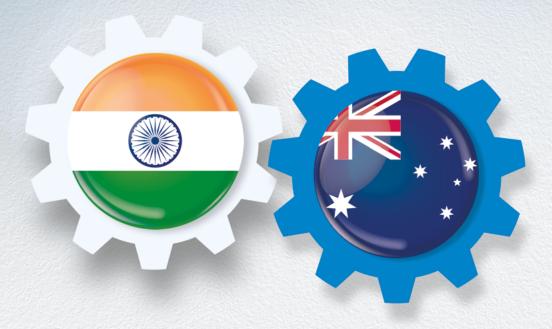




# AN ASSESSMENT OF THE PROSPECTIVE FTA BETWEEN INDIA-AUSTRALIA



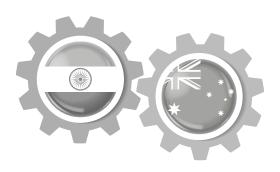
DR. RAHUL NATH CHOUDHURY







### AN ASSESSMENT OF THE PROSPECTIVE FTA BETWEEN INDIA-AUSTRALIA



DR. RAHUL NATH CHOUDHURY



The Indian Council of World Affairs (ICWA) was established in 1943 by a group of eminent intellectuals led by Sir Tej Bahadur Sapru and Dr. H.N. Kunzru. Its principal objective was to create an Indian perspective on international relations and act as a repository of knowledge and thinking on foreign policy issues. The Council today conducts policy research through an in-house faculty as well as through external experts. It regularly organizes an array of intellectual activities including conferences, seminars, roundtable discussions, lectures and brings out a range of publications. It has a well-stocked library, an active website, and publishes the journal India Quarterly. ICWA has over 50 MoUs with international think tanks and research institutions to promote better understanding on international issues and develop areas of mutual cooperation. The Council also has partnerships with leading research institutions, think tanks and universities in India.

#### An assessment of the prospective FTA between India-Australia

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#### INTRODUCTION

The concept of globalisation has received a renewed attention in the recent times. The spread of COVID-19 and its subsequent effects on the global economy has further established the importance of the open economy and globalisation. Countries are increasingly entering into multilateral as well as bilateral trade agreements. Two of the world's largest trade agreements-Regional Comprehensive Economic Partnership (RCEP) and Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) were signed during the past two three years. These agreements were signed within a gap of less than two years. Economies are getting integrated with others more than ever. The global share of trade covered under them has been steadily increasing over the last decade and a half (Ahmed, 2011). "Countries are turning towards their potential trading partners to explore the option for engaging into preferential or free trade agreement (FTA). India is no exception. India recently resumed many of its stalled FTA negotiations. One such is with Australia.

#### LITERATURE REVIEW

A large body of the scholars believes that A FTA between India and Australia would open numerous opportunities for both the nations. A significant number of studies exist on this subject exploring numerous aspects of India Australia relationship. Scholar from both International Relation and Economics tried to understand the subject from their own perspective. One such study is by Panda and Baruah (2010). They recommend the economic complementarities

between the two economies are major drivers towards the sculpting of a strategic partnership. The proposed FTA between these two nations presents a valuable opportunity for both to engage with one another in fostering trade and investment, collaboration to capitalise on the growth momentum that is being experienced in the past.

Ahmed (2011) investigates the potential economic impacts of prospective India-Australia FTA using a Computable General Equilibrium (CGE) model. He uses four hypothetical tariff liberalisation scenarios focusing on short and long run. The study reveals that both India and Australia gain in terms of welfare. The study further suggests that Australia's Export Intensity Index is higher than Import Intensity Index as it exports more to India compared with its imports. It can also be summarised that India has not tapped Australian market and essential steps need to be taken to gain market excess in mutual interest. Allocative efficiency for Australia and India broadly improves, suggesting that net trade creation occurs. The study recommends partial and selected tariff liberalisation as the best strategy in India's interest while negotiating prospective India-Australia FTA. India will gain on obtaining market access for its financial, software and business process outsourcing services sectors in Australia, besides seeking easier mobility for professionals and smoother visa norms.

Alam et. Al (2013) analysing the proposed India- Australia FTA with reference to the agricultural sector comments that agricultural trade liberalisation will be a difficult task for Indian policy makers. The authors argue that as the Indian economy continues to prosper, it should further liberalise its agriculture sector. It may

be difficult to implement this in the short term, but would be likely to enhance economic welfare in the long term. An FTA with Australia could provide a spur to such liberalisation and assist with the agricultural producers of Australia to enhance their exports to India. The positive impact of liberalisation in agriculture will not necessarily be limited to this sector, but would also be likely to spill over to other sectors of the Indian economy.

Cho and Yoon (2014) studied the sectoral impact of the proposed India-Australia FTA. Applying static applied general equilibrium model, and using a social accounting matrix finds the results are consistent with trade-liberalisation experiences observed in the past, which says an increase in the domestic production leads to in an increase increasing in the export sectors and prices falls in the import sectors. Their analysis reveals Australian exports to India increases moderately and become heavily concentrated in fuel exports, while imports show much significant growth, especially in those sectors that were originally more protected.

Brewster (2015) argues that the relationship between India and Australia is more crucial from security perspective than economic. He argues mentions that the changing balance of power in the Indo-Pacific—and particularly the emergence of both China and India as major powers—is forcing India and Australia to engage on security and defence issues. Two countries increasingly seeing each other as poles in an emerging axis focused on balancing against China. The author argues that given the current condition India would be willing to open up key markets to Australian products although greater progress may be made in investment and services. He highlights that Australia-India CECA, if and

when concluded, will be an important step forward in the bilateral relationship, but it may have more political significance than immediate economic substance.

## CONCEPTUALIZING TRADE CREATIONAL AND TRADE DIVERSION<sup>1</sup>

Viner (1950) introduces the concepts of trade creation and trade diversion, two opposing welfare effects that come to play with formation of a PTA, and shows that the net effect of trade liberalisation on a regional basis is not unambiguously positive. PTAs can result in trade creation if, due to the formation of the regional agreement, the members switch from inefficient domestic producers and import from efficient producers of other PTA members. In this case, efficiency gains arise from both production efficiency and consumption efficiency. On the other hand, trade diversion takes place if, because of the PTA, members switch imports from low-cost producers in the rest of the world to higher-cost producers within the region. Trade diversion lowers welfare of not only the partner countries but also of the rest of the world.

A World Bank (2000) study illustrates the trade diversion effect with an example. Suppose an imported goods from a partner country costs \$105 per unit, \$100 from the rest of the world (ROW) and that in both cases MFN duty is \$10, making the prices paid by consumers \$115 and \$110 respectively. In this situation, imports are obviously from the ROW at \$110. Say now the country forms a



<sup>1</sup> This section is adopted from Jha (2011)

PTA with the partner and imports of this good is made duty-free under such an arrangement, so that the price consumers pay for imports from the partner country falls to \$105, while imports from the ROW still cost \$110. Consumer choices are obvious: they switch to the partner country, buying the \$105 good and saving \$5. But the government now loses \$10 per unit (the revenue it was getting on each unit of imports from the ROW), so the net effect for the country is a loss of \$5. Thus the PTA has reduced real income. This is the deleterious welfare effect of trade diversion.

Is a particular PTA trade creating or trade diverting? The answer, reasons Viner, depends on who the pre-PTA supplier was. De Melo and Panagariya (1993) give a good example of shoe production in the context of a US-Mexico FTA. If the US produced its own shoes before formation of the FTA and after wards shifts to Mexico, then the Mexican shoe producers must be the lower cost producers and hence this FTA is trade creating: the welfare of the union and the rest of the world rises. If on the other hand, the US imported shoes in the initial equilibrium from another country, that country must be a lower cost producer of shoes than Mexico. There is thus trade diversion from a lower to higher cost source as after the FTA US shifts its demand for shoes to Mexico: welfare of the union and the world declines.

## REGIONAL TRADING AGREEMENTS (RTAS) AND INDIA'S ENGAGEMENT

"RTAs have now become a prominent feature of the multilateral trading system as well as an important trade policy tool for virtually all WTO members. The number of RTAs as well as the world share of trade covered under them have seen a rising trend during the Uruguay Round negotiations and is further strengthened by the many RTAs that are being proposed and being negotiated, in the context of current impasse in the Doha Round".

"RTAs can be defined, broadly as agreements between two or more countries and/or trading blocs to enter into preferential trading arrangements with each other. The RTAs differ considerably in their scope. In their simplest form, they provide for the exchange of tariff preferences on a limited range of goods between two or more signatories commonly known as Preferential Trading Arrangements (PTAs). At the other extreme, they may liberalise tariffs fully on substantially traded items and can contain trade issues, which stretch well beyond traditional approach of tariff elimination to areas such as standards, services, intellectual property, investment, non-tariff barriers, trade facilitation, competition etc.".

"Regional economic integration has been adopted as a strategy for development in different regions of the world over the 1990s, following the formation of a single market by the European Union (EU) and of North American Free Trade Agreement (NAFTA) by the North American countries. With the growing worldwide popularity of regional economic integration, more than half of world trade is now conducted between members of regional trading arrangements (RTAs) (viz., on preferential basis) and not on most favoured nation (MFN) basis. Regional integration has also become an important factor in shaping the global patterns of production and investment.

India has always stood for an open, equitable, predictable, nondiscriminatory and rule based international trading system. India gives primacy to engagements in multilateral negotiations at the World Trade Organisation. However, recognising the fact that the RTAs would continue to feature for a long time in the world trade, India got engaged with its trading partners with the intention of expanding its export markets".

In the early phase, India adopted a cautious and guarded approach to regionalism and was initially engaged in only a few bilateral/regional initiatives, mainly through PTAs. These included the Bangkok Agreement (now called APTA), signed in 1975 to exchange tariff concessions in the Economic and Social Commission for Asia and the Pacific (ESCAP) region, the Global System of Trade Preferences (GSTP) - signed in 1988 to exchange tariff concessions among G-77 member countries, and the SAARC Preferential Trading Arrangement (SAPTA) - signed in 1993 to liberalise trade in South Asia. However, because of the limited coverage of products, these engagements achieved limited results in terms of increase in trade volume with the member countries. India perceives RTA as 'Building Blocs' towards the overall objective of trade liberalisation complementing the multilateral trading system.

Since the early part of this decade, India began concluding agreements with a view to move, in some cases, towards Comprehensive Economic Cooperation Agreements (CECAs) covering FTA in Goods (i.e., having a zero-customs duty regime within a fixed time frame on items covering substantial trade and a relatively small negative list of sensitive items on which no or limited duty concessions are offered), Services, Investment and

India and Australia jointly announced the resumption of the negotiation for a potential FTA in June 2020. Assigning priority to this negotiation, these two economies signed an interim FTA or Economic Cooperation and Trade Agreement (ECTA), in April 2022

other identified areas of economic cooperation. In addition, India has started engaging with regional blocks like EU, South Africa Custom Union" (SACU and MERCOSUR).

By now India signed and enforced 15 agreements with varied scope. It enforced its first FTA with Sri Lanka in 2000 and first CEPA with Singapore in 2005. India offered preferential trade access to APTA members since 1976<sup>2</sup>. A detailed list of all the trade agreements signed and enforced by India is placed in the Annexure1.

India and Australia jointly announced the resumption of the negotiation for a potential FTA in June 2020<sup>3</sup>. Assigning priority to this negotiation, these two economies signed an interim FTA or Economic Cooperation and Trade Agreement (ECTA), in April 2022. Interim agreement is a precursor to an FTA between two trading partners when the negotiating countries identify certain products for tariff liberalisation proposed in the actual FTA. Started in 2011, India and Australia had nine rounds of discussion before suspending in 2015<sup>4</sup>. Since then, a lot has changed between them and they have come closer than before especially after the



<sup>2</sup> https://www.bilaterals.org/?-india-

<sup>3</sup> Choudhury, R. (September 21, 2021). High time India and Australia resume FTA negotiations to seal a conclusive deal. South Asia Monitor.

<sup>4</sup> Department of Foreign Affairs Trade, Government of Australia.

Started in 2011, India and Australia had nine rounds of discussion before suspending in 2015. Since then, a lot has changed between them and they have come closer than before especially after the outbreak of the COVID-19. The countries have come strategically closer through forums such as QUAD and Supply Chain Resilience Initiative (SCR I

outbreak of the COVID-19. The countries have come strategically closer through forums such as QUAD and Supply Chain Resilience Initiative (SCR I)<sup>5</sup>. Though the total bilateral trade volume between these two partners shows a fluctuating trend but for many items such as Nuclear Items (HS 84) Chemicals (HS 29) and Vehicle other than railways and tram (HS 87) remained remarkably high. In case of the service trade, a large number of Indian students are opting for Australia for their higher education. Education remains Australia's largest service export to India, valued at US\$4.46 billion and accounting for around 88 percent of the total in 2020. At the end of 2020, Indian students in Australia numbered 115137. Indian and Australian investors are in search of opportunities to seize appearing in respective marketplaces. Bilateral investments are protected through Bilateral Investment Protection Treaty. Experts believe that trade between India and Australia are much below its potential and it can be increased significantly if the policies are framed favourably especially by adopting a liberal tariff rate (Ahmed, 2011, Alam et al., 2013). The proposed FTA is a step in this

<sup>5</sup> Choudhury, Rahul (September 21, 2021) High time India and Australia resume FTA negotiations to seal a conclusive deal. South Asia Monitor. Available at: https://www.southasiamonitor.org/spotlight/high-time-india-and-australia-resume-fta-negotiations-seal-conclusive-deal. Accessed on 12.12.21

<sup>6</sup> Based on the data extracted from UNCTAD WITS.

direction. With this background, the present study aims to estimate the volume of trade that can be reached by relaxing the tariff rates. The study would try to find answer for three pertinent questions. First, is there any benefit or loss for India to sign an agreement with Australia and what would be the potential medium and long-term gains/losses for India (both, as exporter and importer) from a trade agreement with Australia? Second, what should be the extent of coverage of tariff lines and magnitude of tariff liberalisation for India's negotiating position? Finally, what are the potential areas/ sectors of importance wherein existing bottlenecks are impeding greater market integration?

The concept of preferential trade has two dimensions: unilateral, such as Generalised System of Preferences (GSP) schemes, whereby developed countries unilaterally grant tariff preferences to developing and less developed countries to promote their exports and thereby ensure economic growth. Second form of preferential trade is reciprocal where two or multiple countries enter into a contractual arrangement and offer preferential rate of tariffs to each other on mutually agreed goods and services. This study deals with reciprocal trade arrangements whereby tariff concessions are exchanged between countries on bilaterally traded items.

The rest of the study is organised as follows. The next section of the study outlines the growing India Australia bilateral relations from the strategic and diplomatic perspective. This is followed by describing the different aspects of an FTA and India's engagement into various FTAs so far. The fourth section of the study analyses the bilateral trade relation between India and Australia. This analysis is followed by a construction of Trade Intensity Index

to gauge the intensity of trade for major trading items between these two partners. The sixth section describes the mathematical model and the methodology followed in the study. In the seventh section, the results of the model are presented and the final section concludes the study.

#### THE GROWING INDIA AUSTRALIA PARTNERSHIP

The India-Australia strategic relationship has long marked by greater divergence than cooperation. Until recently, India-Australia relationship was experiencing a lot of ups and downs. There were not much regular diplomatic engagement or trade meetings. Bilateral trade with Australia was not happening to its full potential. The proposed free trade agreement was also stalled for a very long time. It seemed that neither India nor Australia was willing to pursue the relationship seriously. Australia's strategic involvement was primarily with the United States of America (USA), South-East Asia and European nations while for trade it heavily relied on China. After years of differences amid the backdrop of the early Cold War, two countries took part in air force exercises ('Shiksha') along with the US and United Kingdom (UK) in 1963, and talks were held between the two countries' senior officials in 1967. In 1980s in particular also witnessed fitful attempts at reviving relations, including during visits to Australia by Indian Prime Ministers (PMs) Indira Gandhi and Rajiv Gandhi and later, in 2006 Australian PM John Howard's visit to India and Malcolm Turnbull in 2017 while Indian PM Modi's visit to Australia in November 2014 marked beginning of a new era of bilateral relationship.

#### HISTORICAL CONTEXT

Among many initiatives to strengthen the bilateral relationship was Australia's Department of Foreign Affairs and Trade's identification of India as an emerging economy with great potential in 1994. It happened after India liberalised its economy and opened the door for foreign participation. Meg Gurry of the Australia India Institute in Melbourne referred to this as a "radically different strategic and commercial climate, one which is obviously far more conducive to the development of closer ties than in the past'. In the 1990s and the following decade, a number of academic studies were also commissioned to explore potential of the relationship and to suggest measures to revive it (Gordon, 1993; Gurry, 1996; Bonnor, 2001). Another commendable initiative was to establish the Foundation of the Australia-India Council in 1992. However, despite these efforts, the bilateral relationship did not revive as per expectation". The bilateral relationship between India and Australia went extremely below in 1998 when India conducted its nuclear tests. Australian Foreign Minister Downer harshly criticised Indian move and described the tests as 'outrageous acts'. Australia joined the league of Nations to threaten India and impose a set of

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sanctions. This stopped almost all the bilateral efforts to rejuvenate the relationship which was going on for few years.

Although the diplomatic engagement did not give the expected results, the trade between them grew substantially in the first half of the 1990s, from about US\$530 million in 1989–1990 to US\$881 million in 1994–1995. Trade grew by 24.6 percent per year between 2000 and 2009, making India Australia's tenth-largest two-way trading partner and fifth-largest export market. Moreover, India is currently Australia's seventeenth-largest foreign investor, while Australia is the 22<sup>nd</sup> largest investor in India.

#### STRATEGIC PARTNERSHIP

The growing trade volumes influenced both nations to revive the relationship. Taking a step in this direction, in September 2013, the Australian government released a country strategy for India as part of a series of similar documents outlining a strategy to develop relations with countries identified as priorities because of their size, economic links with Australia and strategic and political influence in the region and globally. The document reflected the

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views of Australian states and territorial governments, business representatives, academics, and community stakeholders. As such, it enumerated as objectives a number of ways to link these diverse categories of actors. This document, reinforced by official Australian statements, indicates an evolution in India-Australia relations.

This report recommends that, Australia should strive by 2035 to lift India into its top three export markets, to make India the third largest destination in Asia for Australian outward investment, and to bring India into the inner circle of Australia's strategic partnerships, and with people to people ties as close as any in Asia. This report makes sector wise assessment and identifies 12 priority sectors for cooperation. The report recommended a series of measures to enhance the co-operation. Later in 2018, India commissioned another study with an aim to prepare India's economic strategy for Australia. India published Australia Economic Strategy Prepared jointly by the Confederation of Indian Industry (CII) in collaboration with (Klynveld Peat Marwick Goerdeler) KPMG under the leadership of former Ambassador Anil Wadhwa, who retired as Secretary (East), Ministry of External Affairs, Government of India. This report identified the existing and potential areas of economic collaboration between India and Australia. Author suggests the traditional sectors such as pharma, mining etc. in which India can utilise its untapped potential. The report further recommends the revival of the "India-Australia Energy Security Dialogue" and focus on the emerging areas of such as renewable energy — with particular focus upon solar panels, windmills, hydrogen fuel etc.

With the changing global geopolitics, both Australia and India started to look at each other as an important partner in promoting With the changing global geopolitics, both Australia and India started to look at each other as an important partner in promoting regional security and stability. This led to up gradation of bilateral relationship to a 'Strategic Partnership', including a Joint Declaration on Security Cooperation in 2009.

regional security and stability. This led to up gradation of bilateral relationship to a 'Strategic Partnership', including a Joint Declaration on Security Cooperation in 2009. Over the years an array of institutional mechanism has been put in place to promote bilateral cooperation. Bilateral mechanisms include high level visits, Annual Meetings of Prime Ministers, Foreign Ministers' Framework Dialogue, Joint Trade & Commerce Ministerial Commission, India-Australia '2+2' Foreign Secretaries and Defence Secretaries' Dialogue, Defence Policy Talks, Australia-India Education Council, Defence Services Staff Talks, Energy Security Dialogue", Joint Working Group (JWG) on different issues etc.

#### THE CHINA FACTOR

China is a critical factor for the growing closeness between India and Australia. "The impact of China's rise and behaviour, has profound implications for both Australia and India. In the aftermath of the clash in Ladakh, which killed twenty Indian

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soldiers and an unknown number of Chinese troops, relations between the India and China started to deteriorate sharply. India has always been reluctant to publicly name China, even in objection to China's behaviour. This has been the case not only on broader international issues but also even when China has directly targeted India. Although India does not openly criticise Chinese actions, it consistently evades denouncing China by name". For example, India has repeatedly supported the issue of freedom of navigation in the South China Sea and also supported the judgment of the Permanent Court of Arbitration, both of which are clearly targeted at China.

India and China have traditionally been competitive. The first of those is the longstanding India—China boundary dispute, which resulted in the 1962 border war and military stand-offs more recently in 2013, 2014, 2017, and 2020. Second are the persistent concerns about Chinese influence in India's neighbourhood, including in South Asia and the Indian Ocean. Under the guise of the Belt and Road Initiative (BRI), the investment of greater Chinese economic resources in Sri Lanka, Maldives, Myanmar, and Nepal as well as military resources in Pakistan and Bangladesh, has fuelled Indian unease, as has the development of a permanent Chinese military presence in the Indian Ocean.

In Australia-China relations, differences arose despite having a robust trade and economic relationship. China has been the largest destination for Australian exports. Flourishing trade relationship with China has immensely driven Australian prosperity. An increase in the Chinese diaspora in Australia has largely been instrumental in driving Chinese investment to Australia. Along with all these developments concerns have grown especially in Chinese

investment in critical infrastructure such as 5G telecommunication technology. China's alleged involvement in Australian politics and its growing naval exercises in South China Sea have alarmed Australian policy makers. In response to these, Australia tightened its policy related to political funding from foreign sources and amended its security strategy. Australia devised a major foreign policy push to align with other likeminded nations in the South Pacific, Southeast Asia, and with Japan, India, and the US.

#### **CULTURAL RELATIONS**

Along with various other areas of cooperation, Australia and India are also building strong and lasting ties through their people-to-people links. Both the governments believe in building cultural diplomacy as a tool for fostering bilateral relations effectively. A significant number of Indian communities (comprising both Australians of Indian origin and Indian resident in Australia) with the population size of about seven hundred thousand reside in various states of Australia and their number continuously growing each year. Indian diaspora is now Australia's fastest growing diaspora in Australia. Hinduism is our fastest growing religion and Punjabi is fastest growing language. India is one of the top sources of skilled immigrants to Australia. The number

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In order to foster the people to people contact, India and Australia organise "the Australia India Youth Dialogue (AIYD) in India and Australia in alternate years. It is the pre-eminent track-two young leaders' dialogue between Australia and India. The AIYD hosts 15 of the best and brightest young minds from each country at an annual conference.

of Indian students continues to grow with approximately 115137 students presently studying in Australian universities. After England, India is the second largest migrant group in Australia in 2020. Indian festivals, especially Deepawali, Holi and Durga Puja are celebrated with great enthusiasm in Australia reflecting the growing significance of the community in Australia.

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#### **DEFENCE AND MARITIME COOPERATION IN IOR**

The Indian Ocean Region (IOR) serves major geostrategic interests for both India and Australia. Naval forces of both nations are actively engaged in the maintenance of safety and security of the strait as a foreign policy priority. Through various bilateral and

multilateral initiatives, both India and Australia have expressed their commitment to the region. For example, in September 2020, India joined the Djibouti Code of Conduct (DCOC) (The Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden), an international grouping against piracy. While its membership comprises littoral countries in the western part of the IOR, India has joined as an observer to the DCOC, along with the US, the UK, Japan and Norway. Undoubtedly, the addition of Australia to the list of observers would prove fruitful in expanding the scope of DCOC's counter piracy agenda to the easternmost end of the IOR as well. Some of the most prized multilateral initiatives on maritime cooperation for both India and Australia include the Indian Ocean Naval Symposium (IONS) and the Indian Ocean Region Association (IORA). While the IONS, founded by the Indian Navy in 2008, serves to create dialogue around issues of maritime security among its IOR counterparts, the IORA, conceived jointly by India and South Africa in 1997, acts as an intergovernmental forum (headed by the Council of Ministers) for deliberations on opportunities and challenges facing the IOR as a whole.

The most prominently placed initiative, however, is the Quadrilateral Security Dialogue or QUAD, a grouping of four Indo-Pacific powers (India, Australia, the US and Japan) that form the "Asian Arc of Democracy" for their own benefit. The renewed focus of the QUAD has not just been to countervail increasing Chinese influence in the region but also to eliminate transnational maritime threats such as terrorism and piracy from the high-seas. On the bilateral level, India and Australia engage in AUSINDEX, a naval exercise to flex their military might in the maritime domain, all the while endeavouring to enhance cooperation and interoperability

for the navies and coast guards of the two countries. The 4<sup>th</sup> iteration of the AUSINDEX, which concluded in September 2021, witnessed joint replenishment, response and other exercises between warships, patrol aircrafts, submarines, tactical fighter jets and helicopters from both countries. MALABAR 2021, the joint naval exercise between the four QUAD countries conducted in August this year, also witnessed navy-to-navy warfare training, gunnery events and cross-deck flight operations between maritime forces of the four countries.

There is also enthusiasm for greater cooperation, such as the "Australia–India–Japan and Australia–India–Indonesia trilateral dialogues. These represent what an Australian defence official has described as the region's "thickening architecture". India–Indonesia strategic relations received a fillip of their own after the 2018 summit between Modi and Indonesian President Joko Widodo. India–Australia–Japan trilateral engagement represents the growth of a complementary relationship.

Advancing the cooperation, Australia and India organised their first ever 2+2 ministerial dialogue in September 2021. Australian Minister for Foreign Affairs and Minister for Women Marise Payne and Defense Minister Peter Dutton MP, travelled to New Delhi on 10-11 September for in person meetings with their counterparts from India, External Affairs Minister S. Jaishankar and Defence Minister Rajnath Singh. At the heart of this interaction, which arose out of a decision taken at the virtual Summit between the two Prime Ministers in June 2020, was the objective of advancing their shared vision of an open, free, prosperous and rules-based Indo—Pacific region. They have decided to meet at least once every two years in this format to keep up the momentum. During this

dialogue, Australia invited India to participate in future Talisman Sabre exercises, to empower operational compatibility between their defence services. It is expected, this exercise will raise interoperability while both sides explore longer term reciprocal arrangements in logistics support.

#### **ENERGY COOPERATION**

Energy forms the core of a nation's national security as a country's economy is fuelled by energy resources and India is no exception in this respect. "It holds a prime position as the Indian economy. There is no denying that India has come a long way since independence in the energy sector. With higher levels of consumption, in both industrial and domestic, have led to a stage where the supply of energy falls short of the demand. The main focus of the government of late has been on capacity-building of the economy. Energy-intensive projects such as infrastructure development are the top priorities of the government. And this is where the importance of Australia for India lies, given its abundant energy resources. Both the countries are also trying to find ways and means to work jointly on increasing the production of geo-thermal and solar energy as also to enhance clean-energy technology cooperation among other things".

To strengthen the energy cooperation, Australia and India regularly conducts joint dialogue. The recently organised The Australia-India Energy Dialogue, is the primary forum to discuss bilateral engagement on energy and resources. It is a Ministerial-level dialogue between the "Australian Minister for Energy and

Emissions Reduction and the relevant Indian counterpart. The dialogue is held annually, alternating between India and Australia and take place alongside international events in other countries and attended by both Ministers. There are 4 working groups being established to support the Energy Dialogue: 1. Renewable Energy and Smart Grids 2. Power and Energy Efficiency 3. Coal and mines 4. Oil and Gas. Participants in the working groups include government representatives, researchers and industry. In February 2022, India Australia concluded their 4th energy dialogue discussed in detail about the ongoing Energy Transition activities in their respective countries with focus on renewable, energy efficiency, storage, Electric Vehicle (EVs), critical minerals, mining etc. The need for climate finance was also highlighted by India for meeting the Energy Transition goals of developing countries.

#### COOPERATION IN SCIENCE TECHNOLOGY AND EDUCATION

Formal cooperation in science and technology between Australia and India began in 1986 with the signing of an agreement by the two governments. A Memorandum of Understanding (MoU) between the Indian Department of Science and Technology and

> There are 4 working groups being established to support the Energy Dialogue: 1. Renewable Energy and Smart Grids 2. Power and Energy Efficiency 3. Coal and mines 4. Oil and Gas. Participants in the working groups include government representatives, researchers and industry.

The Department of Industry, Innovation and Science, Australia was signed in 2003, replacing an original MoU signed in 1996. A MoU with the Indian Department of Biotechnology was signed in 2006, supporting joint funding of activities. In 2011, this MoU was extended for a further five years until 2016.

India is increasingly emerging as a global technology hub. Its digital economy is slated to reach US\$1 trillion by 2025. It's a leading source of information technology (IT) and IT-enabled services. Indian companies from those sectors are estimated to have set up more than 1,000 global delivery centres in 80 countries which include Australia. New investments in space and satellite technologies, smart cities and vibrant cyber security and start-up sectors are positioning India's economy to take advantage of our digital world. Australia has comparative global strengths in the fields of research, education and training. The current government has continued to show an appetite for continued investment in the defence and strategic technology sectors. Across government, the public service is increasingly investing in technology policy expertise, and, while still settling, policymaking in that area is slowly becoming more strategic and long term.

The increasing relevance of space in multiple domains (including economics, meteorology, navigation and the military) provides ripe ground for further collaboration on opportunities and challenges. Although India and Australia have very different space programs (India's is longstanding and established, while Australia's is just beginning), there are still avenues for fruitful cooperation. There's a critical role for both countries in combining their efforts to

bridge the gaps between different proposals that seek to ensure the use of space in a safe, secure and sustainable manner. India and Australia could team up with other middle powers and likeminded governments to devise technology-driven solutions to address these challenges.

In order to strengthen the cyber security cooperation, India and Australia conducts joint Cyber Policy Dialogue. The Dialogue provides an opportunity to discuss current and emerging cyber security issues including emerging ICT technologies, national approaches to cyber security policy and legislation, international issues including our respective views on the UN Group of Governmental Experts and Open-Ended Working Group, critical technologies, and cooperation to address cybercrime. Both countries noted their sustained concern with the increasing frequency and seriousness of cyber security incidents that have the potential to impact the national and economic security of respective countries and undermine international peace and security. India and Australia elevated bilateral cyber security through Australia-India Framework Arrangement on cyber and cyber enabled critical technology cooperation under the CEPA in June 2020.

In order to promote joint research work on strategic issues in the field of science and technology, the "Australia-India Strategic Research Fund (AISRF) was established in 2006. The Australia-India Strategic Research Fund (AISRF) is jointly administered and funded by the governments of Australia and India. It provides an opportunity to Australian researchers from public and private

sectors to participate with Indian scientists in leading-edge scientific research projects and workshops. High-performing Australians and early and mid-career researchers can access funding to travel to India and work with leading researchers at major Indian science and technology organisations". The Indian Government also supports Indian researchers to spend time at Australian institutions. These reciprocal fellowships help to facilitate long-term science, technology and innovation collaboration between our nations.

Since its inception in 2006, the AISRF has supported over 230 joint projects, workshops and fellowships in key areas of priority to Australia and India, involving some 100 top universities and research institutes in both countries. The US\$20 million extension for the AISRF announced in September 2014 is a testament to the success and importance of this fund between our two countries and its potential to drive science and industry forward together. This extension will mean that the AISRF remains Australia's largest fund dedicated to bilateral research and increases the total commitment from the Australian Government to \$84 million.

India and Australia formed a Joint Working Group on Education which has identified several key areas for co-operation, including collaborative research in education policy, student exchange programmes, capacity building in vocational education and distance learning in higher education. Pursuant to the signing of the new Memorandum of Understanding on Cooperation in Vocational Education and Training, the Joint Working Group Meeting between India (Ministry for Skill Development and

Entrepreneurship) and Australia (Department of Education, Skills and Employment) was held virtually on 26 November 2020.

## BILATERAL TRADE RELATION BETWEEN INDIA AND AUSTRALIA

India is the world's largest democracy and is a market of 1.3 billion people. Its youthful population, diversified economy and growth trajectory present significant opportunity for Australian business, including in education, agriculture, energy, resources, tourism, healthcare, financial services, infrastructure, science and innovation, and sport. Over the next 20 years, a growing India will need many of Australia's goods and services, including agriculture, education and skills training, and healthcare.

Recent years have seen remarkable growth in the trading relationship between India and Australia, fuelled by the many complementarities between the two economies. Two-way trade in goods and services has grown in value from US\$13.6 billion in 2007 to US\$24.3 billion in 2020.

To expand the bilateral trade, India and Australia have already signed Trade and Economic Framework (TEF) Agreement.

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## To expand the bilateral trade, India and Australia have already signed Trade and Economic Framework (TEF) Agreement.

The key sectors focused in the TEF include energy and mining, infrastructure development and financing, ICT, education, tourism, film and entertainment, biotechnology apart from traditional areas of textiles/clothing, footwear and agriculture. Initiatives under the TEF would assist to identify commercial opportunities under these areas.

Figure 1, placed below shows the exports and imports between India and Australia from 2003. The data shows, India's import from Australia constantly increased from 2003 to 2011; while post-2011 a fluctuating trend is noticed in the data. During the reference period, Indian imports reached its peak in 2017 and fell sharply in 2020. The primary reason to this decrease is the outbreak of COVID-19 pandemic. Indian imports increased exponentially during the reference period from merely US\$ 2 billion to US\$ 17.51 billion in 2017. Indian imports experienced a growth of more than 700 percent during this time period.

India maintained approximately a constant trend in its export to Australia; however, it increased over time in the reference period of the study. But there remains a wide gap between export and import. India had been having trade deficit with Australia in all the years. Australia holds a share of 1.39 percent in India total exports to the world while 2.9 percent in its gross import during 2020-21. A list of items exported and imported from Australia by India is places in the annexure 2 and 3.

Remains a wide gap between export and import. India had been having trade deficit with Australia in all the years. Australia holds a share of 1.39 percent in India total exports to the world while 2.9 percent in its gross import during 2020-21.

Though there is a marked trade imbalance in Australia's favour, but it will merely create any problem, as long as India's overall trade balance is positive. It is also likely to be rectified over the longer term as India develops a larger range of more sophisticated manufactures and services. However, it could prove to be a short-term irritant. Australia and India could consider working together, both bilaterally and in relevant international forums such as the World Trade Organisation and the G20, to explain the issues surrounding outsourcing and to make international trade in services more viable.

20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00

Figure 1: Bilateral trade between India-Australia (In Bill US\$)

Source: Author's calculation based on UN COMTRADE data.

Table 1
Bilateral trade between India-Australia (In Bill US\$)

Year	Export	Import
2003	0.56	2.04
2004	0.66	3.55
2005	0.83	4.90
2006	0.89	6.50
2007	1.08	7.68
2008	1.35	9.57
2009	1.41	12.02
2010	1.65	12.06
2011	2.10	13.42
2012	2.63	12.93
2013	2.40	10.87
2014	2.59	9.93
2015	3.25	9.41
2016	2.95	8.73
2017	3.88	14.35
2018	3.73	17.51
2019	2.97	10.57
2020	3.47	7.26

Source: UN COMTRADE

Table 2 India's top 10 exporting items to Australia during 2019 (Mil US\$)

Sl. No.	HS Code	Product	Export Value
1	27	Mineral fuels, oils & product of thereof	353.4
2	71	Natural/cultured pearls, prec stone	268.9
3	30	Pharmaceutical products.	251.8
4	86	Railw/tramwlocom, rolling-stock &	169.5
5	84	Nuclear reactors, boilers, mchy&m	157.6
6	73	Articles of iron or steel.	139.9

Source: UN COMTRADE

7	85	Electrical mchy equip parts thereof	137.2
8	62	Art of apparel & clothing access, n	128.8
9	63	Other made up textile articles; set	128
10	61	Art of apparel & clothing access,	88.9

Source: UN COMTRADE

Table 3
India's top 10 Importing items from Australia during 2019 (Mil US\$)

HS Code	Product	Export Value
27	Mineral fuels, oils & product of th	8224.2
71	Natural/cultured pearls, prec stone	529.9
28	Inorgn chem; compds of precmtl,	403
26	Ores, slag and ash.	258.2
76	Aluminium and articles thereof.	137.7
51	Wool, fine/coarse animal hair, hors	125.9
72	Iron and steel.	99.7
32	Tanning/dyeing extract; tannins &	84.3
8	Edible fruit and nuts; peel of citr	70.6
84	Nuclear reactors, boilers, mchy& m	61.1
90	Optical, photo, cine, meas, checkin	56.2

Source: UN COMTRADE

Table 4
Tariffs faced by Indian items in Australia (Binding /Weighted average)

HS Code	Product	Tariffs (%)
27	Mineral fuels, oils thereof	1.61
71	Natural/cultured pearls, prec. stone	9.54
30	Pharmaceutical products.	NA
86	Railw/tramwlocom, rolling-stock	15.13
84	Nuclear reactors, boilers, mchy	8.77
73	Articles of iron or steel.	NA
85	Electrical mchy equip parts thereof	8.38

Source: WITS, TRAINS



HS Code	Product	Tariffs (%)
62	Art of apparel & clothing access, nec	41.46
63	Other made up textile articles	23.86
61	Art of apparel & clothing access	42.06
87	Vehicles o/t railw/tramw roll-stock	10.42
42	Articles of leather; saddlery/harne	15.74

Source: WITS, TRAINS

Table 5
Tariffs faced by Australian items in India (Binding /Weighted average)

HS Code	Product	Tariffs (%)
27	Mineral fuels, oils & product of thereof	29.17
71	Natural/cultured pearls, prec stone	40
28	Inorgn chem; compds of prec metal	40
26	Ores, slag and ash.	32.5
76	Aluminium and articles thereof.	NA
51	Wool, fine/coarse animal hair, hors	43.33
72	Iron and steel.	40
32	Tanning/dyeing extract; tannins	40
8	Edible fruit and nuts; peel of citr	85
84	Nuclear reactors, boilers, mchy	29.2
90	Optical, photo, cine, meas, checkin	31.33
31	Fertilisers.	5
7	Edible vegetables and certain roots	91.88

Source: WITS, TRAINS

Tables 2 and 3 show the top exporting and importing items of India from Australia. Importantly, in case of both export and import the top 10 items constitute a share of more than 60 percent in India's total trade to Australia. Products like Mineral fuels, oils (HS27), Natural/cultured pearls (HS 71) Pharmaceutical products (HS 30), railway tram and locomotive engines (HS 86) are among the

major items exported from India to Australia. Inorganic chemicals (HS 28), Ores, slag and ash (27), Mineral fuels, oils (HS27), Natural/cultured pearls (HS 71) are among India's primary import items from Australia.

Tables 4 and 5 show the tariff faced by Indian export in Australia and Australian export in India respectively. It is evident from the data that, Indian tariffs are much higher than Australia. Despite higher tariffs Indian import from Australia is progressively increasing over the time reflecting the fact that tariffs are not the only determinant to curtail or increase trade. India has a great scope to reduce its tariff rate and offer preferential duties to Australian goods. India's highest tariff rate among the top importing items is above 90 percent applied on Edible vegetables (HS 07) while lowest rate is 5 percent levied on Fertilizers (HS 31). Highest Australian tariff rate is 42.06 applied on Art of apparel and clothing access (HS 61) and lowest tariff rate is 1.61 percent levied on Mineral fuels (HS 27).

## TRADE INTENSITY INDEX (TII) ANALYSIS

In order to understand the relative intensity of trade between India and Australia, we measured the Trade Intensity Index (TII). The TII for a country summarises the relative position of the imports from a given country vis-à-vis that of the world imports. For example, if the relative importance of Indian imports as against the world imports is increasing for a given product, then that market is emerging as an export potential market for India. Contrary to this if the relative importance of Indian imports as against the world imports is decreasing for a product, then that market is referred as declining market. TII is calculated as follows:

$$Tij = \frac{X_{ij}}{X_{wi}} X_{it}$$

$$X_{wi}$$

$$X_{wt}$$

Where,

 $X_{ij}$  is the export of a particular commodity by India to country j, Xit is the total Export of India,

 $\mathbf{x}_{wj}$  is the world export of a particular commodity to country j and  $X_{wt}$  is the total world export.

The index of trade intensity with a value greater than one is indicative of higher bilateral trade than can be expected on the basis of the countries' share in world trade. The change in the value of the index over time reveals if any two countries/groupings are experiencing an increased or decreased tendency to trade with one another. An increasing value of the index is indicative of enhanced prospects for further integration while a decreasing value would suggest diminished prospects. The TII values are presented in Table 6.

Table 6
Trade Intensity between India and Australia

Year	TII
2009	0.5
2010	0.5
2011	0.5

Source: Author's calculations based on UN COMTRADE Data.

Year	TII
2012	0.6
2013	0.5
2014	0.6
2015	0.9
2016	0.9
2017	1.0
2018	0.9
2019	0.7
2020	1.0

Source: Author's calculations based on UN COMTRADE Data.

The TII values show that Indian trade with Australia has never been above 1 except in 2020. However, year 2020 cannot be considered as indicative of any change because of the disruption of trade due the COVID-19. The TII values reveal that bilateral trade between India and Australia is far less than its potential given their relative positions in the world trade. This reflects the potential of higher trade between these two economies in the future.

To understand this trade prospects in detail, we calculated the TII for top 10 importing items of Australia from the world. This means if the TII for those items are also low, it will further open the scope for Indian export. The values show the expected results. India has higher TII values for 5 items while for two items it has lower TII values. Moreover, exports of the two items are not regular. This gives India a huge scope to intensify its trade with Australia. (See Table 7)

The TII values reveal that bilateral trade between India and Australia is far less than its potential given their relative positions in the world trade.

Table 7
TII of India for Australia's top importing items in 2019

HS Code	Product Description	TII values
271019	Light petroleum distillates nes.	93.1
270900	Petroleum oils, oils from bituminous minerals, crude	0.0
870323	Motor cars	0.0
870421	Motor cars	1.3
710812	Gold in unwrought forms non monetary	0.0
300490	Medicaments nes.	286.1
851712	telephone sets with cordless handsets	0.6
847130	data processing machines	0.3
851762	communication machine	1.9
271012	Petroleum spirit for motor vehicles	222.4

Source: Authors calculations based on WITS data

#### METHODOLOGY OF THE STUDY

In order to estimate the possible impact of tariff elimination, the study applies SMART (Software for Market Analysis and Restrictions on Trade) Model. The SMART is a partial equilibrium modelling tool developed by the World Bank available under World Integrated Trade Solution (WITS). The analysis will be done at the HS 6-digit level.

The SMART Model focuses on the changes in imports into a particular market when there is a change in trade policy. The demand side of the market in SMART is based on the Armington assumption that commodities are differentiated by their country of origin. This assumption implies that, for a particular commodity,

Details' regarding the SMART model used in this study is adopted from the V ADB publication, 'Methodology for impact assessment of Free Trade Agreements'.

imports from one country are an imperfect substitute for imports from another country. Thus, even though an FTA entails preferential trade liberalisation, import demand does not completely shift to a source from within the FTA. The SMART Model also assumes that consumers' demand is decided in a two-stage optimisation process that involves allocating their spending by commodity and by national variety. At the first stage, consumers decide how much to spend on the given commodity. At the second stage, the chosen level of spending for this commodity is allocated among the different national varieties, depending on the relative price of each variety. The extent of the between-variety response to a change in the relative price is determined by the substitution elasticity. Different countries compete to supply (export to) the market and the model simulates changes in the composition and volume of imports into that market after a tariff reduction or another change in trade policy. The degree of responsiveness of each foreign exporter's supply to changes in the price is known as the export supply elasticity.

The SMART Model, by default, assumes that the export supply elasticity of each foreign country is infinite, which implies that each foreign country can export as much of the good as possible at a certain price. This assumption may be appropriate for an importing country whose import quantity is too small to affect the prices of foreign exporters (i.e., the price-taker assumption). If changes in the country's import quantity can have a price effect on the foreign exporter, SMART can operate with finite export supply elasticity, but the value of this parameter must be found and incorporated into the analysis. In the SMART Model, an FTA will affect both the price index of the commodity and the relative prices of the different

In recent years, subtle geo-political and strategic competition in the IOR between the US, China and India has been recognised by Sri Lanka as a possible threat to its security interest in the region.

national varieties. To illustrate, suppose there are three countries: A, B, and C. A imports a good from B and C, but A is forming an FTA only with B. Reducing the tariff on imports from partner B will lower the domestic price of the variety coming from B and the price index of the commodity. Domestic consumers will therefore want to purchase and import more of the commodity. The cheaper price of imports from B relative to C also causes consumers to switch sourcing their imports from C to B. This substitution of imports is perfectly balanced in the SMART model so that the substitution does not affect the overall imported quantity, but simply reallocates market shares among foreign partners based on the new relative prices. The FTA does, however, result in an increase in imports from the country or countries benefiting from preferential trade because of lower prices. In sum, the importing country will experience an increase in imports, FTA export partners will have an increase in exports, and outsiders will see their exports of the commodity fall. Besides trade effects, SMART can calculate changes in tariff revenue as well.

SMART requires the following data, which can be extracted from WITS or imported from alternative sources of information, for the simulation of an FTA: (i) the import value from each foreign partner, (ii) the tariff faced by each foreign partner, (iii) the import demand elasticity for the commodity, (iv) the export supply elasticity for the

SMART simulation results indicate an increase in imports of extractions, textile and wearing apparel and heavy manufacturing by 4 percent, 1.9 percent and 1.18 percent, respectively. In this scenario, global imports of Australia and India are expected to increase by 1.12 percent and 0.88 percent, respectively.

commodity, and (v) the substitution elasticity between varieties of the commodity.

All the data required to conduct the SAMRT simulation model is available at the WITS.

#### SIMULATION SCENARIOS

To examine potential economic effects as result of tariff removal by India and Australia on imports from each other, two hypothetical scenarios are simulated:

- Scenario-1 considers 50 per cent tariff cut by India on imports from Australia and 50%tariff cut by Australia on imports from India.
- Scenario-3 considers 100per cent tariff cut by India and Australia on imports from each other.

Based on the four scenarios, we modelled this equation, for net trade effects, net revenue effects.

The Net trade effect (TE) is a summation of trade creation and trade diversion effect:

$$TE = TC + TD$$



The net revenue effect (RE) shows the revenue changes after a change in tariffs. It largely depends on the price and volume of imports.

```
\Delta Rijk
Rijk
= [\Delta tijk
1 + tijk]^*n^*[1 + \beta\beta - n]
Where, Rijk = The effects on revenue due to tariff changes; tijk = Tariff; n = the
```

#### **RESULTS AND DISCUSSION**

#### **SCENARIO 1**

Assuming a tariff cut of 50 percent by Australia to Indian imports, we simulated the top most (25) items that Australia imports from India. The simulation results are presented in Table 8. The results indicate that domestic price of Australian products in Indian markets declines significantly. Significant decline in prices of Australian products in Indian markets indicate towards India's high tariff regime and hence significant consumer surplus gains as a result of tariff cuts. The price of grain crops, meat products, extractions, processed food items, textile and wearing apparels, light manufacturing and heavy manufacturing products declines in the range of 8–23 per cent and 13–53 per cent. Table 8 reveals that in case of India the trade creation over powers the trade diversion effect in all the commodities except products with HS code 710239, (other-Diamonds) 870322, (Vehicles with Cylinder capacity less

than 1000 CC), 847490 (Parts of Industrial machinery), and 940360 (wooden Furniture). The extent of trade creation for India is the highest in miscellaneous edible preparations, beverages, machinery items, minerals, heavy engineering goods.

Our results also show global imports under prospective India—Australia FTA. The results indicate an increase in India's global imports of meat products by 12.89percent, grain crops by 1.65percent, textile and wearing apparel by 1.59 percent and heavy manufacturing by 1.08per cent. In Australia, SMART simulation results indicate an increase in imports of extractions, textile and wearing apparel and heavy manufacturing by 4 percent, 1.9percent and 1.18 percent, respectively. In this scenario, global imports of Australia and India are expected to increase by 1.12 percent and 0.88 percent, respectively. However, intensity of effect in either direction varies and generally higher in the long-run.

#### **SCENARIO 2**

The simulation results assuming complete elimination of import tariffs i.e., the new tariff rate would be zero, we find the commodity wise percentage increase in imports and exports, total trade effect which is decomposed into the trade creation and trade diversion effects, old duty rate, consumer surplus, and welfare effect of FTA.

The lack of a formal defence agreement, however, has not obstructed the level of defence cooperation between the two countries. Sri Lanka is the largest beneficiary of India's defence cooperation.

The results displayed in Table 9 reveal that in case of India the trade creation dominates over the traded inversion effect in almost all the commodities. Thus, it is clear that the India—Australia FTA will not lead to significant trade creation in the case of a number of commodities both agricultural and manufacturing. It is evident from Table 9 that welfare effect is larger for India than the Australia. This implies that the trade creation improves welfare as the new imports replace high-cost domestic production. This is because trade creation effect shifts trade from high-cost non-member countries to low-cost member countries.

## **CHALLENGES FACED BY INDIAN EXPORT**

Like other developed countries, Australia has well-developed regulations, including NTM- related regulations. Australia strictly imposes NTMs on imports to protect its society, in accordance with the WTO Agreement, for reasons of human health, hygiene and sanitation, protection of animal and plant life, environmental conservation, and essential security, in compliance with domestic legislative and policy requirements (including revenue objectives) and international commitments (Ministry of Foreign Affairs of Japan, 2016). Table 10 outlines the types of NTMs imposed by Australia. The table reports 1,897 occurrences of NTMs in Australia. Of these, import-related NTMs account for more than 75 per cent, while the remaining NTMs are export-related. Australia's import NTMs are mostly technical measures, referring to technical regulations and procedures for assessing conformity with technical regulations and standards, including measures covered by the Sanitary and Phytosanitary (SPS) Agreement (chapter A), and

TBTs (chapter B). Technical measures (i.e. chapters A, B, C, and some in P) account for 93 per cent of import NTMs, or 70 per cent of total NTMs, leaving only 7 per cent for nontechnical measures. As shown in Table 10, the most common type of NTM in Australia is TBTs, which account for 55 per cent of the total, followed by export measures (25%), and SPS measures (15%). The nontechnical measures include price control measures.

Table 10:
Types of non-tariff measures imposed by Australia, by chapter

Type of NTMs	Number of coded NTMs	Percentage of total NTMs (%)	Number of affected products (national tariff lines)	(%)
Sanitary and phytosanitary measures	293	15.39	6184	100
Technical barriers to trade	1035	54.56	6184	100
Pre-shipment inspection and other formalities	6	0.32	6184	100
Contingent trade-protective measures	0	0		
Non-automatic licensing, quotas, prohibitions and quantity control measures other than for sanitary and phytosanitary measures or technical barrier to trade reasons	18	0.95	185	2.99
Price control measures including additional taxes and charges	77	4.06	6185	100
Finance measures	0	0		
Measures affecting competition	0	0		
Trade-related investment measures	0	0		
Distribution restrictions	0	0		
Restrictions on post-sale services	0	0		
Subsidies (excluding export subsidies under P7)	0	0		
Government procurement restrictions	0	0		
Intellectual property	1	0.05	43	0.7
Rules of origin	0	0		
Export-related measures	468	24.67	6184	100

Source: Adopted from UNCTAD (2020) pp18

There is an urgent need to relax many of these NTMS to take advantage of the free trade agreement. Only a conducive policy regarding the NTMs combined with tariff relaxation can help to increase the trade between these two emerging partners.

#### CONCLUSION

Both India and Australia are pursuing an FTA. Experts believe that trade between India and Australia are much below to its potential and can be increased significantly if the policies are framed favourably especially by adopting liberal tariff rates. Both the nations believe that, this opportunity can be tapped through offering preferential trading rights to each other. The proposed FTA is a step in this direction. The present study attempted to estimate the volume of trade that can be reached by relaxing the tariff rates. The study is conducted from the Indian perspective with two imaginary situations. We assumed a reduction of 50 percent and 100 percent in the tariff rates and estimated the possible creation and diversion of trade in the post-FTA period. The study tried to gauge the potential benefits that India can accrue from the trade negotiation.

During the last few years, a remarkable growth has been noticed in the trading relationship between India and Australia, fuelled by the many complementarities between the two economies. Two-way trade in goods and services has grown in value from US\$13.6 billion in 2007 to US\$24.3 billion in 2020. To enhance the commercial ties both India and Australia have signed Trade and Economic Framework (TEF) Agreement focusing on a list of sectors.

The analysis finds Indian tariffs are much higher than Australia. Despite higher tariffs, Indian import from Australia is progressively increasing over the time reflecting the fact that tariffs are not the only determinant to curtail or increase trade. India has a great scope to reduce its tariff rate and offer preferential duties to Australian goods. India's highest tariff rate among the top importing items is above 90 percent applied on Edible vegetables (HS 07) while lowest rate is 5 percent levied on Fertilizers (HS 31). Highest Australian tariff rate is 42.06 applied on Art of apparel and clothing access (HS 61) and lowest tariff rate is 1.61 percent levied on Mineral fuels (HS 27).

The TII analysis reveals that bilateral trade between India and Australia is far less than its potential given their relative positions in the world trade. This reflects the potential of higher trade between these two economies in the future.

In order to estimate the possible impact of tariff elimination, the study applies SMART (Software for Market Analysis and Restrictions on Trade) Model. The predictions of the model are consistent with trade-liberalisation experiences observed in the past, with domestic production increasing in the export sectors and prices falling in the import sectors. Australian exports to India record moderate increases and become heavily concentrated in fuel exports, while imports show much significant growth, especially in those sectors that were originally more protected.

The results with 50 percent tariff reduction indicate that domestic price of Australian products in Indian markets declines significantly. Significant decline in prices of Australian products in Indian markets indicate towards India's high tariff regime and hence significant

consumer surplus gains as a result of tariff cuts. The price of grain crops, meat products, extractions, processed food items, textile and wearing apparels, light manufacturing and heavy manufacturing products declines in the range of 8–23 percent and 13–53 percent.

The results with 100 percent tariff reduction reveal that in case of India the trade creation dominates over the trade diversion effect in almost all the commodities. Thus, it is clear that the India – Australia FTA will not lead to significant trade creation in the case of a number of commodities both agricultural and manufacturing.

 Table 8:

 Trade effects in India-AUS FTA with 50% tariff cut from Indian Perspective

300490         27367.02           100630         3676.53           711319         14610.87           90111         8433.13           380893         5667.24           630260         536.815           630522         5035.76           940490         4327.24           760120         4464.96           860310         11330.55           940360         4086.27           610910         1948.39           722591         2248.70           732591         2248.70           710590         2616.46           630419         1110.46           710239         1189.22           570500         782.94           870521         308.32           630492         385.55           860500         145.41           620442         149.88           271012         76.24	Creation	Diversion Effect	Duty Rate	Duty Rate	Welfare Effect	Revenue Effect	Consumer Surplus	Change	Change
	26766.94	600.07	30.00	21.00	6905.81	3886.93	4160.32	26766.94	27367.02
	25890.32	10875.21	35.50	24.85	20978.65	-1403.37	5953.59	25890.32	36765.53
	8797.29	5813.58	36.67	25.67	2834.35	-4277.78	1966.12	8797.29	14610.87
	5420.48	3012.66	3.33	2.33	139.48	-562.51	97.18	5420.48	8433.13
	5215.28	451.96	43.33	30.33	2730.04	1583.90	1868.63	5215.28	5667.24
	5150.17	217.98	32.86	23.00	522.53	854.60	1456.31	5150.17	5368.15
	4253.25	782.51	06:90	4.83	548.35	-9413.67	61.52	4253.25	5035.76
	3851.50	475.75	4.60	3.22	113.93	-541.40	26.76	3851.50	4327.24
	3781.82	683.13	4.28	2.99	213.26	-886.47	20.69	3781.82	96'794
610910 1948.39 732591 2248.70 210690 2616.46 630419 1143.48 570231 1110.46 710239 1189.22 570500 782.94 870322 594.02 630492 385.55 860500 145.41 620442 149.88	3590.98	7739.57	2.23	1.56	352.73	-688.94	16.02	3590.98	11330.55
	3224.12	862.15	0.35	0.25	98'64	-160.35	11.63	3224.12	4086.27
	1691.10	257.29	57.71	40.40	1332.38	642.08	625.62	1691.10	1948.39
	1577.15	671.56	29.00	20.30	265.40	-333.74	372.47	1577.15	2248.70
	1506.40	1110.06	29.90	20.93	282.19	-978.26	307.38	1506.40	2616.46
	951.95	191.53	0.27	0.19	26.39	-520.40	1.98	951.95	1143.48
	703.79	79.904	5.78	4.05	33.53	-507.21	17.07	703.79	1110.46
	580.83	608.39	30.00	21.00	145.18	-1109.56	128.08	580.83	1189.22
	45.474	308.40	0.89	0.62	1.62	-237.64	3.34	474.54	782.94
	248.58	345.44	13.83	89.6	17.12	-229.61	7.55	248.58	594.02
	133.71	174.61	3.89	2.72	1.46	-305.05	1.76	133.71	308.32
	128.99	256.56	5.48	3.84	2.94	-136.78	0.72	128.99	385.55
	108.36	47.74	41.43	29.00	39.38	-56.14	34.66	108.36	155.50
	90.43	59.45	3.01	2.10	1.68	-14,14	0.95	90.43	149.88
	63.48	12.76	18.33	12.83	2.68	-7.14	19.42	63.48	76.24
847490 104.87	96.09	43.93	0.42	0.29	0.59	-62.70	0.14	60.94	104.87
271019 55.23	54.64	10.60	37.78	26.44	26.27	-3.74	14.44	54.64	65.25
300410 81.74	28.15	53.59	114	08.0	0.11	-2913	0.14	28.15	81.74
730630 0.03	0.01	0.02	30.00	21.00	0.00	-0.01	0.00	0.01	0.03

Table 9: Trade effects in India-AUS FTA with 100% tariff cut from Indian Perspective

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90111	26
0.00	0.00	0.00	-0.09	0.00	0.11	0.13	0.05	0.17	570500	23
55.88	0.01	1.78	-17.63	0.03	30.00	22.80	9.95	32.75	730630	13
18.65	0.15	12.61	-22.83	1.87	11.25	29.21	43.16	72.37	271012	5
1.17	0.00	0.12	-83.39	0.28	0.07	120.89	53.26	174.14	760120	25
0.55	0.00	0.91	-270.70	2.98	2.53	385.16	160.81	545.97	271019	28
41.94	2.98	38.33	-155.25	33.20	30.00	36.82	165.05	201.87	847490	15
222.23	3.49	44.07	-70.26	92.09	53.33	6.56	187.38	193.94	271019	_
69.17	0.72	89.59	-389.96	100.07	40.00	229.28	322.91	552.19	860500	ω
71.88	0.48	75.89	-458.40	87.02	31.25	436.76	515.17	951.94	630492	18
31.83	0.08	50.93	-1035.38	151.26	11.91	1246.75	1642.74	2889.49	300410	24
31.47	0.01	350.92	-2930.31	379.90	20.36	1980.10	2312.86	4292.96	870322	14
98.18	0.95	451.19	-1734.93	580.21	30.00	1627.29	3005.43	4632.72	630532	17
52.86	2.76	1036.25	-4864.58	773.99	34.68	3061.68	4002.81	7064.49	630419	19
48.44	2.03	1217.47	-6967.26	1043.80	29.96	3937.22	6090.33	10027.55	210690	12
28.83	13.55	1499.09	-10816.95	1123.35	30.00	2163.30	7611.80	9775.10	710239	4
78.94	0.60	1643.49	-17792.12	3269.30	33.94	12233.08	7828.01	20061.10	711319	6
11.99	0.07	83.13	-1860.29	1278.52	1.85	1614.94	7864.46	9479.40	570231	27
458.11	10.03	2383.71	-1208.71	463.93	33.53	841.29	9545.00	10386.29	630260	10
60.95	1.28	588.77	-12952.02	2235.45	18.57	11286.55	10108.93	21395.48	940360	22
76.44	1.58	2240.50	-3037.96	1389.95	23.89	2992.95	10274.81	13267.76	732591	11
369.89	1.13	3803.79	-3646.50	5937.45	53.78	1829.88	10821.35	12651.24	610910	8
80.63	1.72	6040.74	-8584.40	3130.22	38.46	5753.10	14362.51	20115.60	420221	16
644.05	19.21	5088.73	-2222.11	6363.15	42.50	1269.67	17768.81	19038.48	380893	9
28.84	9.81	75152.26	-129000.66	48004.51	109.38	17816.44	75715.45	93531.89	940490	21
495.03	86.72	14438.42	-7020.53	16239.50	30.00	2771.37	101368.07	104139.44	300490	2
117.98	43.44	27395.92	-91760.11	23884.52	38.00	22502.92	111123.88	133626.80	860310	20
67.44	3.77	30727.15	-152715.94	30659.71	36.14	60617.11	133002.92	193620.03	100630	7
Change	Change	Surplus	Effect	effect	Duty Rate	Diversion Effect	Creation Effect	Effect	Code	SE NO
Evnort	Import	Concumor	Domonilo	Wolfaro	Old Simple	Trado	Trado	Trado Total	Droduct	2 2

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## Annexure 1

RTA name	Present members	Date of entry in to force	Chronology
FTA and EIA			
India–Japan FTA and EIA	India and Japan	August 1,2011	
India–Malaysia FTA and EIA	India and Malaysia	July 1, 2011	
India–Singapore FTA and EIA	India and Singapore	August 1, 2005	
India–South Korea FTA and EIA	India and South Korea	January 1, 2010	
FTA			
India–ASEANFTA	Cambodia, Brunei Darussalam, India, Indonesia, Lao PDR, Malaysia, Myanmar, Singapore, Thailand, The Philippines and Vietnam	July 1,2004	India, Malaysia, Singapore and Thailand (January 1, 2010)Brunei Darussalam, Myanmar and Vietnam (June 1, 2010), Indonesia (October 1, 2010), Lao PDR (January 1, 2011), The Philippines (May 17, 2011), Cambodia (July 15, 2011)
India–Bhutan FTA	India and Bhutan	June 30, 2008	
SAFTA	Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka	January 6, 2004	Trade Liberalisation Programme commenced from January1,2006
India- Mauritius CECPA	India and Mauritius	April 2021	
PSA			
India–Afghanistan PSA	India and Afghanistan	May 13, 2003	
India APTAPSA	Bangladesh, China, India, Lao PDR, South Korea, Sri Lanka	June 17, 1976	BA Signed: 1975 (India, Bangladesh, South Korea, Lao PDR, Sri Lanka) BA came intoforce:June17,1976Accession of China: January 1, 2002, APTA renaming: 2005, Amended agreement: September 1, 2006
India-Chile PSA	India and Chile	August 17, 2007	The agreement effectively entered into force in India on September11,2007
India-MERCOSURPSA	India, Argentina, Brazil, Uruguay and Paraguay	June 1, 2009	A Framework Agreement was signed onJune 17, 2003 Preferential Trade Agreement was signed onJanuar 25, 2004 Venezuela is not a part of this agreement.
India-Nepal PSA	India and Nepal	October 27, 2009	

Source: Adopted from Agarwal and Ghosh 2017.

# Annexure 2 Indian top 50 Export goods to Australia in 2019-20 (Mil US\$)

HS Code	Product Description	Value
271019	Other Petroleum Oils and Oils ObtaindFrombituminous Minerals Etc	16969
710239	Others	16553
300490	Other Medcne Put Up for Retail Sale	14812
271012	Light Oils and Preparations:	8245
100630	Semi/Wholly Miled Rice W/N Polished/Glazed	8030
711319	Articles Of Othr Prcs Mtl W/N Pltd or Clad	4827
30617	Other Shrimps And Prawns: Frozen	3855
760110	Aluminium-Not Alloyed	3536
851712	Telephones For Cellular Networks or For Other Wireless Networks:	3105
260111	Iron Ores andConcentrats Non-Agglomerated Other Than Roasted Iron Pyrites	3100
20230	Boneless	2852
890590	Othr Vssls,Fire Floats Etc	2578
841112	Turbo-Jets of A Thrust>25 Kn	2405
870899	OtrPrtsandaccssrs Of Vhcls Of Hdg 8701-8705	2359
720839	Flt-Rold Prdcts in Coils Of A Thckns Of <3Mm Nt FrthrWrkdThn Hot- RoldExclPckld	2122
870322	Vehicles With Spark-Ignition Internal Combustion Reciprocating Piston Engine ofCylinder Capacity>1000Cc Bt Nt>1500Cc	1989
170199	SugarRefined Nt Contng Frvrng/Colrng Matter	1910
260112	Iron Ore and Concentrates Agglomerated	1796
520100	Cotton, Not Carded or Combed	1780
871120	Motor Cycle Etc With Rcprctng Intrnl Cmbstn Pstn Engn Of Cylndr Cpcty>50 Cc To 250 Cc	1779
711311	Articles Of JewellPartsAnd Parts Thereof Of Slvr W/N Pltd/Cld With Othr Prcs Mtl	1766
720719	Othr Prdcts Contng By Wt<0.25% Of Carbon	1682
290243	P-Xylene	1554
610910	T-Shirts Etc of Cotton	1470
380891	Insecticides	1344
380893	Herbicides, Anti-Sprouting Products and Plant-Growth Regulated:	1289
294200	Other Organic Compounds: Cefadroxil And Its Salts, Ibuprofane, Nifedipine, Ranitidine, Danes Salt Of D(-) Pheny	1271
300420	Other, Containing Antibiotics	1219



HS Code	Product Description	Value
230400	Oil-Cake and Othr Solid Residue W/N Grnd/In Pllts Form ObtndFrm Soya- Bean Oil Extrctn	1135
870323	Vehicles With Spark-Ignition Internal Combustion Reciprocating Engine Of A Cylinder Capacity>1500 Cc Bt<=3000	1088
870321	VhclWithSprk-Igntn Intrnl Cmbstn RcprctngpistonEngne Of Cylndr Cpcty<=1000Cc	1088
690721	Of A Water Absorption Coefficient by Weight Not Exceeding 0.5%	1074
850440	Static Converters	1074
630260	Toilet Linen And Kitchen Linen,Of Terry Towelling/Similar Terry Fabrics,OfCotn	1044
630419	Other Bedspreads	1013
90421	Fruits Of the Genus Capsicum Or Of The Genus Pimenta: Dried, Neither Crushed Nor Ground:	970
293399	Other HeterdcyclicCmpndswith Nitrogen Hetro Atom (S) Only	930
300220	Vaccines For Human Medicine	879
880330	Other Parts Of Aeroplanes Or Helicopters	878
151530	Castor Oil and Its Fractions	848
720711	Prdcts Contng By Wt<0.25% Crbn,OfRctnglr (InclSqr)Crs-Sctn;Wdth <twice td="" thckns<="" the=""><td>842</td></twice>	842
520523	SnglYrn Of CmbdFbrsMeasurng< 232.56 But >=192.31 Dctx(>43 But <=52 Mtrc No)	834
680223	Smply Cut/Swn Granite With A Flt/EvnSurfce	824
401170	Of A Kind Used on Agricultural Or Forestry Vehicles And Machines	814
293339	Other: Derivatives Of Pyridine :	807
320417	Pigments And Preptns Based Thereon	785
630492	Othr FrnshngArticles Of Cotn,NtKntd/Crchtd	774
848180	Other Appliances:	768
290220	Benzene	755
760120	Aluminium Alloys	739

# Annexure 3 India's top 50 Importing goods from Australia in 2019-20 (Mil US\$)

HS Code	Product Description	Value
271019	Other Petroleum Oils And Oils Obtaind From bituminous Minerals Etc	16969
710239	Others	16553
300490	Other Medcne Put Up For Retail Sale	14812
271012	Light Oils And Preparations:	8245
100630	Semi/Wholly Miled Rice W/N Polished/Glazed	8030
711319	Articles Of Othr Prcs Mtl W/N Pltd Or Clad	4827
30617	Other Shrimps And Prawns : Frozen	3855
760110	Aluminium-Not Alloyed	3536
851712	Telephones For Cellular Networks Or For Other Wireless Networks:	3105
260111	Iron Ores And Concentrats Non-Agglomerated Other Than Roasted Iron Pyrites	3100
20230	Boneless	2852
890590	Othr Vssls,Fire Floats Etc	2578
841112	Turbo-Jets Of A Thrust>25 Kn	2405
870899	OtrPrtsandaccssrs Of Vhcls Of Hdg 8701-8705	2359
720839	Flt-Rold Prdcts In Coils Of A Thckns Of <3Mm Nt FrthrWrkdThn Hot- RoldExclPckld	2122
870322	Vehicles With Spark-Ignition Internal Combustion Reciprocating Piston Engine Of Cylindr Capacity>1000Cc Bt Nt>1500Cc	1989
170199	SugrRefined Nt Contng Frvrng/Colrng Matter	1910
260112	Iron Ore And Concentrates Agglomerated	1796
520100	Cotton, Not Carded Or Combed	1780
871120	Motor Cycle Etc With Rcprctng Intrnl Cmbstn Pstn Engn Of Cylndr Cpcty>50 Cc To 250 Cc	1779
711311	Articles Of Jewellery And Parts Thereof Of Slvr W/N Pltd/Cld With Othr Prcs Mtl	1766
720719	Othr Prdcts Contng By Wt<0.25% Of Carbon	1682
290243	P-Xylene	1554
610910	T-Shirts Etc Of Cotton	1470
380891	Insecticides	1344
380893	Herbicides, Anti-Sprouting Products And Plant-Growth Regulated:	1289
294200	Other Organic Compounds : Cefadroxil And Its Salts, Ibuprofane, Nifedipine, Ranitidine, Danes Salt Of D(-) Pheny	1271
300420	Other, Containing Antibiotics	1219



HS Code	Product Description	Value
230400	Oil-Cake And Othr Solid Residue W/N Grnd/In Pllts Form ObtndFrm Soya-Bean Oil Extrctn	1135
870323	Vehicles With Spark-Ignition Internal Combustion Reciprocating Engine Of A Cylinder Capacity>1500 Cc Bt<=3000	1088
870321	VhclWithSprk-Igntn Intrnl Cmbstn RcprctngpistonEngne Of Cylndr Cpcty<=1000Cc	1088
690721	Of A Water Absorption Coefficient By Weight Not Exceeding 0.5%	1074
850440	Static Converters	1074
630260	Toilet Linen And Kitchen Linen,Of Terry Towelling/Similar Terry Fabrics,OfCotn	1044
630419	Other Bedspreads	1013
90421	Fruits Of The Genus Capsicum Or Of The Genus Pimenta: Dried, Neither Crushed Nor Ground:	970
293399	Other HeterdcyclicCmpnds With Nitrogen Hetro Atom (S) Only	930
300220	Vaccines For Human Medicine	879
880330	Other Parts Of Aeroplanes Or Helicopters	878
151530	Castor Oil And Its Fractions	848
720711	Prdcts Contng By Wt<0.25% Crbn,OfRctnglr (InclSqr)Crs-Sctn;Wdth <twice The Thckns</twice 	842
520523	SnglYrn Of CmbdFbrsMeasurng< 232.56 But >=192.31 Dctx(>43 But <=52 Mtrc No)	834
680223	Smply Cut/Swn Granite With A Flt/EvnSurfce	824
401170	Of A Kind Used On Agricultural Or Forestry Vehicles And Machines	814
293339	Other : Derivatives Of Pyridine :	807
320417	Pigments And Preptns Based Thereon	785
630492	Othr FrnshngArticles Of Cotn,NtKntd/Crchtd	774
848180	Other Appliances :	768
290220	Benzene	755
760120	Aluminium Alloys	739
HS Code	Product Description	Value
270900	Petroleum Oils And Oils Obtained From Bituminous Minerals Crude	59478
710812	Other Unwrought Forms	34497
270119	Other Coal:	14421
710231	Non-Industrial Diamonds Unworked/Simply Sawn Cleaved Or Bruted	10695
271111	Liquified Natural Gas	7881

HS Code	Product Description	Value
851770	Parts:	6982
710239	Others	6526
151110	Crude Palm Oil And Its Fractns	5676
880240	Aeroplanes And Othr Aircraft,Of An Unladen Weight Exceeding 15000 Kg	5368
847130	PortblDgtlAutomatc Data ProcesngMachns,Wghng<10Kg Consistng A CentrlProcesng Unit, A Kbyboard And A Display.	5243
854231	Processors And Controllers, Whether Or Not Combined With Memories, Converters, Logic Circuits, Amplifiers, Clock	5063
271019	Other Petroleum Oils And Oils ObtaindFrombituminous Minerals Etc	4570
271113	Liquified Butanes	4105
851762	Machines For The Reception, Conversion And Transmission Or Regeneration Of Voice, Images Or Other Data, Including Swit	3663
271112	Liquified Propane	3621
150710	Soya Bean Crude Oil W/N Degummed	2837
310210	Urea Whether Or Not In Aqueous Solution	2798
890590	Othr Vssls,Fire Floats Etc	2626
854239	Other	2314
851712	Telephones For Cellular Networks Or For Other Wireless Networks:	2244
854140	PhotosenstvSemicndctrDevices,InclPhotovltc Cells W/N Assmbld In Modules/ Made Up Into Panels;LightEmttng Diodes	2071
852990	Othe Parts Of Hdg 8525 To 8528	2049
760200	Aluminium Waste And Scrap	2008
151211	Crude Oil Of Sunflower And Safflower Seed	1964
310530	DiamonmHydrgnorthphospht(DiamonmPhospht)	1949
852580	Television Cameras, Digital Cameras And Video Camera Recorders:	1838
847150	DigitlProcesng Units Excl Of Sub Hdngs 847141 And 847149,Wh/Not Cont One/Two Typs Of Uni,LikeStorg/Input/Output Uni	1836
280920	Phosphoric Acid And Polyphosphoric Acids	1683
390410	Poly (Vinyl Chloride), Not Mixed With Othr	1584
980100	Project Goods	1499
720421	Waste And Scrap Of Stainless Steel	1446
870899	OtrPrtsandaccssrs Of Vhcls Of Hdg 8701-8705	1359
284390	Other Compounds; Amalgams :	1356
847330	Parts And Accssrs Of Mchns Of Hdg No.8471	1322



HS Code	Product Description	Value
720449	Other Waste And Scrap	1274
850440	Static Converters	1258
310420	Potassium Chloride	1213
271012	Light Oils And Preparations:	1205
850760	Lithium-lon	1193
847989	Othr MchnAndmchnclApplncs Of Hdg 8479	1134
740200	Unrefined Copper;Copper Anodes For Electrolytic Refining	1088
740311	Cathods And Sectns Of Cathods Of Refined Cop	1026
270112	Bitumns Coal W/N Pulvrsd But Nt Aglomrtd	1016
841112	Turbo-Jets Of A Thrust>25 Kn	1008
80131	Cashen Nuts Fresh/Dried In Shell	985
740400	Copper Waste And Scrap	930
848180	Other Appliances :	914
854232	Memories	914
392690	Other Articles Of Plastics	895
80211	Almonds Frsh Or Driedin Shell	868
382200	Compst Diagnostic/LabrtryReagntsExcl Goods Of Hdg. No. 3002/3006	866
470790	Other, Including Unsorted Waste And Scrap	839
293399	Other HeterdcyclicCmpnds With Nitrogen Hetro Atom (S) Only	828



# Dr. Rahul Nath Choudhury was a Research Fellow at the Indian Council of World Affairs. His primary research interests include foreign direct investments, multilateralism, international political economy, geo-economics and digital trade. Rahul has a decade long experience of working in both the public and the private sector in academia and the industry in various capacities. He has edited the book China-US trade war and the South Asian Economies, published by Routledge, in 2021. He has contributed to numerous book chapters and academic journals. Rahul regularly writes Opinion pieces and commentaries to various Indian and international newspapers and web portals.





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