of adequate infrastructure.⁵⁷

In fact, India's aspiration for a global player and 'Make in India' campaign is questioned when the realities of India's basic infrastructure are taken into the account. However, the lack of infrastructure offers immense opportunities for the businesses in the infrastructure sector in India. Today the reforms are being taken by the Modi Government and India is becoming a major attraction for many countries with capital, resources and modern technology in the infrastructure sector. India's vast infrastructure needs are expanding all the time, and this presents enormous opportunities. India's growing population, a developing economy, international trade, the rapid industrialisation, and the migration of people to big cities and growing consumerism have necessitated the need for efficient ports, a better supply system of electricity and water, and the upliftment of railways and road transport system. The need for a big upliftment of India's infrastructure sector has intensified and the government is taking steps in this regard.

Indian railways, the lifeblood of India's economy and the world's fourth largest railway network has also not been able to keep up pace with growing demands. India has added

⁵⁵ The World Economic Forum "Global Competitiveness Report for 2014-2015," <http://reports.weforum.org/global-competitiveness-report-2014-2015/rankings/>

⁵⁶ Manish Agarwal, "A Passage to Modernity" in *Gridlines: The Opportunities and Challenges for India's Infrastructure*, A Report by PWC, Available at <https://www.pwc.com/gx/en/capital-projects-infrastructure/assets/gridlines-india-article-2013.pdf>

⁵⁷ N. Banik and J. Gilbert, "Trade Cost and Regional Integration in South Asia" in D. Brooks (eds.), *Trade Facilitation and Regional Cooperation in Asia*, (Edward Elgar, Northampton. 2010).

only 12,000 km of rail track since independence in 1947, adding to the 53,000 left behind by the British.⁵⁸ This has created further strain on already poor road network. The government aims to build 25,000 kilometers of new lines by 2020, yet only 1,750 kilometers have been added from 2006 to 2011.⁵⁹ This has created further strain on an already poor road network.

India will need to improve its urban infrastructure in cities such as New Delhi, Kolkata and Bangalore as India's urban population of around 375 million are projected to reach 500 million by 2017.⁶⁰ This rate of urbanisation means that massive investment will be required in everything from metro systems to clean water supplies, power generation to affordable housing. It is projected that urban India will contribute nearly 75 % of the national GDP in the next 15 years. Cities are accordingly referred to as the engines of economic growth. The Modi Government has come out with a plan of 100 smart cities by 2030 to address the need for the cities to get smarter to handle this large-scale urbanisation and finding new ways to manage complexity, increase efficiency, reduce expenses, and improve the quality of life.⁶¹ As India's cities will grow, services in town planning, architecture, waste management, heritage conservation and new funding models for city governance will be needed. Environmental management, for example, Clean Ganga River initiatives, is another growth area in which Australian expertise in water conservation, irrigation, dry land farming, and project management could prove valuable.⁶²

Recognising these almost limitless requirements, the previous Congress-led United Progressive Alliance (UPA) government called for \$ US 1 trillion in infrastructure spending

⁵⁸ Shashi Tharoor, "India's railways need work. Fast," *World Finance*, 4 June 2015, Available at <http://www.worldfinance.com/home/indias-railways-need-work-fast>

⁵⁹ Beina Xu and Eleanor Albert, "Governance in India : Infrastructure," *CFR Backgrounders*, Council on Foreign Relations, Available at <http://www.cfr.org/india/governance-india-infrastructure/p32638>

⁶⁰ Agarwal, "A Passage to Modernity," n56.

⁶¹ "100 Smart Cities," NASSCOM, Available at <http://www.nasscom.in/100-smart-cities-program>

⁶² Moignard, "Unfinished Business", n 35.

in the five years through 2017.⁶³ The Ministry of Road Transport has outlined plans for \$US 120 billion worth of road-widening projects, with 65% of this money targeted to come from the private sector. There are also plans for \$US 60 billion to be invested in India's ports by 2020. India will need to create 180 additional airports in the next decade to meet its growing demand for the aerospace sector for civilian purpose.⁶⁴

These pressing and urgent demands in the infrastructure have made India one of the world's most attractive markets in the infrastructure sector. Australia can become a major player by investing in the infrastructure and by sharing technical skill and expertise.

IV. Governments' Initiatives and Political Will:

The rapid growth of relations between Australia and India is reflected by a large number of ministerial visits between the two countries. Both the countries have established a number of institutional platforms including the Framework Dialogue of the Foreign Ministers, the Joint Ministerial Commission on Trade and Investment, the Defence Ministers Dialogue, the Australia-India Energy and Minerals Forum and the Ministerial Dialogue on Education. An Australia-India Strategic Research Fund was set up in 2006 with a contribution of A\$ 64 million from each side to support the large-scale joint research project to deliver practical solutions focussing on energy, food, water security, health, environment, etc for a productive, long-term scientific and technology partnership. The AIRSF⁶⁵ jointly administered by Australia and India, has supported more than 90 joint research projects, involving more than 100 leading Australian and Indian universities and research institutes since its inception in 2006.⁶⁶

⁶³ "India's PM Unveils Infrastructure Investment Plan," *Wall Street Journal*, 6 June 2012, Available at <http://online.wsj.com/article/SB10001424052702303665904577450692014546230.html>

⁶⁴ Agarwal, "A Passage to Modernity," n. 56.

⁶⁵ Australia-India Strategic Research Fund (AISRF), <http://www.science.gov.au/international/CollaborativeOpportunities/AISRF/Pages/default.aspx>

The Modi Government's thrust on 'Make in India' campaign and India's positive trends in the economy will further increase its huge appetite for Australian resources, energy, skill and investment. Both the countries are keen to diversify and enhance the range of their export. In this regard, Abbott and Modi's visit to India and Australia, their determination and the steps being taken by both the governments for an early conclusion of a CECA and conclusion of Australia-India civilian nuclear deal have been path-breaking steps.

i. Australia-India Free trade Agreement:

The India-Australia Joint Ministerial Commission (JMC), established in 18989, in its thirteenth meeting held in Canberra on 12 May 2011 agreed to commence negotiations for a Comprehensive Economic Cooperation Agreement between Australia and India.

There have been six rounds of negotiations, the most recent of which was held in December 2014. Abbott's visit to India and Modi's visit to Australia have given a momentum to the ongoing Australia-India Comprehensive Economic Cooperation Agreement negotiations. During their Prime Ministerial visits to India in September 2014 and November 2014, Abbott and Modi agreed for an early conclusion of an equitable, balanced, comprehensive and high-quality agreement.⁶⁷ A free trade agreement with India would give Australian exporters access to a market of 1.25 billion people, including a middle class of around 500 million people in the coming years.

A feasibility study in 2008 stated that the if the free trade agreement had been adopted then, it would have yielded a gain to Australia of \$43 billion over the period 2010-20 (in 2008 net present value terms) and a gain to India's real GDP of \$46 billion.⁶⁸

⁶⁶ Australian Government, Department of Industry and Science, Collaboration with India, <http://www.industry.gov.au/science/internationalcollaboration/Pages/CollaborationwithIndia.aspx>

⁶⁷“About the Australia-India Comprehensive Economic Cooperation Agreement negotiations,” Available at <http://dfat.gov.au/trade/agreements/aifta/Pages/australia-india-comprehensive-economic-cooperation-agreement.aspx>

⁶⁸ Andrew Brewster, “Australia-India Relations: The Odd Couple of the Indian Ocean?” *Future Directions International*, 20 May 2014, Available at

Once materialised, the free-trade agreement would broaden the base of merchandise trade and encourage two-way trade by lowering tariff barriers, bringing regulatory transparency, reducing border restrictions on trade in goods and services and enhancing investment protections.

- A comprehensive agreement would assist in broadening the base of merchandise trade by addressing tariff barriers and behind the border restrictions on trade in goods.
- There is a significant potential to expand trade in services between India and Australia. A Free Trade Agreement (FTA) could facilitate growth in services trade by reducing barriers faced by Australian service suppliers and by increasing regulatory transparency.
- An FTA could facilitate and encourage investment by reducing barriers, increasing transparency and enhancing investment protections.⁶⁹

ii. PM Tony Abbott Visit to India and the Civilian Nuclear Agreement:

During Prime Minister Tony Abbott's visit to India in September 2014, Australia and India signed a long-pending civil nuclear deal, which would allow the export of Australian uranium to India.⁷⁰ In their meetings, Abbott and Modi covered a broad range of issues, ranging from nuclear energy, trade, and education, to the defense relationship. The nuclear issue was a trust issue for many years between the two nations and the nuclear agreement signed during the meeting signalled a new chapter in the India-Australia relationship. The nuclear agreement will further underpin the growing confidence and mutual trust between the two nations.

iii. PM Modi's Visit to Australia:

<http://www.futuredirections.org.au/publications/associate-papers/1692-australia-india-strategic-relations-the-odd-couple-of-the-indian-ocean.html>

⁶⁹“About the Australia-India Comprehensive Economic Cooperation Agreement negotiations,” <http://dfat.gov.au/trade/agreements/aifta/Pages/australia-india-comprehensive-economic-cooperation-agreement.aspx>

⁷⁰ Mark Kenny, “Tony Abbott’s Indian summer: uranium, artworks and cricket,” *The Sydney Morning Herald*, 5 September 2014, Available at <http://www.smh.com.au/national/tony-abbotts-indian-summer-uranium-artworks-and-cricket-20140905-10d41x.html>

Prime Minister Modi made an official visit to Australia during the G20 summit in November 2014. Modi's interaction with scientists at Queensland University of Technology (QUT), his blockbuster reception in Sydney addressing a 20,000-strong crowd of Indian Diaspora, his address to the Australian Parliament and his meeting with top business leaders at the Australia-India Business Council in Melbourne, have been positive steps in towards a comprehensive India-Australia relationship.

While addressing the Australian Parliament,⁷¹ Modi emphasised the synergy between the two countries as well as the challenges that both nations face. He noted the early completion of a deal committing Australia to sell uranium to India in which Australia agreed to export uranium, under suitable safeguards, to promote cleaner energy.

The two summit level meetings are helping to deepen economic ties between India and Australia. While Modi prioritised Australia's uranium sales to India, Abbott emphasised free trade, committing to an early conclusion a free trade agreement with what is potentially the world's largest market.

iv. Australia Business Week in India (ABWI): Australian Trade and Investment Minister's Visit to India

To strengthen and explore business opportunities in India, the Australia Business Week in India (ABWI), Australia's largest ever trade and investment promotion on the sub-continent was organised from 12-15 January 2015. This was led by the Australian Minister for Trade and Investment Andrew Robb to represent Australian Government trade and investment mission to India. The ABWI aimed to enhance bilateral relationships through high-level political and commercial exchanges and to promote Australia as a trade, investment, education and tourism partner.

The ABWI, a governmental initiative for Australian businesses, was launched in India's complex business environment and the sector-specific networking events to raise the

⁷¹ Visit to Australia by Mr Narendra Modi, Prime Minister of the Republic of India - Address to Members & Senators in HOR Chamber, 18 November 2014, Available at http://parlview.aph.gov.au/mediaPlayer.php?videoID=243743&operation_mode=parlview

understanding of doing business in India and enhance existing relationships with Indian businesses.⁷²

To keep momentum towards the conclusion of an Australia-India Comprehensive Economic Cooperation Agreement (CECA) in the year 2015, the Australian Minister for Trade and Investment, Andrew Robb visited India (21-24 April). His meeting with Indian government counterparts, senior business leaders, investors and policy experts in both New Delhi and Mumbai have been positive steps to keep the momentum building on both sides to conclude the agreement by the end of 2015, a difficult target but plausible.

Positive Trends in the Indian Economy

The Modi Government's steps to streamline the bureaucracy and to reform economy have begun to show positive results. In the Financial Year 2014-15, India's GDP Growth at basic prices increased 0.6% from 6.6% to 7.2%. GDP growth at market prices increased from 6.9% to 7.3%. This increase happened despite a decline in agriculture growth from 3.7% in Financial Year 2013-14 to 0.2 % in Financial Year 2014-15.⁷³

India's manufacturing sector growth rate increased substantially from 5.3% in Financial Year 2013-14 to 7.1 % in Financial Year 2014-15 while Services growth increased substantially to 10.2% in Financial Year 2014-15 from 9.1% in Financial Year 2013-14. Within services, financial, real estate, and professional services increased from 7.9% in FY 2013-14 to 11.5% in FY 2014-15.⁷⁴

⁷² "Australia Business Week in India 2015 Trade Mission (12-15 January 2015)," Department of Industry, Exports from New South Wales, Available at <http://www.industry.nsw.gov.au/export-from-nsw/export-assistance/trade-missions-and-exhibitions/missions/australia-business-week-in-india-2015-trade-mission-12-15-january-2015>

⁷³ Government of India, Ministry of Finance, *Press Information Bureau*, 29 May 2015, Available at http://finmin.nic.in/press_room/2015/MoF_response_CS029052015.pdf

⁷⁴ Government of India, Ministry of Finance, *Press Information Bureau*, 29 May 2015, Available at http://finmin.nic.in/press_room/2015/MoF_response_CS029052015.pdf

India has began to move from GDP growth of less than 5%, high interest rates, inflation, slow economic reforms, political deadlock of coalition politics, fiscal deficit and the high cost of capital of the last three years during the Congress-led UPA government, and it no longer characterises the present status of Indian economy. Its moving towards a more credible economy, and the reforms are being taken.⁷⁵ The Indian government's economic reforms measures and governance have built confidence among the private business and foreign investors in Indian economy's growth prospects which is a good sign for Australia-India economic relationship too.

VI. The Steps Ahead :

- To move beyond the broadly mentioned area of industry segmentation and both the countries need to come up with an economic and business research tools that provide an updated and coordinated data analysis of all the identified industry sectors made available by states in Australia and in India. To enhance the Australia-India relationship there is a need of sophisticated business data. The presently available investment and trade data do not serve the purpose. There is a need for creating an Australia-India and India-Australia trade index for enhancing Australian investment and trade in India and vice-versa.
- To keep India story running, the building momentum should continue and emphasis should be given to building exchanges, visits and meetings. The momentum of growing exchanges between the business and industry sectors people in India and Australia built over the last one year need to be continued through joint seminars, conferences, exchange programmes and backed by top business leaders, governmental and ministerial level visits.

⁷⁵ Agarwal, "A Passage to Modernity," n.56.

- The Australia-India relationship needs to move towards institutionalisation. Both the nations need to institutionalise the relationship in various sectors backed by the regular meeting at half yearly and annual level.
- The last but not the least, both the nations should not let the expectations become so high that they lose the momentum if the target is not reached. A reasonable and fair amount of expectation will certainly not frustrate either side.

Conclusion:

One of the reasons for failure to accelerate the pace of Australia-India relationship over the last decade was the lack of ‘political will’ from both the sides which could take steps beyond the issuing the joint statements, participating in a photo session and their fondness for cricket.

The future will depend on the Indian government’s willingness to enhance the priorities. It should be noted that Prime Minister Modi’s visit to Australia was almost after three decades of gap by any Indian prime minister. In addition to the unavoidable trade complementarities between Australia and India, Prime Minister Modi’s eagerness to enhance India’s international presence in the Indo-Pacific region, his economics driven foreign policy, and his record number of foreign visits which also include small Island nations which did not figure in the itinerary of the previous prime ministers of India indicate that Australia will be no more at periphery in India’s foreign policy priority list. This also dispels the concerns in Australia about India’s willingness to engage beyond its immediate regional geo-strategic interests and its engagement with big powers.

After flip-flop on uranium sale issues by the previous governments, the Australian Prime Minister Tony Abbott was committed to engaging India. His willingness in this regard was visible as he became the first head of the government on a bilateral visit to India after Modi became prime minister and concluded the civilian nuclear deal with India, which also became a trust issue for more than a decade. The nuclear deal will help in building New Delhi’s confidence in Canberra’s reliability on uranium issue and building India’s confidence in

Australia. Once the uranium sale begins, India's confidence in Australia's ability to deliver will no longer be an issue.

Finally, as Australia's future lies in the Indo-Pacific region, Australia's engagement with India will be a key factor. As Peter Varghese, the Foreign Secretary of Australia opines, "The strategic trajectory of the Indo-Pacific is less easy to project than its economics,"⁷⁶ the challenge for Australia is to carve out a sound and institutionalised economic relationship with India. The surging Indian economy has an immense appetite for the resources and infrastructure development, solutions and services, technical know-how and high-end expertise that Australia can provide in India's march towards progress. The growing complementariness, the ongoing FTA negotiations, a civilian nuclear energy deal, and both the countries decision to enhance the strategic and security partnership and keep each other's country in their foreign policy priorities are the positive signs for a comprehensive Australia-India trade and investment relationship.

⁷⁶ Peter Varghese, "The Lessons of European Integration for the Indo Pacific," 2014 Schuman Lecture, Centre for European Studies, Australian National University, 16 June 2014, Available at http://dfat.gov.au/news/speeches/Pages/140616_anu.aspx