

# IMC

Chamber of Commerce and Industry

## REPORT ON IMC INDO-US PARTNERSHIP VISION SUMMIT

### Dates & Timings

**DAY 1-** Thursday, 29<sup>th</sup> April 2021 | 5:30 pm - 9:15 pm (IST)

**DAY 2-** Friday, 30<sup>th</sup> April 2021 | 6:00 pm - 9:00 pm (IST)



Prepared by:

**IRR**  
Advisory



### Organizing Committee Members- Indo-US Summit 2021

- Mr. Atul Nishar, Founder and Chairman, Azent Overseas Education Private Limited, Founder & Chairman Emeritus, Hexaware Technologies Limited
- Mr. Dinesh Joshi, Chairman, IMC International Business Committee
- Mr. Lutfi Hassan, Chairman & CEO, Apex Group of Companies, USA
- Ms. Nivedita Mehra, Managing Director, US-India Strategic Partnership Forum
- Mr. Paresh (Perry) Patel, Executive Director of Lotus Recovery Centers, USA
- Ms. Priya Samant, Impact Advisor & Director Sequoia Applied Technologies
- Mr. Rajiv Podar, President, IMC Chamber of Commerce and Industry
- Mr. Rahul Sharma, Managing Director, APCO Worldwide
- Mr. Swadesh Chatterjee, Chairman and Co-Founder, US India Friendship Council
- Ms. Shriya Sekhsaria, CEO, Lumhaa: The Memory Jar Company

## **About IMC Chamber of Commerce and Industry**

IMC Chamber of Commerce and Industry has a rich legacy of over a century of existence. It was founded on September 07, 1907 by few Indian Merchants, who came together to establish a Swadeshi institution to fight for the rights of the swadeshi businesses. The Chamber exclusively served the interests of Indian business community and also took part in several key political movement pre-independence. In recognition of the Chamber's contribution to nation building, Mahatma Gandhi accepted honorary membership in 1931, the only Chamber which has this distinction. After independence, IMC has played a significant role in consolidating Indian business interests and making the Indian economy self-reliant. At its 100<sup>th</sup> year, a postal stamp was issued by the government of India recognizing the services of the Chamber.

Over the years, a galaxy of leaders, both Indian and International, including Presidents and Prime Ministers, have adorned the Chambers by their visits. The foundation stone of the Chambers' building in Churchgate at Mumbai was laid by first Home Minister of India Sardar Vallabhbhai Patel.

Headquartered in Mumbai, the Chamber represents the voice of over 400,000 businesses and industry establishments across India from diverse sectors of industry with its membership base of over 5000 members and over 150 trade associations affiliated to it. The Chamber's core function is to provide policy inputs and to promote interests of industry and economic growth of the country.

Since its inception in 1907, the Chamber has evolved into an institution keeping pace with the time by adapting itself to contemporary trends, while at the same time continuing on the path of its proud legacy of over a century in the service of nation building and simultaneously fulfilling its responsibility towards the welfare and well-being of society. The Chamber is now a cradle for nurturing young talents and promoting emancipation of women through Young Leaders' Forum and Ladies' Wing which have become embodiment of youth enterprise, positivism, proactive thought leadership, and movement for women empowerment and entrepreneurship.

The Chamber's expansive global network with formal understanding with over 150 chambers and government agencies, the IMC platform offers its members benefit of this network opportunities to explore and expand their operations. The year-round activities of dialogues and discussions with eminent business, political, societal and government leaders on a wide range of issues to create environment for sustainable economic and social development is uniquely enriching, knowledge sharing and relationship building experience.

The Chamber's state-of-the-art International ADR Centre offers institutional arbitration of disputes in international standard facilities and established rules and panel of arbitrators. IMC's Library is equipped with rarest books and manuscripts, latest books on economics, politics, management, laws, banking, taxations, and other to enjoy in modern lounge seating atmosphere, a rarity today.

# TABLE OF CONTENTS

Foreword.....	1
Key Fact: United States of America.....	3
Key Fact: India.....	4
US India Relations .....	5
US India Trade Relations .....	6
Country Rating - USA.....	10
Country Rating - India .....	13
Summit Overview.....	16
Summit Highlights.....	19
Key Takeaways .....	47

## FOREWORD

India and the USA are the world's two largest democracies occupying a significant position in the world economy with a combined contribution of around 28% in the world GDP. Both countries have fostered a dynamic economic environment in the last few years with the implementation of various praiseworthy economic reforms to maintain macroeconomic stability and promote socio-economic development.



Today, India and the United States demonstrate a global strategic collaboration at the back of common ambition, values and interest. Relations between the two nations have been growing from strength to strength in the past few decades. From Pharma, Education, IT, raw material supplies India has now drawn attention in several new areas like Defense, Retail, Digital, Finance, Climate Change, Regional and Global Challenges, to the strengthening of QUAD grouping in the Indo-Pacific. IMC Indo-US Partnership Vision Summit 2021 has been a platform to envision a future for furthering this partnership and relationship.

IMC Indo-US Partnership Vision Summit focused on a range of thought-provoking and educative sessions on topics such as the Importance and Future of Health, Regional Bilateral Cooperation, Trends in Emerging Technology, Entertainment, Finance and Investments, Defense/Homeland Security and the Knowledge Economy.

Healthcare collaboration has been proving an important strategic dimension of US-India ties. Even before the pandemic, Indian pharmaceutical companies supplied over 40% of generic demand in the United States. India is the largest vaccine producer in the world, making it a continued key contributor to providing vaccines to the USA. The US is a huge market and a global leader in pharmaceutical research and development. India has a lot to learn from the US to develop its own pharma innovation ecosystem.

There is large scope for two countries to embrace frontier technologies and collaborate on enhancing capabilities in 5G, AI, big data analytics, quantum computing, blockchain and the Internet of Things which can accelerate the development and commercialization of modern technological solutions. This has presented both countries with new opportunities for partnerships going ahead.

The Bollywood film industry has been drawing inspiration and ideas from Hollywood films since its inception. This sharing of ideas has ranged from melodies for background scores to entire plot summaries and even translated dialogues. However, with the advent of technology and the increasing popularity of Bollywood cinema in the United States, we are beginning to see American film producers borrowing Bollywood film elements as well as paves a new way for collaboration in the entertainment industry.

The U.S.-India defense relationship has grown over the last decade to become a key component of the overall bilateral partnership. The military trade between India and the US is predicted to cross \$ 25 billion over the next few years. This presents a huge potential opportunity in defense and homeland security for both countries.

With more than 200,000 Indian students studying in the US, the education partnership has become a source of strength and an important bridge between the two countries. India's New Education Policy allows institutions of higher learning to open campuses within the country along with a booming EdTech market that is expected to reach nearly 2 Billion this year-end. It is an opportune moment for both countries to explore a hybrid, collaborative and cross-disciplinary model of education that is able to reach the maximum number of Indian students with quality and skill-based education at affordable costs.

The recent collaboration between India and the US with an aim to launch the "India-US Climate and Clean Energy Agenda 2030 Partnership" on green collaborations, battery, energy is a key milestone towards an inclusive and resilient economic development.

The 21st century will continue to present challenges that no country will be able to solve alone. Both the United States and India should work with renewed vigor on an already strong US-India bilateral partnership. As Hon'ble Union Minister for Road Transport & Highways, Micro Small & Medium Enterprises Shri Nitin Gadkari ji rightly said: ***"Indo-US is the most strategic partnership of 21st century. India and US are committed to the development of society which is livable, workable and sustainable for all."***

IMC Indo US Vision Partnership Summit 2021 has been a platform to showcase our unique strengths, to explore collaboration opportunities and capitalize on our ties and unlock promising possibilities towards an inclusive and sustainable future for all.

**Mr. Rajiv Podar**

President – IMC Chamber of Commerce

## KEY FACT: UNITED STATES OF AMERICA

### GOVERNMENT

#### Chief of State

President Joseph R. BIDEN Jr.

#### Head of Government

President Joseph R. BIDEN Jr.

#### Government Type

constitutional federal republic

#### Capital

Washington, DC

#### Legislature

bicameral Congress consists of the Senate (100 seats) and the House of Representatives (435 seats)

#### Judiciary

US Supreme Court (consists of 9 justices - the chief justice and 8 associate justices)

### GEOGRAPHY

#### Area

Total: 9,833,517 sq km

Land: 9,147,593 sq km

Water: 685,924 sq km

#### Climate

mostly temperate, but tropical in Hawaii and Florida, arctic in Alaska, semiarid in the great plains west of the Mississippi River, and arid in the Great Basin of the southwest; low winter temperatures in the northwest are ameliorated occasionally in January and February by warm chinook winds from the eastern slopes of the Rocky Mountains

#### Natural Resources

coal, copper, lead, molybdenum, phosphates, rare earth elements, uranium, bauxite, gold, iron, mercury, nickel, potash, silver, tungsten, zinc, petroleum, natural gas, timber, arable land

as of February 2021

Source: CIA Factbook

### ECONOMY

#### Economic Overview

remains the most technologically powerful economy in the world – at the forefront in computers, pharmaceuticals, aerospace and military equipment – but its advantages have narrowed since WWII, with output now falling behind China's, as investment in infrastructure, science, industry, and human capital have lagged

#### GDP (Purchasing Power Parity)

\$20.52 trillion (2019 est.)

#### GDP per capita (Purchasing Power Parity)

\$62,530 (2019 est.)

#### Exports

\$2.377 trillion (2019 est.)

partners: Canada 18.3%, Mexico 15.7%, China 8.4%, Japan 4.4% (2017)

#### Imports

\$3.214 trillion (2019 est.)

partners: China 21.6%, Mexico 13.4%, Canada 12.8%, Japan 5.8%, Germany 5% (2017)

### PEOPLE & SOCIETY

#### Population

335 million (July 2021 est.)

#### Population Growth

0.7% (2021 est.)

#### Ethnicity

white 72.4%, black 12.6%, Asian 4.8%, Amerindian and Alaska native 0.9%, native Hawaiian and other Pacific islander 0.2%, other 6.2%, two or more races 2.9% (2010 est.)

#### Language

English only 78.2%, Spanish 13.4%, Chinese 1.1%, other 7.3% (2017 est.)

#### Religion

Protestant 46.5%, Roman Catholic 20.8%, Jewish 1.9%, Mormon 1.6%, other 5.8%, unaffiliated 22.8%, unspecified 0.6% (2014 est.)

#### Urbanization

urban population: 82.7% of total population (2020)

rate of urbanization: 0.95% annual rate of change (2015-20 est.)



## KEY FACT: INDIA

### GOVERNMENT

#### Chief of State

President Ram Nath KOVIND

#### Head of Government

Prime Minister Narendra MODI

#### Government Type

federal parliamentary republic

#### Capital

New Delhi

#### Legislature

bicameral Parliament or Sansad consists of the Council of States or Rajya Sabha (245 seats) and the House of the People or Lok Sabha (545 seats)

#### Judiciary

Supreme Court (consists of 28 judges, including the chief justice)

#### Ambassador to US

Ambassador Taranjit Singh SANDHU

#### US Ambassador

Ambassador Kenneth I. JUSTER

### GEOGRAPHY

#### Area

Total: 3,287,263 sq km

Land: 2,973,193 sq km

Water: 314,070 sq km

#### Climate

varies from tropical monsoon in south to temperate in north

#### Natural Resources

coal (fourth-largest reserves in the world), antimony, iron ore, manganese, mica, bauxite, rare earth elements, titanium ore, chromite, natural gas, diamonds, petroleum, limestone, arable land

as of April 2020

Source: CIA Factbook

### ECONOMY

#### Economic Overview

the diverse economy encompasses traditional village farming, modern agriculture, a wide range of modern industries, and a multitude of services fueled by a large percentage of English speakers

#### GDP (Purchasing Power Parity)

\$9.474 trillion (2017 est.)

#### GDP per capita (Purchasing Power Parity)

\$7,200 (2017 est.)

#### Exports

\$304.1 billion (2017 est.)

partners: US 15.6%, UAE 10.2%, Hong Kong 4.9%, China 4.3% (2017)

#### Imports

\$452.2 billion (2017 est.)

partners: China 16.3%, US 5.5%, UAE 5.2%, Saudi Arabia 4.8%, Switzerland 4.7% (2017)

### PEOPLE & SOCIETY

#### Population

1.3 billion (July 2020 est.)

#### Population Growth

1.1% (2020 est.)

#### Ethnicity

Indo-Aryan 72%,  
Dravidian 25%,  
Mongoloid and other 3% (2000)

#### Language

Hindi 43.6%, Bengali 8%, Marathi 6.9%, Telugu 6.7%, Tamil 5.7%, Gujarati 4.6%, Urdu 4.2%, Kannada 3.6%, Odia 3.1%, Malayalam 2.9%, Punjabi 2.7%, Assamese 1.3%, Maithili 1.1%, other 5.6% (2011 est.)

#### Religion

Hindu 79.8%, Muslim 14.2%, Christian 2.3%, Sikh 1.7%, other and unspecified 2% (2011 est.)

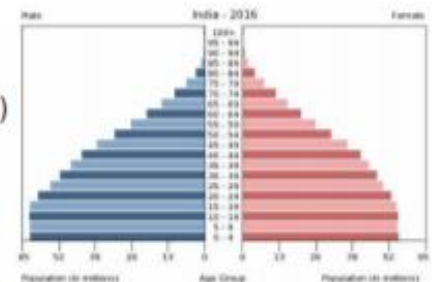
#### Urbanization

urban population: 34.9% of total population (2020)

rate of urbanization: 2.37% annual rate of change (2015-20 est.)

#### Literacy

74.4% (2018)





## US INDIA RELATIONS

The US.-India partnership is founded on a shared commitment to freedom, democratic principles, equal treatment of all citizens, human rights, and the rule of law. The United States and India have shared interests in promoting global security, stability, and economic prosperity through trade, investment, and connectivity. The United States supports India's emergence as a leading global power and vital partner in efforts to ensure that the Indo-Pacific is a region of peace, stability, and growing prosperity. The strong people-to-people ties between the two countries, reflected in a four million-strong Indian American diaspora, are a tremendous source of strength for the partnership. In December 2019, the United States hosted the second 2+2 Ministerial Dialogue in Washington led by the US. Secretaries of State and Defence and their Indian counterparts, at which both sides reaffirmed India's status as a Major Defence Partner and deepened cooperation on maritime security, interoperability, and information sharing. While the 2+2 serves as the premier dialogue mechanism between the United States and India, there are more than thirty bilateral dialogues and working groups, which span all aspects of human endeavour, from space and health cooperation to energy and high technology trade. These include the US.-India Counterterrorism Joint Working Group, which was established in 2000 and is among the oldest government to government dialogues, as well as the Strategic Energy Partnership, Cyber Dialogue, Civil Space Working Group, Trade Policy Forum, Defence Policy Group and many more.

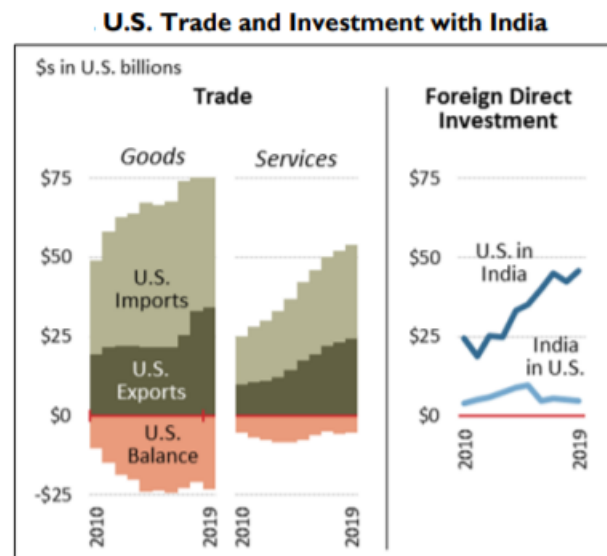
The United States seeks an expanded trade relationship with India that is reciprocal and fair. In 2019, overall US.-India bilateral trade in goods and services reached \$149 billion. US. energy exports are an important area of growth in the trade relationship. In 2018 India purchased 48.2 million barrels of US. crude oil, a significant increase from 9.6 million in 2017. Last year, Indian students enrolled at US. colleges and universities contributed over \$8 billion to the US. economy. The total number of Indian students in the United States has more than doubled over the last decade, from 81,000 in 2008 to a record high of 202,000 in 2019.

India and the United States cooperate closely at multilateral organizations, including the United Nations, G-20, Association of Southeast Asian Nations (ASEAN) Regional Forum, International Monetary Fund, World Bank, and World Trade Organization. The United States welcomes India joining the UN Security Council in 2021 for a two-year term, and supports a reformed UN Security Council that includes India as a permanent member. India is an ASEAN dialogue partner, an Organization for Economic Cooperation and Development partner, and an observer to the Organization of American States. India is also a member of the Indian Ocean Rim Association (IORA), at which the United States is a dialogue partner. In 2019, the United States joined India's Coalition for Disaster Resilient Infrastructure to expand cooperation on sustainable infrastructure in the Indo-Pacific region.

*Source: US Department of State*

## US INDIA TRADE RELATIONS

The United States and India view one another as important strategic partners to advance common interests regionally is a key aspect of strategic ties with potential for more growth. Bilateral trade is about 3% of US world trade. It is more consequential for India; in 2019, the United States was India's largest goods export market (17% share), and third-largest goods import supplier (7%), after China (14%) and the European Union (9%). US-India foreign direct investment (FDI) is limited but growing. Defence sales also are significant in bilateral trade. Civilian nuclear commerce, stalled for years over differences on liability protections, has produced major potential US supply contracts, dating to the second Obama Administration.



Source: CRS analysis, Bureau of Economic Analysis (BEA) data.

Market access and other barriers to trade with India have been longstanding concerns among some Members of Congress and US exporters, and successive US Administrations. Efforts under the Trump Administration to reach a limited bilateral trade deal to address certain frictions did not conclude. President-Elect Joe Biden has expressed interest in cooperating with Indian Prime Minister Narendra Modi on global challenges, but it is uncertain what priority the new Administration will place on bilateral trade issues. Some analysts expect that US-India trade relations may be less strained, but that Congress and the new Administration will continue to seek resolution to ongoing trade frictions in the bilateral relationship. Prime Minister Modi's first term (2014-2019) fell short of many observers' expectations, as India did not move forward with many anticipated market-opening reforms, and instead increased tariffs and trade restrictions.

### Selected Issues between US and India:

- Tariffs:** Under the Trump Administration, bilateral tensions increased over each side's tariff policies. In general, India has relatively high average tariff rates, especially in agriculture. It can raise its applied rates to bound rates without violating its commitments under the WTO, causing uncertainty for US exporters. India's recent tariff hikes, including on cell phones and other telecommunication goods, went from 0% originally to 15-20%. The United States and several other countries requested to join various WTO dispute consultations against India related to its technology tariffs, also questioning its compliance with the WTO Information Technology Agreement (ITA). India opposes the 25% steel and 10% aluminium national security-based "Section 232" tariffs that the Trump Administration imposed in 2018. India repeatedly delayed applying planned retaliatory tariffs against the United States, in

hopes of resolving the issues bilaterally. After India lost its eligibility for a US. trade preference program (see below), India imposed higher tariffs of 10% to 25%, affecting about \$1.32 billion of US. exports (2019 data), such as nuts, apples, chemicals, and steel. The two sides are challenging each other's tariffs in the WTO.

- **US. Generalized System of Preferences (GSP):** Effective June 2019, President Donald Trump removed India from GSP, a US. trade and development program, for failure to provide “equitable and reasonable” market access. GSP provides nonreciprocal, duty-free tariff treatment to certain products imported from qualifying developing countries. The termination followed an US. investigation into India’s market access practices based on petitions by US. dairy and medical technology industries. In 2018, India was the largest beneficiary of GSP; over one-tenth (\$6.3 billion) of US. goods imports from India entered duty-free under the program (e.g., chemicals, auto parts, and tableware). GSP removal reinstated US. tariffs, which ranged 1-7% on the top 15 GSP bilateral imports.
- **Services:** The United States and India are competitive in certain services industries. Barriers to US. firms’ market access include India’s limits on foreign ownership and local presence requirements. A key issue for India is US. temporary visa policies, which affect Indian nationals working in the United States. India was monitoring potential US. action to revise the H-1B (specialized worker) visa program under the Trump Administration. Additionally, India continues to seek a “totalization agreement” to coordinate social security protection for workers who split their careers between the two countries.
- **Agriculture:** Sanitary and phytosanitary (SPS) barriers in India limit US. agricultural exports. The United States questions the scientific and risk-based justifications of such barriers. Each side also sees the other’s agricultural support programs as market-distorting; India’s view of its programs from a broad food security lens complicates matters.
- **Intellectual Property (IP):** The two sides differ on how to balance IP protection to incentivize innovation and support other policy goals, such as access to medicines, including for COVID-19 treatments and vaccines. India remained on the Priority Watch List of the US. 2020 Special 301 report, which cited India’s insufficient progress in addressing IP challenges and noted concerns over India’s treatment of patents, high IP theft rates, and lax trade secret protection.
- **“Forced” Localization:** The United States continues to press India to address its “forced” localization practices, such as in-country data storage, domestic content, and domestic testing requirements—viewed by the United States as presenting barriers to trade with India. Adding to US. concerns are India’s restrictive localization rules for certain financial data flows, which affect companies such as Visa and MasterCard. At the same time, India has moved to ease some local sourcing rules for single-brand retailers, which would affect companies such as Apple.
- **Investment:** India aims to attract foreign investment and has made FDI reforms, such as raising foreign equity caps for insurance and defence, and other strides to improve its business environment. US. concerns about investment barriers persist nevertheless, heightened by new Indian restrictions on how e-commerce platforms such as Amazon and Walmart-owned Flipkart conduct business. From the US. view, India’s weak regulatory transparency and other issues, such as IPR and localization policies,

add to concerns about FDI barriers. Two-way US.-Indian FDI is linked to US. jobs and exports in a range of sectors, yet US. FDI in India prompts some offshoring concerns.

- **Defence Trade:** The two nations have signed defence contracts worth more than \$20 billion since 2008, up from \$500 million in all previous years combined. Major anticipated deals include an Integrated Air Defence Weapon System valued at nearly \$2 billion and 30 MQ-9B ‘SkyGuardian’ drones worth more than \$3 billion. India is eager for more technology-sharing and co-production initiatives, while the United States urges more reforms in India’s defence offsets policy and higher FDI caps in its defence sector. India’s multibillion-dollar deal to purchase the Russian-made S-400 air defence system may trigger US. sanctions on India under the Countering America’s Adversaries Through Sanctions Act (P.L. 115-44).

### **Current Negotiations and Agreements**

- **Bilateral Engagement:** Under the Trump Administration, the United States and India held concerted negotiations to address trade frictions. A potential trade deal could include partial restoration by the United States of India’s GSP benefits in exchange for certain market access commitments, according to press accounts. Yet, the long expected limited trade deal has not materialized to date. Negotiations under prior Administrations on a bilateral investment treaty (BIT) are stalled due to differences on approaches on investor protections. The government-to-government Trade Policy Forum has not met regularly in recent years amid trade frictions. The private sector-based CEO Forum has met periodically.
- **Regional Integration:** Both India and the United States are absent from the Indo-Pacific region’s two major trade pacts.
  - India negotiated, but opted not to join, the Regional Comprehensive Economic Partnership (RCEP), signed by China and 14 other countries in November 2020. India cited concerns about RCEP’s fairness and balance, and reportedly also was concerned about the effects of opening its markets to Chinese exports.
  - The United States withdrew from the proposed TransPacific Partnership (TPP) in 2017. The 11 remaining TPP parties (including 7 RCEP members, but not India or China) signed the new Comprehensive and Progressive Agreement for TPP (CPTPP or TPP-11), which entered into force on December 2018.

India also has long sought to join the Asia-Pacific Economic Cooperation (APEC), composed of the United States, China, and 19 other economies, but its willingness to make sufficient economic reforms to join is uncertain.

- **WTO:** The United States and India often have opposing stances in the WTO, whose future direction is unclear amid debate over institutional reforms and negotiations. With India’s growing integration in the global economy, some policymakers have called on India, like China, to be a more responsible stakeholder in the rules-based global trading system. They blame India for impeding WTO progress on issues such as e-commerce customs duties and fisheries subsidies. India previously blocked the Trade Facilitation Agreement (TFA), which ultimately entered into force in 2017, until a compromise was reached on treatment of certain food security programs. The United States and some developed

countries also are critical of India, China, and others for self-designating as developing countries to claim special and differential treatment under WTO rules— criticisms that these countries refute.

*Source: Federation of American Scientists*

India was the United States' 12th largest goods export market in 2019. US. goods exports to India in 2019 were \$34.3 billion, up 3.3% (\$1.1 billion) from 2018 and up 108.5% from 2009. US. exports to India account for 2% of overall US. exports in 2019. The top export categories in 2019 were mineral fuels (\$8.2 billion), precious metal and stone (\$6.4 billion), aircraft (\$2.8 billion), machinery (\$2.4 billion), and organic chemicals (\$1.9 billion). US. total exports of agricultural products to India totaled \$1.8 billion in 2019. Leading domestic export categories included tree nuts (\$823 million), cotton (\$587 million), fresh fruit (\$62 million), dairy products (\$60 million), and pulses (\$37 million). US. exports of services to India were an estimated \$24.3 billion in 2019, 4.8% (\$1.1 billion) more than 2018, and 144% greater than 2009 levels. Leading services exports from the US. to India were in the travel, intellectual property (computer software, audio and visual related products), and transport sectors.

India was the United States' 10th largest supplier of goods imports in 2019. US. goods imports from India totaled \$57.7 billion in 2019, up 6.3% (\$3.4 billion) from 2018, and up 172.6% from 2009. US. imports from India account for 2.3% of overall US. imports in 2019. The top import categories in 2019 were precious metal and stone (\$11 billion), pharmaceuticals (\$7.6 billion), machinery (\$3.7 billion), mineral fuels (\$3.6 billion), and organic chemicals (\$2.8 billion). US. total imports of agricultural products from India totaled \$2.6 billion in 2019. Leading categories included spices (\$271 million), rice (\$230 million), essential oils (\$184 million), processed fruit & vegetables (\$142 million), and other vegetable oils (\$133 million). US. imports of services from India were an estimated \$29.7 billion in 2019, 3.0% (\$864 million) more than 2018, and 143% greater than 2009 levels. Leading services imports from India to the US. were in the telecommunications, computer, and information services, research and development, and travel sectors.

The US. goods trade deficit with India was \$23.4 billion in 2019, a 11.0% increase (\$2.3 billion) over 2018. The United States has a services trade deficit of an estimated \$5.4 billion with India in 2019, down 4.6% from 2018. US. FDI in India (stock) was \$45.9 billion in 2019, a 8.1% increase from 2018. US. direct investment in India is led by professional, scientific, and technical services, manufacturing, and wholesale trade. India's FDI in the United States (stock) was \$5.0 billion in 2019, down 2.3% from 2018. India's direct investment in the US. is led by professional, scientific, and technical services, manufacturing, and depository institutions. Sales of services in India by majority US.-owned affiliates were \$32.1 billion in 2017 (latest data available), while sales of services in the United States by majority India-owned firms were \$17.8 billion.

*Source: Office of the United States Trade Representative*

## **COUNTRY RATING - USA**

Fitch Ratings - New York - 31 Jul 2020: Fitch Ratings has affirmed United States' Long-Term Foreign-Currency (LTFC) and Local-Currency (LC) Issuer Default Ratings (IDRs) at 'AAA' and revised the Outlooks to Negative from Stable.

The US sovereign rating is supported by structural strengths that include the size of the economy, high per capita income and a dynamic business environment. The US benefits from issuing the US dollar, the world's preeminent reserve currency, and from the associated extraordinary financing flexibility, which has been highlighted once again by developments since March 2020. Fitch considers US debt tolerance to be higher than that of other 'AAA' sovereigns.

However, the Outlook has been revised to Negative to reflect the ongoing deterioration in the US public finances and the absence of a credible fiscal consolidation plan, issues that were highlighted in the agency's last rating review on March 26, 2020. High fiscal deficits and debt were already on a rising medium-term path even before the onset of the huge economic shock precipitated by the coronavirus. They have started to erode the traditional credit strengths of the US. Financing flexibility, assisted by Federal Reserve intervention to restore liquidity to financial markets, does not entirely dispel risks to medium-term debt sustainability, and there is a growing risk that US policymakers will not consolidate public finances sufficiently to stabilize public debt after the pandemic shock has passed. Although a massive policy response has prevented a deeper downturn - such that Fitch expects a less severe contraction in the US in 2020 than in many other advanced economies - the agency has revised down our macroeconomic projections since March and downside risks persist.

The US had the highest government debt of any 'AAA'-rated sovereign heading into the crisis, and Fitch expects general government debt to exceed 130% of GDP by 2021. Fitch's debt dynamics analysis indicates that debt/GDP could stabilize temporarily from 2023 if fiscal balances return to pre-pandemic levels, but only assuming that interest rates stay very low. Health and social security costs are still set to rise over the medium-term while federal revenue in FY19 was close to its long-term average as a share of GDP.

Fitch expects the general government calendar year deficit to widen to over 20% of GDP in 2020. The agency expects the deficit to narrow to 11% of GDP in 2021 as economic support measures are rolled back. The cumulative federal deficit in the first nine months of FY20 (starting in October 2019) reached USD2.7 trillion, compared with USD747 billion in the same period of FY19. Spending rose by USD1.6 trillion, or by 49%. The Congressional Budget Office (CBO) estimated in April that the federal deficit would reach USD3.7 trillion in FY20. In the three months since this CBO estimate was published, Congress has made no major addition to the support packages. However, with Congress considering a further round of fiscal stimulus (Senate Republicans' draft Health, Economic Assistance, Liability Protection, and Schools (HEALS) Act would provide further transfers to households and extend

supplementary federal unemployment benefits at a reduced level), Fitch assumes that a further USD1 trillion in measures will be passed in August to be spread over FY20 and FY21.

The US government has once again demonstrated exceptional financing flexibility, borrowing just under \$3 trillion between the end of February and the end of June, of which USD2.5 trillion was in the form of treasury bills, while the Fed has intervened to backstop financial markets (expanding its balance sheet by USD2.6 trillion since mid-March) and boost global dollar liquidity. Amid a borrowing surge, borrowing costs have fallen, with the 10-year treasury bond yielding 0.6%. Marginal government borrowing costs currently average below 1% for up to 20 years. The effective interest rate on the federal government debt stock fell (by 0.75 percentage points (pp) compared with a year ago) to 1.75% by June 2020, and should continue to fall.

In line with our assumption that the Federal Reserve will hold its policy rate at 0.25%, Fitch expects negative real interest rates to provide some support to public debt dynamics. If real growth also reverted to 2%, a debt stabilizing primary deficit for the general government by 2024 could be around 3%-4% of GDP, comparable with 2019 levels. But it is uncertain whether very low market rates will persist once growth and inflation pick up. At current levels of indebtedness, a 1% rise in the effective rate on the debt would add 1.2% of GDP to the interest bill in a single year.

The future direction of fiscal policy depends partly on November's presidential and congressional elections. The odds of Democrats overturning the Republican majority in the Senate have shifted in their favour over the past quarter, but it is unlikely that either party will achieve a 60-seat majority. A continuation of policy gridlock is a risk. Political polarization may weaken institutions and reduces the scope for bipartisan cooperation, hindering attempts to address structural issues (including some highlighted by the pandemic and protests) but also longer-term fiscal challenges. The economic crisis has likely brought forward the point at which social security and healthcare trust funds are exhausted, demanding bipartisan legislative action to sustainably fund or reform these programs.

Fitch expects the economy to contract by 5.6% in 2020 and recover by 4% in 2021, with the massive fiscal policy response averting a deeper downturn. Personal income rose in 2Q20, despite this marking the trough of the recession, marked by a historic fall in employment and hours worked. Real GDP nevertheless contracted at a 33% annualized rate, in line with Fitch's expectations, and there are downside risks to Fitch's growth forecast, with high-frequency data starting to show a greater impact from the pandemic in parts of the country where the public health response has been deficient and fading fiscal policy stimulus. Unemployment, spiked to 14.7% in April as firms shuttered and laid off staff, but declined to 11.1% in June as some of those on furlough returned to work. The prolongation of this stressful economic period will weigh on human capital, financial stability and future growth potential. The deepest post-war recession will not only open up a large output gap, but also take a permanent toll on potential GDP. As the output gap closes, Fitch expects growth to average 2.2% in 2023-25, above our revised estimate of potential growth.

Fitch expects inflation to remain low, averaging below 1% in 2020-2022. Personal consumption expenditures (PCE) inflation was 0.5% in May and CPI was 0.6% in June); the crisis has disrupted both supply and demand. However, it may have accelerated a number of trends that could bring about higher inflation over the medium to long-term. Market expectations of inflation as derived from yields on inflation-linked bonds have bottomed out and are rising. Having laid bare inequalities in the provision of health care and exacerbated widening wealth inequality (although government assistance to households focused substantial resources towards those on lower incomes), the crisis could also lead to pressure for higher public spending, greater state involvement in the economy, redistribution of incomes and moves to strengthen workers' bargaining power.

The aims and policies of the Fed and Treasury have so far complemented each other. Longer-term, a resurgence of inflation might call for a rise in interest rates, potentially even bringing the goals of the Fed and the government into conflict, and adversely affecting debt dynamics, although this is not Fitch's core forecast. It is a truism that the US government cannot run out of money to service its debts. However, there is a potential (albeit remote) risk of fiscal dominance if debt/GDP spirals, posing risks to US economic dynamism and reserve currency status.

The main factors that could, individually or collectively, lead to a negative rating action/downgrade:

- Public Finances: Absence of a credible commitment to address medium-term public spending and debt challenges that would arrest the upward trajectory of the general government debt to GDP ratio after the pandemic shock;
- Macroeconomic policy, performance and prospects: A decline in the coherence and credibility of US policymaking that undermines the reserve currency status of the US dollar and the government's financing flexibility.

The main factors that could, individually or collectively, lead to a positive rating action:

- Public Finances: adoption of a set of policies consistent with a protracted reduction of the debt/GDP ratio after the pandemic shock.



## **COUNTRY RATING - INDIA**

Fitch Ratings - Hong Kong - 22 Apr 2021: Fitch Ratings has affirmed India's Long-Term Foreign-Currency Issuer Default Rating (IDR) at 'BBB-' with a Negative Outlook.

India's rating balances a still strong medium-term growth outlook and external resilience from solid foreign-reserve buffers, against high public debt, a weak financial sector and some lagging structural factors. The Negative Outlook reflects lingering uncertainty around the debt trajectory following the sharp deterioration in India's public finance metrics due to the pandemic shock from a previous position of limited fiscal headroom. Wider fiscal deficits, and government plans for only a gradual narrowing of the deficit, put greater onus on India's ability to return to high levels of GDP growth over the medium term to stabilise and bring down the debt ratio.

Fitch forecasts a 12.8% recovery in GDP in the fiscal year ending March 2022 (FY22), moderating to 5.8% in FY23, from an estimated contraction of 7.5% in FY21. However, a recent surge in coronavirus cases poses increasing downside risks to the FY22 outlook. This second wave of virus cases may delay the recovery, but it is unlikely in Fitch's view to derail it. In particular, the strong rebound in 2HFY21 and ongoing policy support underpin our expectations for a recovery. Fitch expects pandemic-related restrictions to remain localised and less stringent than the national lockdown imposed in 2Q20, and the vaccine rollout has been stepped up.

Fiscal metrics have deteriorated sharply in the context of the macroeconomic shock and efforts to support health outcomes and the economic recovery. Fitch estimates a general government deficit of 14.0% of GDP in FY21 (excluding divestment) from 7.3% in FY20, consistent with a deficit of 9.5% for the central government. Notably, part of the increase in the FY21 deficit (around 1.5% of GDP) reflects increased transparency by bringing off-budget spending on budget. The government is repaying loans to the Food Corporation of India from the National Small Savings Fund and then to keep such subsidy spending on-budget. Fitch expects the general government deficit to narrow to 10.8% of GDP (7.1% central government), on the basis of our expectations of growth recovery and strong revenue performance in 2HFY21.

The central government's FY22 budget outlined a gradual medium-term consolidation, targeting a deficit of 4.5% of GDP by FY26. This compares with a previous medium-term target of 3% of GDP under the Fiscal Responsibility and Budget Management Act, and partly reflects the improved budgetary transparency. The authorities are assessing potential adjustments to their fiscal anchors, which will provide greater clarity on the central government's medium-term fiscal strategy.

The medium-term debt trajectory is core to Fitch's rating assessment, as higher debt levels constrain the government's ability to respond to future shocks and could lead to a crowding out of financing for the private sector, in our view. India's current ability to finance its deficits domestically is a strength

relative to most 'BBB' peers. Foreign currency government debt comprises only 6% of total debt ('BBB' median 33%) and only 2% of government securities are held by non-residents. Ten-year government bond yields averaged roughly 6% in FY21, due to the Reserve Bank of India's (RBI) accommodative monetary policy settings, but are likely to rise in the coming year as liquidity is withdrawn gradually.

Fitch estimates that general government debt rose to 90.6% of GDP in FY21 from 73.9% in FY20, well above the current 'BBB' median of 54.4% in 2020. Under our baseline forecasts, which assume 10.5% nominal growth and gradual consolidation of the general government primary deficit to 2.8% of GDP by FY25, the debt ratio declines slightly to 89% by FY25. Risks to this forecast relate to India's weak record of fiscal consolidation. For example, government debt fell between the global financial crisis and FY15, but then rose gradually despite double-digit nominal GDP growth. Improved transparency by the government should imply significantly less off-budget financing, but contingent liabilities, such as bank recapitalisations, may also materialise.

The debt dynamics are sensitive to medium-term growth assumptions. Fitch expects India's potential growth to remain robust relative to 'BBB' peers at around 6.5%. The government remains reform-minded, evidenced by the passing of agricultural and labour market reforms in November. These reforms could lift growth if implementation risks are addressed, particularly for the agricultural reforms which have met stiff resistance by farmers. The Production-Linked Incentives scheme to attract FDI and planned increase in public capex could boost private sector investment.

Weaknesses in India's financial sector pose a risk to the medium-term outlook. The degree of asset quality deterioration from the pandemic shock is unclear, amid regulatory forbearance measures and renewed pressures from the second wave. Private banks have stepped up provisioning in recent months, but persistent weaknesses in public-sector banks and risk aversion are likely to keep credit growth constrained in the near term. The proposed injection in the recent budget of INR200 billion (0.1% of GDP) of new capital into state banks is likely to prove insufficient to alleviate the stress, in Fitch's view. The proposed establishment of an asset reconstruction company and an asset management company to deal with bad banking sector assets could be positive depending on the details of its structure and implementation.

Fitch expects inflation to decline to an average of 4.4% in FY22, after hovering above the RBI's 2%-6% target band for much of FY21. Price pressures have moderated, even though both headline and core inflation remain near the upper end of the band. Fitch expects the RBI to keep the policy rate stable in the coming year, following 115bp in cuts since March 2020.

A strengthening of India's external position in the last year and the relatively closed nature of its capital markets enhance the country's resilience to bouts of global financial market volatility. Foreign-exchange reserves rose by roughly USD100 billion to USD579 billion in FY21 (12.4 months of current external payments cover). Meanwhile, the current account shifted to an estimated temporary surplus

of 0.8% of GDP in FY21, driven largely by a fall in imports. Normalisation of imports in FY22 will drive the current account back to a modest 1.2% of GDP deficit under our forecasts.

The main factors that could, individually or collectively, lead to negative rating action/downgrade:

- Public Finances: Failure to reduce sufficiently the fiscal deficit to a level consistent with putting the general government debt/GDP ratio on a downward trajectory.
- Macro: A structurally weaker real GDP growth outlook, for instance due to continued financial-sector weakness or reform implementation that is lacking, which weighs further on the debt trajectory.

The main factors that could, individually or collectively, lead to positive rating action/upgrade are:

- Public Finances: Implementation of a credible medium-term fiscal strategy to bring general government debt down after the pandemic, toward levels of 'BBB' category peers.
- Macro: Higher sustained investment and growth rates in the medium term without the creation of macroeconomic imbalances, such as from successful structural reform implementation and a healthier financial sector.

## SUMMIT OVERVIEW

**DAY 1 - Thursday, 29<sup>th</sup> April 2021 | 5:30 pm - 9:15 pm (IST)**

Timings (IST)	Agenda
5.30 pm – 6.15 pm	<p><b>SESSION I: Importance and Future of Health</b></p> <p><b>Welcome Remarks</b> Mr. <b>Ajit Mangrulkar</b>, Director General, IMC Chamber of Commerce and Industry</p> <p><b>Opening Remarks</b> Guest of Honor: Lieutenant Governor <b>Ms. Bethany Hall-Long</b>, State of Delaware</p> <p><b>Panel Discussion</b> <b>Ms. Kate Beale</b>, Associate Vice President for International Advocacy Pharmaceutical Research and Manufacturers of America, PhRMA</p> <p><b>Dr. Murtaza Khorakiwala</b>, Managing Director, Wockhardt Limited</p> <p><b>Mr. Yugal Sikri</b>, Managing Director, RPG Life Sciences Limited</p> <p><b>Moderator: Mr. Atul Joshi</b>, Founder &amp; CEO, Oyster Capital Management</p>
6.15 pm – 7.00 pm	<p><b>SESSION II: Regional Bilateral Co-operation</b></p> <p><b>Opening Remarks</b> Mr. <b>Lutfi Hassan</b>, Chairman &amp; CEO, Apex Group of Companies, USA</p> <p><b>Guest of Honour Special Address</b> Hon'ble Mr. <b>Vijay Rupani</b>, Chief Minister of Gujarat</p> <p><b>Panel Discussion</b> Mr. <b>Paresh (Perry) Patel</b>, Executive Director of Lotus Recovery Centers, USA</p> <p>Hon. Mr. <b>Geoffrey Connor</b>, Former Texas Secretary of State</p> <p><b>Mr. Arun M. Kumar</b>, Chairman and CEO, KPMG</p> <p><b>Moderator: Mr. Rahul Sharma</b>, Managing Director, APCO Worldwide</p>
7.00 pm – 7.45 pm	<p><b>SESSION III: Trends in Emerging Tech</b></p> <p><b>Mr. Nitin Rakesh</b>, Chief Executive Officer, Mphasis</p> <p><b>Dr. Ruchi Dana</b>, Managing Director, Dana Group, Dubai</p> <p><b>Mr. Suresh Sethi</b>, Managing Director and Chief Executive Officer, NSDL e-Governance Infrastructure Limited</p> <p><b>Mr. Tadepalli Rao</b>, CIO, Seibels Insurance Services, USA</p> <p><b>Moderator: Ms Susan Ritchie</b>, Vice President of Trade and Technology Policy, US India Strategic Partnership Forum</p>
	<p><b>INAUGURAL SESSION</b></p> <p><b>Indo-US Partnership Vision</b></p> <p><b>Welcome Address</b> Mr. <b>Rajiv Podar</b>, President, IMC Chamber of Commerce and Industry</p>

<b>7.45 pm -8.30 pm</b>	<p><b>Guest of Honour:</b> Honorable Senator Mr. Chris Coons, United States Senator from State of Delaware</p> <p><b>Chief Guest</b> Hon'ble Mr. Jayant Sinha, Chairperson, Parliamentary Standing Committee for Finance, Member of Parliament</p> <p><b>Q &amp; A Moderator: Mr. Atul Nishar</b>, Founder and Chairman, Azent Overseas Education Private Limited, Founder &amp; Chairman Emeritus, Hexaware Technologies Limited</p> <p><b>Vote of Thanks</b> Mr. Juzar Khorakiwala, Vice President, IMC Chamber of Commerce and Industry</p>
-------------------------	--

<b>8.30 pm – 9.15 pm</b>	<b>SESSION IV: Entertainment (Hollywood/Bollywood)</b>
	<p><b>Panel Discussion</b> Mr. Jack Giarraputo, American film producer &amp; co-founder Happy Madison Productions</p> <p>Mr. Madhur Bhandarkar, Acclaimed Award Winning Filmmaker</p> <p>Ms. Mary Millben, Award Winning Hollywood Actress/Singer</p> <p>Mr. Jason Hafford, Agent Creative Artists Agency (CAA)</p> <p><b>Moderators:</b> Ms. Medha Jaishankar, Senior Producer at JetSynthesys</p> <p>Ms. Priya Samant, Impact Advisor &amp; Director Sequoia Applied Technologies</p>

	<b>Vote of Thanks</b>
	Ms. Sunita Ramnathkar, Director, Eudora Enterprises Limited, Mitchell Group USA

**DAY 2 - Friday, 30<sup>th</sup> April 2021 | 6:00 pm - 9:00 pm (IST)**

Timings (IST)	Agenda
<b>6.00 pm – 7.00 pm</b>	<b>INAUGURAL SESSION: A New Era of Indo-US Relations</b>
6.00 pm - 6.03 pm	<p><b>Welcome Address</b> Mr. Rajiv Podar, President, IMC Chamber of Commerce and Industry</p>
6.03 pm - 6.10 pm	<p><b>Opening Remarks</b> Mr. Swadesh Chatterjee, Chairman and Co-Founder, US India Friendship Council</p>
6.10 pm - 6.30 pm	<p><b>Keynote Address by</b> Chief Guest : Hon'ble Shri Nitin Gadkari ji, Union Minister of Road Transport and Highways, Micro, Small &amp; Medium Enterprises</p>
6.30 pm - 6.55pm	<p><b>Discussion</b> Chief Guest : Hon'ble Shri Nitin Gadkari ji, Union Minister of Road Transport and Highways, Micro, Small &amp; Medium Enterprises</p> <p>Mr. Rajesh Subramaniam, President and Chief Operating Officer of FedEx Corporation</p> <p>Moderator: Dr. Mukesh Aghi, President &amp; CEO, US-India Strategic Partnership Forum</p>
6.55 pm - 7.00 pm	<p><b>Closing Remarks and Vote of Thanks</b> Dr. Mukesh Aghi, President &amp; CEO, US-India Strategic Partnership Forum</p>

<p><b>7.00 pm – 7.30 pm</b></p>	<p><b>SESSION V: Finance &amp; Investments</b></p> <p><b>Mr. Jaspal Bindra</b>, Chairman, Centrum Group of Companies</p> <p><b>Ms. Kaku Nakhate</b>, President and Country Head (India), Bank of America N.A.</p> <p><b>Mr. Sanjay Nayyar</b>, Chairman, KKR India</p> <p><b>Moderator: Mr. Malachy Nugent</b>, Vice President, Financial Services, USISPF and Former Treasury Attaché at US Embassy, New Delhi</p>
<p><b>7.30 pm – 8.00 pm</b></p>	<p><b>SESSION VI: Defence/Homeland Security</b></p> <p><b>Mr. Ravi Nirgudkar</b>, Managing Director, BAE Systems, India</p> <p><b>Mr. Salil Gupte</b>, President, Boeing India</p> <p><b>Moderator: Mr. S P Shukla</b>, Chairman, Mahindra Defence, Mahindra Aerospace, Mahindra Sanyo Steel, Mahindra CIE Automotive Ltd, etc.</p>
<p><b>8.00 pm – 8.30 pm</b></p>	<p><b>SESSION VII: Knowledge Economy (Education &amp; Skill Across Boundaries)</b></p> <p><b>Dr. Suhas Pednekar</b>, Vice Chancellor, University of Mumbai</p> <p><b>Ms. Anjali Raina</b>, Executive Director, Harvard Business School India Research Centre</p> <p><b>Moderator: Mr. Samir Somaiya</b>, Chairman, K J Somaiya, Education Trusts, Chairman &amp; Managing Director, Godavari Biofineries Limited</p>
<p><b>8.30 pm – 9.00 pm</b></p>	<p><b>VALEDICTORY SESSION</b></p> <p><b>Guests of Honour</b></p> <p><b>H.E. Mr. Taranjit Singh Sandhu</b>, Ambassador of India to United States, Embassy of India</p> <p><b>H.E. Ambassador Mr. Timothy Roemer</b>, Executive Director and Strategic Counselor at APCO Worldwide</p> <p><b>Moderator: Mr. Richard M. Rossow</b>, Wadhvani Chair in U.S. India Policy Studies, The Center for Strategic and International Studies</p>
	<p><b>Vote of Thanks</b></p> <p><b>Mr. Dinesh Joshi</b>, Chairman, IMC International Business Committee</p>



## SUMMIT HIGHLIGHTS

IMC Indo US partnership Vision Summit 2021 focused on net zero carbon, importance and future of health, bilateral cooperation, trends in emerging tech, entertainment, finance and investments, defence and homeland security, and the knowledge economy.

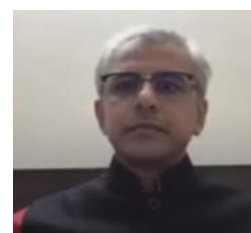
Mr. Ajit Mangrulkar (Director General, IMC Chamber of Commerce and Industry) welcomed everyone to the IMC Indo US Partnership, Vision Summit 2021. He said that over the last two decades, there has been a lot of progress in economic relations between US and India and the countries were cooperating in defence, counter terrorism, cyber security health, environment, agriculture, technology, and many other areas. The objective of the Indo US Partnership Vision Summit was therefore to bring together influential leaders and decision makers to interact and charter road map for building a robust relationship based on mutual trust and respect.



Lieutenant Governor Ms. Bethany Hall (Lieutenant Governor State of Delaware) gave the opening remark. She expressed her delight to bring wishes from the home state of President Biden, stressed the benefits of science and technology and the importance of healthcare and public health infrastructure, and noted how future technologies can break down old traditions. She said that by 2040, it is going to be a different health care platform with focus on data, technology, well-being, and care delivery, and definition of health would be critically important, and US and India would need to stand behind one another both from a life science and technology perspective.



**Session 1 focussed on the importance and future of health.** The moderator Mr. Atul Joshi (Founder & CEO, Oyster Capital Management) mentioned that the panellists had a combined experience of over 120 years, and it would be fascinating to hear their ideas and views on how they looked at the future of health, not just in India, but globally. Accordingly, he invited the panellists to deliberate on how delivery, innovation, technology, and research would evolve over the next few decades in the medical field.

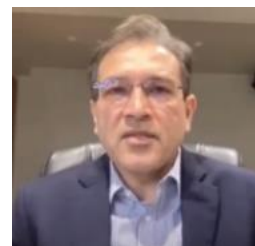


Mr. Yugal Sikri (Managing Director, RPG Life Sciences Limited) began stating that Covid has been a disaster but has shown that health is too critical for human beings and has brought health at the centre stage. Mr. Sikri first talked about health from an Indian context, noting that India had 16~17% of the global population but only 1.6% of the GDP was spent on healthcare, and how technology and innovation were going to be the enablers to address inadequacy of medical infrastructure and provide universal health coverage, including primary, secondary, and tertiary healthcare. He said innovations were happening not only in drugs and

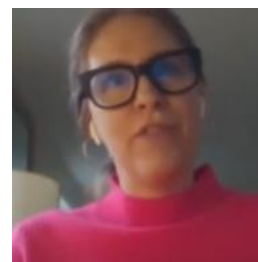


instruments, but also in prevention, diagnosis and treatment of diseases, and artificial intelligence was being used to mine the data and identify treatment regimen for patients.

Dr. Murtaza Khorakiwala (Managing Director, Wockhardt Limited) hoped that US and India were able to collaborate with each other and identify solutions for the Covid pandemic. He stressed the importance of innovation and said innovation was the lifeblood for the health industry. Giving his own experience, he said his company had started three decades back as a generic company, then moved into biosimilars and biologics, and then into new drug discovery and regenerative medicines. Thus, he gave the example of diabetes – over 500 million people in the world suffer from diabetes and more than 15% of that population resides in India. So, their company has focused on an integrated solution in managing diabetes, and their portfolio of products include injectable insulins, oral hyperglycaemic drugs, blood sugar monitoring devices, and patient care. Alongside, their company is into the creation of novel antibiotics to address antibiotic resistance, which is a major problem in the world today. Starting over two decades back, they now have about six molecules at various stages of development, including a gram-positive molecule for the treatment of MRSA infection. All the six molecules that they have developed have all got a US QIPD status that means that it satisfies an unmet medical need. And their focus has been always in seeing what unmet medical need is, and how their product satisfies that. In addition, the UK government has chosen their facility in UK to be a partner for manufacturing the Oxford AstraZeneca vaccine.



Ms. Kate Beale (Associate Vice President for International Advocacy Pharmaceutical Research and Manufacturers of America, PhRMA) mentioned that a holistic coordination between Government official, multi-national organizations and the business community were required to tackle the pandemic. There needs to be clear lines of communication and understanding of what each stakeholder brings to the table to help eradicate the Covid pandemic and address the global health threats that are emerging around the corner. Three areas are of particular importance, first being market access and ensuring that patients have adequate access to life saving drugs to vaccines and therapeutics; the second is the regulatory space which allows necessary patients access to quality drugs and therapeutics through strong predictable policies; and third being the innovative landscape that drives research and development, and creation of new vaccines and new therapeutics.



Mr. Atul Joshi then enquired what kind of policy level measures were required, whether by way of collaboration or infrastructure, for India to be able to manufacture medical equipment rather than being import dependent. Mr. Yugal Sikri mentioned about the Atal Innovation Mission and how all stakeholders were brought together to accomplish a task. The Atal Incubation Mission has funds, mentors, and subject matter experts to support start-ups, and while the government plays a role, public private partnership is key.



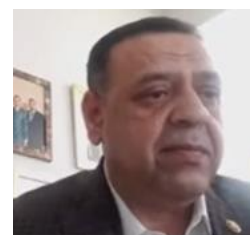
In terms of the scope to build a global health care system, Ms. Kate Beale replied that India has provided leadership in the pharmacy world, particularly in the generic space. However, health is changing and in a very scary, threatening way and it is heartening to know that India and US governments have again renewed the focus on the bilateral relationship. As per Ms. Beale, policy frameworks really help in unleashing the collaborative efforts.

Mr. Atul Joshi then wondered about the possibility of traditional medicines marrying with the important technology over the next few years, to which Dr. Murtaza Khorakiwala replied there was potential but pointed out two caveats. First on patentability - in ayurvedic or traditional medicines, patent protection is not possible because they are known. Secondly, all scientific research and development is based on very rigorous kind of studies, which are conducted in labs, animals, and humans. This kind of scientific rigor of data information is not there for traditional medicines today. However, Dr. Murtaza believes there is space in terms of providing holistic care to patients, whether it is by allopathy, homeopathy, ayurvedic or any other form of treatment.

**For the Guest of Honour special address**, Honourable Mr. Vijay Rupani (Chief Minister of Gujarat) noted that India and America are strategic partners, and the partnership is people-oriented and people-centred. The values of democracy, strong culture ties, and goal of human prosperity are similar between the two countries. In a continuous effort to give new heights to India US relationships, Gujarat provided hydro-chloroquine drugs to US during the first Covid wave, while many countries are helping India during the second wave. Mr. Rupani also mentioned that while Gujaratis are playing a key role in the American service sector, Gujarat is keen to partner with US in science, defence, petrochemicals, clean energy and logistics.



**Session 2 was on Regional Bilateral Co-operation.** In his opening address, Mr. Lutfi Hassan (Chairman & CEO, Apex Group of Companies, US) mentioned that opening markets and removing trade barriers was a priority in President Joe Biden's trade agenda. While India's large market, economic growth and progress towards development made it an essential market for many U. S. exporters, a general and consistent trend of trade restrictive policies have inhibited the potential of the bilateral trade relationship. As per Mr. Hassan, apart from the federal level recent initiative on bilateral strategic trade matters between the two governments, the regional collaboration in trade and investment as well as cultural exchanges are the foundation of overall US - India bilateral relationship, best exemplified by sister cities formal arrangements for enhancing bilateral cooperation like between Ahmedabad and Jester City, Amritsar and Bakersfield, and Bengaluru and Cleveland. Mr. Hassan said there was investment opportunities in sectors specific to certain states, for example Himachal Pradesh for pharma, Gujarat for solar power, and Karnataka and Telangana for tech industry, and the pandemic and the evolving geopolitical situation called for

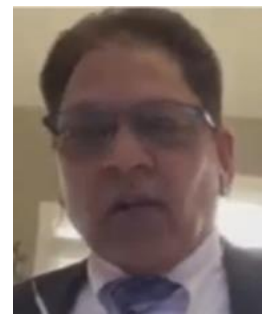


exploring possibilities for further enhancing regional trade and investment between the two democracies.

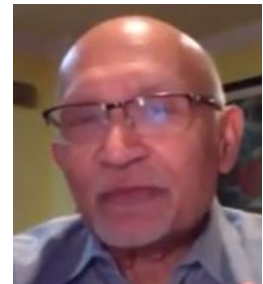
Mr. Rahul Sharma (Managing Director, APCO Worldwide) welcomed the panellists and noted that while India is passing through a difficult phase due to the second Covid surge, Indians are thankful that the Joe Biden administration have come forward to provide support. Mr. Sharma asked Mr. Paresch Patel (Executive Director of Lotus Recovery Centers, US) additional steps can be announced by the US Government to ensure that the collaboration between the two countries reach a different level.



Mr. Paresch Patel admitted that the numbers and death tolls looked scary, and the vaccination drive needed to be increased. Mr. Patel believed it is technology – including AI, ML and predictive analytics - that has disrupted everything in healthcare, and that is where all countries together need to put effort. Going forward, instead of worrying about health care systems, he felt one should worry about health at an individual health – and health includes mental, physical and spiritual aspects.



Mr. Sharma then enquired to Mr. Arun Kumar (Chairman and CEO, KPMG) what needed to be done to resolve trade impediments so that India and US could collaborate. Mr. Arun Kumar mentioned that trade issues will always be present, but US - India relationship needed to look beyond that. Mr. Kumar was encouraged by two recent developments in the US which displayed the strong emotional links between US and India. He said both US and India are growth markets and there is a lot of reasons – including market access and R&D - why Indian entrepreneurs and businesses look to the US and vice versa. So, while every issue will have disputes because of the presence of different kind of stakeholders, Mr. Kumar said that Mr. Biden had focused on health, education, and infrastructure as areas of potential cooperation between the US and India, and these have tremendous prospects.



Mr. Sharma then asked the Honourable Mr. Geoffrey Connor (Former Texas Secretary of State) his views on how the US-India relationship would play out, particularly in the backdrop of US-China ties. The Honourable Mr. Geoffrey Connor believed that President Biden would not be as confrontational with China as the Trump administration was. However, he felt there were other elephants in the room too, including India-Russia ties and US-Pakistan engagement. However, when Mr. Sharma asked whether India and US had better relationship during the Trump era, Mr. Connor admitted there was real positive chemistry between Prime Minister Modi and President Trump, but they could never concur



on the trade agreement. Mr. Connor felt President Biden would face more challenges because of regional politics. Mr. Paresh Patel added that it was Mr. John Kerry of the Obama administration who had the initial meeting with PM Modi, and that while there would be hiccups, he was sure President Biden and his team would have full cooperation and support for India and her administration.

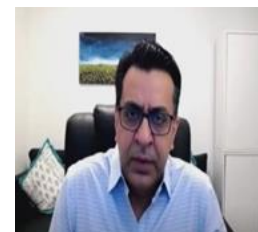
Mr. Rahul Sharma asked Mr. Arun Kumar how business was going to be impacted going forward to which Mr. Kumar responded that the beauty of the US - India business relationship was that it kept moving forward, regardless of the governments at the centre. He said business was not just about tariffs and non-tariff barriers, but also about finding the demand, finding the markets, the promotional aspect of business, making the connects. While Mr. Kumar was optimistic about the way forward, integrating global value chains and global supply chains would be a challenge. Also, one needed to wait and watch President Biden's roadmap on multilateral agreements and PPP.

Honorable Mr. Geoffrey Connor felt that while President Biden is correctly regarded as a globalist and an internationalist and enjoyed good relations with many foreign leaders. His focus would be on Asian security arrangements and that ensuring that no country was overly aggressive. Mr. Paresh Patel opined that the Indo-US relationship building would be remembered by history. Mr. Rahul Sharma concluded that the relationships between US and India is extremely important, it is moving forward, and the strength of the relationship is shown by how the administration and US. businesses have come together to support India during this pandemic.

**Session 3 was on trends in emerging tech.** Ms. Susan Ritchie (Vice President of Trade and Technology Policy, US India Strategic Partnership Forum), the moderator, introduced the four participants who have used technologies to solve problems, and said she would like to hear from them how they viewed the next wave of technological development, and how these emerging technologies would usher in a new era of transformation.



Mr. Nitin Rakesh (Chief Executive Office, Mphasis) opined that the Indian IT services industry was a great example of the collaboration in the US India corridor from a technology standpoint, and which has deepened over the last two decades. He felt India has emerged as a major R&D hub for software platform development for AI and their likes. The emergence of smart phones and digital devices have ushered in a new era of consumerism and the end customer is driving a lot of business disruption including being serviced anytime anywhere. As per Mr. Rakesh, the focus was now on how to enable enterprises to keep up and lock step with these consumers, how to use data that sits in the systems, how to create the power of using the data to improve customer service and how to take that feedback loop back into the enterprises and use that knowledge of the customer to drive new products and services development, and target those customers, as exemplified by Netflix and Amazon Prime. ML and AI have shortened the vaccine



development process by over 80-90% using data effectively. However, Mr. Rakesh also felt that most enterprises continue to lag customer expectations and enterprises have to find a way to harness the technology, get to know the customer well, predict their needs, create customised products and services, and create customer loyalty for customers moving away from brands to experiences.

Dr. Ruchi Dana (Managing Director, Dana Group, Dubai) discussed how corporates, including competitors, have come together for open innovation and creative solutions. Thus, while the pandemic has increased the adoption of telehealth, telehealth affects income from other cost and revenue centres of the hospital, including diagnostics, pharmacies, and the cafeteria. Therefore, while Dr. Dana agreed that any business model needs to address the requirements of all the stakeholders, including cyber security, the focus should be on outcome and whether it can benefit the entire healthcare system while bringing huge cost savings to the entire system. Therefore, several start-ups are working on workflow automation for healthcare to reduce hospital burden, including robotics surgery and using AI and computer navigation for diagnosis. Dr. Dana felt that computational biology has taken things to the next level and India is very well positioned build scale in precision medicine and personalized medicine. Finally, women were disproportionately affected because of Covid 19 as the masks were not suitable for women as per UN report. Hence, more women empowerment is required.



Mr. Suresh Sethi (Managing Director and Chief Executive Officer, NSDL e-Governance Infrastructure Limited) felt that one of the clear challenges of the pandemic was that while digitization has taken a very central role, one needed to ensure that rather than introducing equality, it did not lead to inequality because of different abilities or different sort of capabilities at the last mile. Mr. Sethi's organization plays a significant role in modernizing the tax system of the country looking at the old age pension and security systems, but it was their national ID program for India that ensured financial inclusion in India within 10 years which would otherwise taken 46 years to achieve. As per Mr. Sethi, the introduction of a biometric identity across the population made it easier to enable people to come into the financial ecosystem. However, providing access to people was equally important, and today the government can provide last mile benefits or subsidies, they can use the entire ecosystem of accounts and Aadhar and provide money at the last mile. During the pandemic, almost 60 billion dollars of subsidy has been pumped into account of the people as direct benefit subsidy. Mr. Sethi said that it was necessary to remove information asymmetry so that people can get access both to credit and be able to be part of the supply chain in a formal digital manner.



Mr. Tadepalli Rao (, CIO, Seibels Insurance Services, US) quoted Charles Darwin: "It's not the strongest of the species that survive nor the most intelligent that survives it is the one that's most adaptable to change". He felt this was most relevant today and creativity is an important factor not just in

technology, but also in establishing bilateral partnerships. Mr. Rao touched on the growth mindset and fix mindset, and on fear of failure and fear of missing out, and to cultivate innovation, one needed to block out fear of failure. Further, Mr. Rao felt that networking was an extremely important thing, not only within the industry, but outside the industry, and find out what other industries are doing in adapting technology like blockchain, Big data, Voice, Alexa etc. Alongside, Mr. Rao stressed the importance of Economic connection and Emotional connection. Finally, Mr. Rao concluded that technology is a double-edged sword but there are no boundaries for enabling the global economy.



Ms. Susan Ritchie asked the panellists whether the pandemic has accelerated the development or deployment of emerging technology. Mr. Nitin Rakesh felt the crisis has been a major accelerant, but there is no way to predict competition coming from within the industry or outside the industry, and competition is now more from outside the industry. Dr. Ruchi Dana agreed on the adoption of technology and felt the mentality of the people played a role, and people were now more adherent to their medications. Mr. Suresh Sethi concurred that there has been a great expansion and adoption of technology, but there was need for frugal innovation to bring people who cannot afford technology to introduce into the ecosystem. He felt one needed to move away from balance sheet lending to flow based lending. Mr. Rao agreed with the views and felt technologies like digital payments and drones have really accelerated during the pandemic. The final word for the panel was acceleration.

**In the inaugural session**, Mr. Rajiv Podar (President, IMC Chamber of Commerce and Industry) gave the welcome remarks and observed that Indian pharmaceutical companies supply over 40% of the generic demand in the US and India is the largest vaccine producer in the world, making it a continued key contributor to providing vaccines to US. He felt that India can benefit from more intensive use of technology and health care, both in terms of expanding access to public health services as well as reducing the cost of prevention and treatment of common diseases. At the same time, the US companies have access to India's highly skilled technical personnel as well as domain knowledge of appropriate health services in emerging markets. He therefore felt that both countries can work collaboratively to foster innovative health technologies and there is a large scope for both countries to enhance frontier technologies and collaborate financing capabilities in 5-G, AI, Big data analytics, Quantum Computing, Blockchain and Internet of Things. Mr. Podar also touched on collaboration opportunities in the film industry, defence, and education, and said the 21st century would continue to present challenges and no country would be able to solve it alone.



Mr. Jayant Sinha (Chairperson, Parliamentary Standing Committee for Finance, Member of Parliament) acknowledged the Indo-US linkages among families, including at a personal level, and believes that the relations between the two communities are rock-solid and will go only stronger, whether it be in

security, trade, investments, science, or education. He reiterated former Secretary of State Condoleezza Rice's statement that the India-US relationship was the most strategic partnership for the world for geopolitics in the 21st century. Alongside, advisor Ricard Campbell acknowledged that G2 was going to be the US and India rather than the US and China, and US and India were going to play a defining role in many domains. Mr. Sinha highlighted three areas, including health, technology and climate change. He highlighted partnership on vaccine production and how J&J plans to produce low-cost vaccines in high volumes from India for the ASEAN community. Mr. Sinha talked about tech start-ups in India and how they were absolute game changers, and how they were being funded by venture capitalists from US. He complimented the joint development of technologies and approaches between the tech ecosystem, the start-up ecosystem, between the US and in India, and how India relies on the technologies and the capital that is in the US to enable India to be able to build net zero economy. Mr. Sinha felt that signing for a net zero target legally bound India and would help her attract investments, technology, and support, and create millions of jobs. Mr. Sinha concluded that "Atmanirbhar Bharat" is a net zero Bharat which is competitive, sustainable, and resilient.



Mr. Atul Nishar (Founder and Chairman, Azent Overseas Education Private Limited, Founder & Chairman Emeritus, Hexaware Technologies Limited) welcomed the delegates and quoted from speeches of both President Biden and Vice President Kamal Harris, to demonstrate the strong US – India relationship and which is reflected in US being India's largest trading partner across multiple sectors including Information Technology, Pharma, Healthcare, Entertainment, Consumer Products and Consumer Durables. Mr. Nishar felt that there are several industries which may not be able to achieve zero emission criteria and hence whether Mr. Sinha was considering certain policy measures to bring change in these industries.



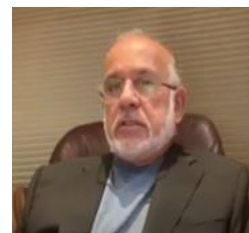
Mr. Jayant Sinha opined that there was significant time over the next three decades to achieve zero emission, with the most important being switching our energy system to net zero energy generation. Having said that, he stated that there were many industries like cement, steel, automotive where major efforts were needed to get to net zero emissions though the good news was that a host of technologies and approaches were available to make that happen over the next thirty years. He felt there might still some industries that would be positive generator of emissions, but it would be net zero, which really meant that India would develop carbon syncs to absorb these additional carbons. Mr. Sinha concluded that the net zero pathway had to be pro-growth and pro-jobs.

Mr. Nishar then enquired why India was targeting 2050 when China had set 2060 for net zero emissions. Mr. Sinha observed that every country had to do its own modelling and its own policies, and while China may be peaking, China was the world's largest emitter and heavily dependent on coal, and still putting up coal plants even as they become the world's largest producer of renewable energy.

Mr. Sinha felt China's challenge as the largest consumer of coal and the largest manufacturer in the world was unique and hoped they would meet the 2060 target. Mr. Sinha said India had the advantage that much of her energy system was yet to be built relative to her economic output in 2050, and hence if the right decisions were made now, we would have a much greener, competitive and sustainable economy.

Mr. Nishar then asked about target sectors where India and US could work together to take it forward and Mr. Sinha said that every industry had tremendous potential for the closer linkages. He thought the entire healthcare sector was extraordinarily important, and particularly vaccine production. As an example, Mr. Sinha talked about the J&J vaccine - which is a single shot vaccine that does not require an elaborate cold chain - and India being the lowest cost producer of these kinds of vaccines could manufacture these vaccines for India and ASEAN region.

Mr. Juzar Khorakiwala (Vice President, IMC Chamber of Commerce and Industry) gave the vote of thanks. He said India and the US had shared interest in promoting global securities, stability and economic prosperity through trades, investments and connectivity. He viewed that US supports India's emergence as a potential global power and a vital partner in efforts to ensure the Indo-Pacific regional peace which was essential for stability and growing prosperity. He felt that the strong people-to-people ties between the two countries, reflected in a 4 million strong Indian diaspora, as a tremendous source of strength for the partnership.



**Session 4 focussed on entertainment (Hollywood/Bollywood).** Ms. Priya Samant (Impact Advisor & Director Sequoia Applied Technologies), who co-hosted the event with Ms. Medha Jaishankar (Senior Producer at JetSynthesys), gave the welcome remark. She thought that we were living in a time, where along with hope, prayers and community support, international collaborations and partnerships were also integral for sustenance. She hoped that the entertainment industry could be mutually beneficial to both Hollywood and Bollywood - helping promote trade, talent and people management, and thus be a building block for strengthening bilateral relationships. She asked Mr. Madhur Bhandarkar (Acclaimed Award-Winning Filmmaker) how young, new talent from the West could break into the Bollywood industry.



Mr. Madhur Bhandarkar said that art had no boundary and emotions connect, due to which we see and connect with Spanish, French and Mexican productions. Mr. Bhandarkar felt that breakthroughs were made by filmmakers, citing examples of Ismail Merchant and Shekar Kapur, and opined that it was the international film festivals that made his films popular and accepted in the West. He therefore felt it was necessary to collaborate through



joint ventures and cited Soviet Union – India joint ventures in movies in 1980s as an example. Mr. Bhandarkar believed without that integration, breakthroughs would be difficult.

Ms. Samant then asked Ms. Mary Millben (Award Winning Hollywood Actress/Singer) how to use entertainment as a tool for cultural diplomacy. Ms. Mary Millben stated that entertainers and artists, are story tellers who share the stories of human experience. The beauty of entertainment, as expressed by Ms. Millben, is that it gives the space to have honest conversations about human experiences through story telling. But she added that while a great song starts with a great melody and a great film starts with a good story, to advocate the same one needs to know the topic – thus to advocate India, one needed to know the Indian dream. She said this made cultural diplomacy essential, and as an example, she said that before any of her performance, she would immerse herself culturally in order to better entertain her audiences on stage and create impact off-stage.



Ms. Medha Jaishankar then asked Mr. Jason Hafford (Agent Creative Artists Agency (CAA)) who represents stars like Alia Bhatt, his vision of 2030 in terms of Indian talents working in US versus US talents working in India. Mr. Hafford felt the film industry was increasingly becoming global and said that both countries benefit when there is organic collaboration. He thought, given the global angle, there would be a constant international pipeline into the US and Bollywood was uniquely talented to overperform and overdeliver in that capacity. He thought the other way was also equally interesting and mentioned that Chris Hemsworth shot the Netflix original 'Extraction' a few years ago in India and which is one of the highest performing Netflix films ever made, while Will Smith did a Facebook Show in India. Looking towards the future, Mr. Hafford thought there was an opportunity for more multi-lingual options as the audience became less language agnostic, and hence personally he would like more collaboration with other partners, countries and places that are known for great cinema and television. Looking to 2030, Mr. Hafford observed that the investments happening now in India by American companies will lead the way for more American collaborations.



Ms. Medha Jaishankar then asked Mr. Jack Giarraputo (American film producer & co-founder Happy Madison Productions) why he thought Indian talents were special. Mr. Giarraputo stressed the importance of developing a creative trust and the need to make a beginning, citing the example of Bollywood going to Hollywood for graphic businesses like visual effects. Mr. Giarraputo said he was impressed by India's creative modelling talent and hoped the two countries could collaborate to create a win-win situation.



Ms. Medha Jaishankar then asked the panellists what part of the Indo-US entertainment structure they would invest in if they had US\$ one million. Ms. Mary Millben said she would invest in storytelling



between the relationship of the African American and the Indian experience as there are parallels between the African- American experience and the Indian experience. Mr. Jason Hafford said he would give the money to Madhurji to make the project he wants to make. Mr. Madhur Bhandarkar concurred with Mr. Hafford and said he would tell a good human story which connects the heart. Mr. Jack Giarraputo felt content was the future, but post-production editing was the challenge. He would therefore invest the money to make editing ubiquitous, just available everywhere.



Ms. Sunita Ramnathkar (Director, Eudora Enterprises Limited, Mitchell Group US) gave the vote of thanks. She thanked the panellists for an entertaining session and said they managed to arouse her sensibilities and transport her from her mundane existence into a fantasy as she watched the unfolding creativity with rapt attention. She thanked the leaders for their contribution to the entertainment industry. She hoped that trade between the two countries could happen as seamlessly as watching Hollywood and Bollywood at the press of a button.



### **Day 2 - Inaugural Session: A New Era of Indo-US Relations**

Mr. Rajiv Podar gave the welcome address. He mentioned that India and the US has now demonstrated a global strategic collaboration at the back of common ambition, values and interest and the trajectory of the efforts made by the two nations in recent times to align with each other's interests has been simply remarkable. Mr. Podar added that over the years, the US- India relationship has become increasingly multifaceted covering cooperation's and presenting opportunities in diverse new areas such as retail, defence and security, space technology and application, media and entertainment and healthcare. He said that while yesterday had scintillating and thought-provoking session ranging from health, regional bilateral cooperation, emerging tech, and entertainment, today's discussion would provide insights on finance and investment, defence and homeland security, and the knowledge economy.

Mr. Podar complimented Mr. Nitin Gadkari, Union Minister of Road Transport and Highways, Micro, Small & Medium Enterprises, for relentlessly working on infrastructure, road transport and MSME development in India. He was of the view that the growth in infrastructure development over the next few years would be driven by rapid urbanization, rising income and economic prosperity and India would become the world's third largest construction market by 2022. Mr. Podar talked about the construction of the national infrastructure pipeline at an estimated 1.5 trillion dollars investment by 2025, and Government of India's plan to constructing roads worth 213 billion dollars in the next two years. Mr. Podar said that India's robust ecosystem and favourable reforms had opened a plethora of opportunities for partnership with the US, primarily in funding resources, technology and knowledge sharing. Further, India had approximately 63 million MSMEs vis-a-vis 30.7 million small businesses in the United States, and thanks to technology and moving towards one global market, Mr. Podar felt

there was a huge potential for cooperation and collaboration among the MSME sector. Mr. Podar concluded that the recent collaboration between India and the US regarding India US Climate and Clean Energy agenda 2030 partnership on green collaborations, battery and energy was a key milestone towards an inclusive and resilient economic development and hoped the two countries would build on their unique strengths through collaboration and capitalize on their opportunities and ties to unlock promising possibilities towards an inclusive and sustainable future for all.

The opening remarks were provided by Mr. Swadesh Chatterjee, Chairman and Co-Founder, US India Friendship Council. Mr. Chatterjee recounted how US India ties had changed over his lifetime – in his early days in the US, India was viewed with suspicion and was a country to be managed and not partnered with in the geopolitical game; however, the rise of India's economic power and America's interest in balancing China, reinforced by the strong activism of Indian American community, had fundamentally altered the US -India relationship. He narrated how the Indian American community worked overtime to ensure the Presidential trip to India in 2000 was a success, ensured sanctions were lifted on India after she conducted nuclear test, with the crowning moment being the signing of the US India civil nuclear agreement in 2008. Mr. Chatterjee was confident that President Biden and Kamala Harris would build a stronger and steadier US-India partnership and take the friendship to a new height, and quoted Biden from 2006 when Biden was involved in the US - India nuclear deal: “My dream is that in 2020 the two closest nations in the world will be the India and the United States”. As per Mr. Chatterjee, the US- India civil nuclear deal would never have become a reality without Joe Biden's leadership.



Quoting from his book ‘Building Bridges’, Mr. Chatterjee said that they lobbied for a vision of a deep and lasting friendship between the United States and India, and the signing of the nuclear deal was a symbol of US-India bilateral relationship reaching new heights. He continued that President Biden supported India’s membership in the reformed United Nations Security Councils, worked together with Congress to make India a major defence partner, and within his first hundred days in office, President Biden reached out to India during the Quad summit and agreed on a safe and effective vaccine distribution strategy. The two countries have also agreed to work on climate change and renewable energy, and a working group has been formed for cooperation in critical and emerging technologies of the future. This is also reflected in the lifting of the freeze on visas for highly skilled Indian workers so that they can bring their talent and creativity to the United States. While Mr. Chatterjee admitted that disagreements would be there, he believed President Biden would revive long neglected areas of cooperation between the two countries and he had already made a beginning in public health, education, climate change, sustainable energy, technology, and democratic institution building. Mr. Chatterjee concluded that sky was the limit for US - India partnership and he was very bullish about the relationship.

The keynote address was given by Mr. Nitin Gadkari. He expressed his pleasure in speaking at the inauguration of the Indo-US Partnership Vision Summit and hoped the summit would provide opportunities for collaboration in areas of education, space, science, finance and investment, health, infrastructure, pharma, emerging technologies, defence, IT, cyber security and entertainment. He said the partnership could have profound impact on the dynamics of geopolitics and traditional Indo-US friendship and said both countries were working to address contentious issues to make the partnership based on mutual trust, respect and complimentary. Mr. Gadkari told US and India stood against terrorism and the two countries had reached in-principle agreement in the area of defence, security, energy and trade.



Mr. Gadkari continued that the national interests of India and the United States were converging in the new era of relationship and there was growing confidence between both the administrations that all outstanding trade issues would be resolved and major trade agreement would be signed soon. He strongly believed that both the countries were committed to the development of a society that was liveable, workable and sustainable for all. He said policies like NIP, where 7,300 projects were to be implemented with an outlay of 1.4 trillion US dollars by 2025, demonstrated India's commitment to building world class infrastructure and attracting investments in highways, railways, ports, airports mobility, energy and agriculture and rural industry. Mr. Gadkari recounted President John F. Kennedy's quote which was displayed in his office that 'American roads are not good because America is rich but America is rich because American roads are good', and said that this was his inspiration and which was reflected in road construction of 37 km per day in India, the highest in the world. He talked about Gol's target of 212.8 billion US dollar worth road construction over the next two years, backed by Gol's allocation of 24.3 billion US dollars. Mr. Gadkari felt that this was a tremendous achievement by a country which had the second largest road network, and he was confident that road construction pace would touch 40 km per day by next year. Mr. Gadkari told that NHAI was committed to developing additional 50,000 km of road by 2025.

The Minister talked about 100% FDI in the road sector and developing 22 Green Express Highway and access control corridors of 7700 km length at a capital cost of Rs. 3.32 lakh crore. He also touched upon the Paris climate agreement and Gol's pledge to reduce carbon emission by 30-5% by 2030 and India's ambitious plan to achieving 450 MW renewable energy capacity by 2030. He mentioned India's prominent role in setting up CDRI and signing the international solar alliance, priority on bio-fuel, and focus on diversification of agriculture towards energy and power sector and promoting usage of alternative fuels such as compressed Biogas, CNG, LNG, Ethanol and Methanol. He elaborated on India's initiatives in Green Hydrogen Fuel Cell in collaboration with IITs and other research institutes, his focus on ensuring availability of ethanol fuel across the country, and how LNG could prove to be a sustainable future fuel for long distance buses and commercial vehicle-like trucks while reducing logistic costs. Mr. Gadkari aimed to run 100 public transport buses, and all two-wheelers and three-

wheelers vehicles on electricity, and said 81% of the Lithium Ion Battery while research was continuing on Aluminium Ion, Zinc Ion, Steel Ion and Sodium Ion.

The Minister continued on the National Electric Mobility Mission Plan 2020 to invest 140 billion dollars in the next eight years for the development of electric infrastructure and opined that India's Electric Vehicle market could be worth around Rs. 45 lakh crores If the country achieved its 2030 Electric Vehicle ambitions and for that India would need a cumulative investment of about Rs. 12.50 lakh crore. He talked about encouraging use of bio-fuels in construction equipment machinery and tractors, and cited a recently launched JCB machine that runs on Bio CNG to minimize pollution. He felt the recently launched voluntary vehicle scrapping policy would boost the Indian auto industry and invited US to share their experiences and technology to roll out the vehicle scrapping process effectively in India. The scrapping policy would reduce production costs because of availability of raw materials like aluminium, copper, plastic and rubber from vehicle scrapping. Mr. Gadkari said all leading global auto OEMs were present in India and using India as a manufacturing base for exports, and with India's focus on developing technology like Ethanol, Methanol, Biodiesel, Bio CNG, Electric, LNG and Green Hydrogen, he was confident India would be the number one manufacturing hub in the next 5 years.

Other initiatives on which his Ministry was working included: water conservation through rain water harvesting and artificial groundwater recharge system along the national highway; mandatory use of solar powers at toll plazas; promoting use of new alternative material and technology in road construction like fly ash, waste plastic, rubber, steel fibre, jute, coir, perpetual pavement using recycle bitumen, and soil stabilization technology; reducing usage of steel and cement in road and bridge construction; and framing the green highway policy and ensure plantation along the highways to save ecology and environment. Mr. Gadkari felt the need to collaborate with US companies regarding soil stabilization techniques. He stressed that one of the most important solutions to tackle environmental issues were waste to energy and there was also the requirement of implementation of green building technology to tackle the climate change exchange issues. The Government was developing 35 multi-modal logistic warehouses with cold storage facilities, 15 international stations, wayside amenities highway needs and smart bus ports, and also working on the development of advanced transport solution like electric highway, broad gauge metro rail system, road train bus, cable car, roadway, funicular rail and sea planes. He felt US had expertise in intelligent transportation system like artificial intelligence technology, IOT, GIS, GPS based technology, atomization tools and robotics, and could play an important role in India's infra development and digital transformation.

Regarding MSME sector, Mr. Gadkari felt the sector has the potential to contribute 50 % to India's GDP and around 60 % of her exports. He said MSME development was his highest priority and he felt conversion of knowledge into wealth was very important. As per Mr. Gadkari, innovation, entrepreneurship, science, technology, research skill and successful practices were knowledge, and conversion of knowledge into wealth and conversion of waste into wealth were his two important guiding philosophies. He felt there were lot of avenues for US and India to collaborate and he was

confident that India would become a global investment destination and a supply chain alternative in the new normal. He concluded that India had the advantage of a huge market, intellectual youth power and the fastest growing economy with ample opportunities across all sectors, while the Government was committed to providing a flexible environment and favourable policy framework, time-bound decision-making process, well develop public industrial institutional capacity, and a transparent ecosystem for better ease of doing business.

Dr. Mukesh Aghi (President & CEO, US-India Strategic Partnership Forum) then asked Mr. Nitin Gadkari where he saw opportunities for investment from US companies in the Indian infrastructure space and what his advice would be to American companies for India as a destination of investment. Mr. Gadkari said there were opportunities in airports, ports, railway stations, metro rails, public transport on electricity, ropeway cable car and railways, although the success story was road infrastructure. He said NHAI was 'AAA' rated and the company had received investments from Australia, Canadian Pension Funds, and other institutions from around the world. NHAI had several models for developing national highways, including the BOT (Build, operate and transfer) and the hybrid annuity model - where 40% is given as investment subsidy by GoI, 20% is promoters contribution and 40% is provided by banks. The toll is collected by NHAI and the money is returned with interest cost to the investor till the end of the debt. The toll projects are monetized for 30 years and Indian bankers are providing good support, but foreign investors may have issues in the hedging costs. Mr. Gadkari said he was open to any model and work was going on in several green corridors – including Meerut – Delhi, Delhi – Dehradun, Delhi – Haridwar, Delhi – Mumbai and Delhi – Jaipur, and in all these projects, there were opportunities for technology and investments. Mr. Gadkari advised that companies should collaborate with NHAI as 100% FDI was allowed there whereas permissions were required for other routes, and reiterated that India was the fastest growing economy and internal rate of return was good when compared to the US, and he was confident investors would get double the returns in India versus US.



Dr. Mukesh Aghi then asked Mr. Rajesh Subramaniam (President and Chief Operating Officer of FedEx Corporation) what needed to be done to set up FedEx India as a hub for the region. Mr. Subramaniam said that FedEx had been operating in India for over 25 years, employed thousands of employees, and was the only transportation logistics company that operated out of three airports. He was excited on Mr. Gadkari's vision on road networks as it was critical for JIT and supply chain efficiency. Mr. Subramaniam talked about their global infrastructure and their ability to make things happen through physical intervention, and narrated how FedEx was supplying oxygen concentrators to India under the USIPF program. He continued that FedEx was supplying healthcare supplies across the world, had distributed hundreds of millions of vaccines around the world, that they were donating a full charter aeroplane for India and their mission was solving the pandemic problem in India.



Dr. Mukesh Aghi then asked Mr. Gadkari on his plans to encourage US companies to partner with the MSME sector in India. The Minister said that currently, the MSME sector contributed to 30% of India's GDP and 44% of her exports, and had created over 11 crore jobs, but wanted to increase the GDP contribution to 50%. The Ministry had identified 115 aspirant districts which were socially, economically and educationally backward, and while the GDP contribution from rural, tribal and forest area were negligible, they had availability of raw material like biomass and bamboo. Mr. Gadkari said bio CNG could be produced there with technology, and reduce India's crude oil import bill of Rs. 8 lakh crores, and he highlighted how US companies were making ethanol from corn and how the Indian government had given permission to make ethanol from corn, rice, food grain and bio-mass. He continued that bio CNG could be converted into LNG and used for long-term transport. Also, rural and tribal India had huge tourism potential and he was of the opinion that ropeway, cable car, funicular railway, seaplane and amphibious seaplane had huge potential in India. He highlighted how his Ministry was spending Rs. 12,000 crores to construct an all-season road to Badrinath, Kedarnath and Gangotri, and how one could have ropeway and cable car connections to the road.

Mr. Gadkari talked about the huge potential LNG had in India. It required around Rs. 10 – 12 lakhs to convert a diesel truck into LNG, but the economic payback period was 2 years. He therefore felt there was need for different types of technology in the transport sector, including LNG technology. He also stressed about the huge potential for tourism, including BOT and PPP, and said how his Ministry was contemplating creating a new Davos and developing a tourist resort near Jojila Pass in Kargil with adventure sports facilities. He hoped developers from US would be interested in the project.

Mr. Gadkari highlighted the various projects which are economically viable, including aviation, solar energy, bioenergy, biofuels, khadi Gram Udyog and village industry, and development of tribal and rural areas. He welcomes investments in agriculture, agriculture products, agro-processing industries, cold storage and pre-cooling plants and showcased how opportunities were available across the entire backward area around Chambal Express Highway. The area was just a 4-hour drive from Delhi and Mr. Gadkari said he was trying to persuade the MP Chief Minister to offer free land to big industries. Mr. Gadkari added that US investors could set up base in industrial clusters and smart cities, and take advantage of India's skilled manpower, raw material availability, reasonable cost base, and appropriate technology, to export across the globe. The Minister concluded that it was the priority of his Government to create new jobs for rural, agriculture and tribal India through new technology.

Dr. Mukesh Aghi then pointed to Mr. Rajesh Subramaniam that FedEx's focus on making its fleet carbon-neutral by 2040 would require billions of dollars investment, and asked how FedEx could explore that partnership with India. Mr. Subramaniam first thanked the Minister for the strong network building and improving infrastructure, and hoped Indian industry's logistics cost would come down from ~14% to near US levels, which was 8-10%. Coming to the question on carbon neutrality, he mentioned that FedEx had 700 airplanes and 200,000 motorized vehicles, and their direction was using

more electrification and green energy. To that extent, FedEx was looking at sustainable aviation fuel and they had funded 100 million dollars at Yale to set up a Yale centre for natural carbon capture. He quoted Bill Gates on green premium and felt the cost of green alternatives were significantly higher and therefore it was imperative to work on three fronts: ensure efficient operations; enable green supply chains by reducing carbon footprint with customers; and introduce innovation and R&D with like-minded partners. Mr. Subramanian concluded that he was very interested in understanding India's R&D approach and collaborating.

Dr. Mukesh Aghi then posed the last question to Mr. Gadkari, asking his thoughts on digital infrastructure which was the future. Mr. Gadkari agreed on the need to establish new partnerships and new relationships with respect to various technologies. This could be bifurcated into different sectors and one could decide on the approach – whether it be joint venture, collaboration or upgradation of technology. Giving the example of MSMEs, he said how the Government was supporting MSMEs with good credit rating by providing them 10-15% equity from the government side. With investments and upgradation of technology, the MSMEs could have huge export potential. He ended by saying his office was open for stakeholders from both India and US for any co-operation that they required.

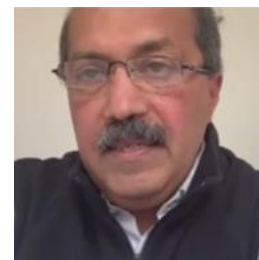
Dr. Mukesh Aghi concluded saying that the relationship of the two countries was not just geopolitical but cultural, and also on education, energy and security. He said that India and US had demonstrated that a friend in need is a friend indeed, and hoped that US India trade would reach 500-billion-dollar, as opined by President Biden. He expected the partnership between the two countries to deepen both from geopolitical and economic perspectives.

**Session 5 focussed on Finance & Investments.** Mr. Malachy Nugent (Vice President, Financial Services, USISPF and Former Treasury Attaché at US Embassy, New Delhi), the moderator of the session, said the session was going to focus on foreign capital flows, direct and portfolio investments and trends in the banking sector. He asked Mr. Sanjay Nayyar (Chairman, KKR India) to talk



a little about foreign capital - foreign capital flows going forward in India and how critically can the government best capitalize on these resources - as it is a critical driver of investment, and while India has enjoyed strong capital inflows in recent years, the source of financing is going to be even more important in years to come as India faces a challenging fiscal environment post Covid.

Mr. Sanjay Nayyar said that India was always going to need a lot of investments given the demographics, infrastructure spending, and consumption uptick. While India had high savings, the high growth meant there was a big gap between investments and savings and India needed foreign capital to bridge the fiscal deficit. Mr. Nayyar said that foreign private capital – whether venture capital or private capital – had almost trebled in the last five years in India which



is a tremendous growth, and even last year, which was Covid affected, there was 42-billion-dollar inflow into India as private capital. Mr. Nayyar stressed that saving-investment gap would remain in India, but continued that India is a country where people feel comfortable in investing given the growth opportunity, the consistency of the law, the value of the contract and the sheer entrepreneurial dynamism that Indian entrepreneurs demonstrate. Mr. Nayyar believed that India could attract a lot of foreign capital, but capital inflows came in response to a robust domestic capital market which was liquid, and Indian capital markets had come a long way in terms of the infrastructure, liquidity, depth and width. But Mr. Nayyar added that apart from returns, local capital needed to be robust if a country wanted to attract foreign capital.

Mr. Nayyar felt that India was a natural destination for foreign capital, but India was going to need more capital inflows over the next two three years and it needed two hands to clap. Mr. Nayyar was confident that as capital markets deepened and local flows from local insurance and pension became more robust, more foreign inflows would happen and India would continue to deliver big opportunities for foreign private capital.

Mr. Malachy Nugent then asked Ms. Kaku Nakhate (President and Country Head (India), Bank of America N.A) to comment a little bit on the development of the capital markets. Ms. Nakhate agreed that India was a great place to be in, and while there were ups and downs, the potential to earn was huge but one had to be patient with money in India to yield good returns. Ms. Nakhate said that while the Indian capital market had grown from strength to strength, it was still not in line with what a five trillion-dollar economy required. There had been reforms and India had opened up, with InvITs and REITS being the new additions. She talked about the 1.1-billion-dollar InvIT by Power Grid and the tremendous interest it had seen from investors. She said that the equity market had always performed in India and that India really stood out in investments among the emerging economies. Ms. Nakhate continued that banking, technology and pharmaceuticals would continue to see good amount of traction, but it was foreign private equity which kept the market alive last year, and which has seen another 14 billion dollars inflow in the current year. However, she saw the opportunity in China vacating the US corridors and wanted the regulators to sort out how Indian companies could get listed in the US so that Indian unicorns could get listed in the foreign markets to really unravel their value and pursue their growth strategy.



Mr. Malachy Nugent then asked Mr. Jaspal Bindra (Chairman, Centrum Group of Companies) about the transformation in the Indian banking sector and underlying trends that he saw in Indian banks as a credit provider. Mr. Bindra said that banks had traditionally been the leading provider of credit, both domestic and overseas capital, and would continue to remain so. But he added that India had a demand-supply gap in credit and there is a large unserved and underserved clientele from a credit perspective, both in retail and in wholesale. However, Mr. Bindra felt that for the first





time, the Government and the regulators had made a serious effort to create scale on the supply side, evident in the consolidation of the PSU banks, periodically issuing licenses to new banks every five years including for small finance banks and allowing them to build scale and making exception for a foreign bank to takeover a local private bank. Mr. Bindra added that the review of ownership for new licenses was the most important change, where deep pockets irrespective of their existing business interests along with good enforcement of arm's length, would ensure huge capacity add to the banking sector. Mr. Bindra admitted that government was doing a lot from the capacity side, but there were issues on accountability, especially for the public sector banks. There were issues, he said, in risk management, returns and corporate governance, but they were improving. He concluded that the combination of scale and accountability would drive the banking sector to provide a large part of the credit needs of the country although there was still a lot to be done.

Mr. Malachy Nugent then asked the panellists in which sectors they expected growth to happen post-Covid and where the real investment opportunities in India lay. Mr. Nayyar singled out infrastructure and renewables, and said that while the government had done a commendable job in infrastructure spending, the private sector needed to step in too. He continued that it was difficult to attract foreign capital in infrastructure because of low returns in dollar terms, and hence the sector required local capital and this is where investable surplus from insurance and pension funds could be deployed. Mr. Nayyar felt this required a tweak in certain regulations and he opined that the government was aligned to the same, as reflected in the insurance regulator allowing insurance surpluses being deployed into 'AA' and better rated InvITs in debt instruments. Mr. Nayyar urged to democratize the ownership of infrastructure ownership as much as possible so that one could crowd in local capital and he felt the need to focus on that so that high net worth and retail individuals could deploy their savings in InvITs and REITs.

Ms. Kaku Nakhate said the first PLI scheme on mobile manufacturing attracted significant FDI and saw investments from Apple and Samsung Galaxy in India to set up manufacturing for the world. Buoyed by the experience, she added that the government announced PLIs in 11 more sectors, including EV, battery, renewable solar, textiles, white goods etc. While she felt people are worried about investing during Covid-environment, she also knew investors are looking at China plus one strategy and that has seen a lot of traction in APIs. Just like the pharmaceutical APIs had suddenly grown from strength to strength, she said the specialty chemicals was now following that and these sectors would attract investments apart from the infrastructure sector. Ms. Nakhate concluded that ease of doing business needed to be continued to be worked on and efforts have to be ongoing on a continuous basis, especially on lower taxation.

Mr. Jaspal Bindra agreed that Mr. Nayyar and Ms. Nakhate had covered the big spots, but he foresaw ESG become a big thing in the future and also felt payment infrastructure was still at a nascent stage and had huge potential. Mr. Malachy Nugent then enquired why banks are shifting and promoting retail lending over industrial lending and what the government needed to do to encourage banks to

lend more to industry. Mr. Jaspal Bindra agreed that the wholesale side of the business had seen challenges from 2008, and since bank funds flow to the most convenient spot with a return potential, it was logical that banks targeted retail. Mr. Bindra agreed that technology had played a role and narrated the success story of Bajaj Finance, but also concurred that the story in retail was a mixed picture and that most of the action had happened in the upper end of the pyramid, but the real opportunity was in the bottom end of the pyramid and that required business to deliver cost efficiency and profit at low ticket items.

Mr. Nugent then asked Ms. Nakhate if she could elaborate on India's advantage in the US China relationship and how India could position itself and advance the agenda to build a five trillion-dollar economy. Ms. Kaku Nakhate agreed that Chinese companies had grown from strength to strength and had been able to attract all pools of capital, including being listed on US exchanges. She felt US investors understood negative EBITDA well, and hence these companies could grow and become mega companies. Ms. Nakhate was of the opinion that India was also well positioned and there were several smart companies on the ground, including Nykaa, Dream11 and Zomato, and these companies had their own unique models different from US and China and catered to all livelihoods of people. She said India had 37 unicorns last year which was expected to touch 100 by the end of the year and for that, the regulators needed to work out on the cross-border listing guidelines and allow for listings on New York or Hong Kong exchanges. The other alternate route available, she felt, was the SPAC route and recounted the success of Renew, saying the first renewable listed SPAC anywhere in US was going to be an Indian company. However, she added these would be more attractive if regulations on ESOPs were changed so that employees could participate in offshore capital. It was therefore necessary to develop more models on start-ups, she concluded, so that India could position itself in the space China was vacating.

Mr. Malachy Nugent ended saying the key takeaways from the discussions were India needed to focus on continuing to develop its local capital markets, tap into those sources of long-term patient capital that are out there, attract investments in infrastructure, pharmaceuticals, tech and supply chain, and really focus on support of regulations and ease of doing business.

**Session 6 had the theme Defence/ Homeland Security.** Mr S. P. Shukla (Chairman, Mahindra Defence, Mahindra Aerospace, Mahindra Sanyo Steel, Mahindra CIE Automotive Ltd, etc.), the moderator, said India and US are natural partners being the largest democracies, and their bilateral relations had developed into a global strategic partnership based on shared values, and regional and global causes. While US is the largest trading partner of India, Mr. Shukla believed defence had emerged as a major pillar of India US strategic partnership since the signing of a new framework for defence cooperation in 2005, and reflected in defence joint exercises and maritime security counter-piracy operations, culminating in 2016 with US recognizing India as a major defence partner to facilitate technology sharing to a level commensurate with that of allies and



partners. He added that defence related acquisition from US had crossed 21 billion dollars in the recent past, and the two companies driving the partnership between the two countries were Boeing and BAE Systems. Mr. Shukla introduced Mr. Ravi Nirgudkar (Managing Director, BAE Systems, India) and Mr. Salil Gupte (President, Boeing India) and then asked Mr. Gupte how the strategic partnership model would impact the Indian ecosystem.

Mr Salil Gupte said the goal of the strategic partnership model under the new defence procurement procedure was 'Buy Global, Manufacture in India' and then drive the development of a defence industrial ecosystem in India from lowest complexity all the way to highest complexity components, and eventually into platforms. Over the last decade, Mr. Gupte acknowledged that Boeing had evolved from forging simple metallic and non-metallic parts to some of the most complex composite parts that are critical to an aircraft at their joint venture at Hyderabad and cited how the apache fuselage is manufactured in India for apache helicopters across the globe, including US and Indian army.



He continued that this was made possible by ensuring a few things; first by developing large and mid-size suppliers and then bringing them up the value curve. Thus, Boeing today has over 250 Indian companies in their supply chain and the sourcing from India has quadrupled from 250 million dollars to one billion dollars in the last five years. Mr. Gupte mentioned that one of the MSMEs that they started working with five years ago has twice won the 'Boeing supplier of the year award' which highlights the level of quality and capability available in India. He also added that MSMEs needed to be recognized as the next generation of great manufacturers in India and for the Indian ecosystem to develop via a strategic partnership model and transform, one needed to develop these MSMEs. Thus, Boeing has 50 MSMEs in their 250 Indian suppliers, and while many are new in manufacturing, others are from different industries like automotive industry, and Boeing engages with these MSMEs to develop capabilities and make sure they understand the standards of quality, material and safety required in the aerospace industry.

Mr. Shukla then asked Mr. Nirgudkar - whose company received the M777 contract under the G2G FM's contract in 2016 - his manufacturing and assembly experience in the country. Mr. Nirgudkar said 'Make in India' and Atmanirbhar Bharat are not new concepts for them, and when they were required to establish an assembly integration facility and acceptance test firing capability, they could not have done without the help of their Indian partners, including Mahindra. BAE Systems works with 80 suppliers in India on technology transfer and knowledge transfer, and has been supporting and participating the Indian eco-system for 'Make in India'. Mr Nirgudkar added that he was happy to inform that they had developed a world-class paperless facility to deliver customer requirements as per their expectation.



Mr S. P. Shukla then asked about their experience over the last one-year post-Covid. Mr. Nirgudkar said they had a paperless state-of-the-art facility and had been able to meet their customer expectations during Covid, while taking every precaution to ensure their employees and partners' employees were safe, due to the processes and systems in place. Mr. Shukla then enquired about the overlap between aviation and defence industry, and whether the time had come for take-off in the synergy between defence and aerospace manufacturing.

Mr Salil Gupte agreed India was one of the most important defence markets in the world which was reflected in India's defence budget. However, he added that India was not only one of the largest acquirers of equipment, but was poised to be the third largest civil aviation market in a few years. Mr. Gupte said this was a unique combination – while China had a huge market for defence and civil, it did not import for defence while other countries that had large defence markets did not have a large civil market. India had the advantage of having massive markets in both, which meant that India's capability to serve those markets and manufacturing those markets must become equally significant. Mr. Gupte therefore concurred that the synergy had now reached inflection point, and there were a couple of reasons driving that – one, as India's fleet on the civil side matured over time, there would be more need for maintenance, repair and overhaul in India; and two, the government had taken key decisions to reduce taxation and increase the ease of doing business for maintenance, repair and overhaul in India. He said this was important for defence as most of the large maintenance shops for defence around the globe, like Delta Tech Ops, Lufthansa Techniques and SD Aerospace, happened to also be in civil. Mr. Gupte explained that this meant the scale efficiencies that came from doing civil work lent themselves to building capability and investing in defence work. Mr. Gupte explained the importance saying that there were only a few aircrafts in defence and even large fleets in defence might only have 50 aircrafts of a type, whereas thousands of a type in a fleet in civil and that scale allowed one to spread fixed costs and make defence maintenance more cost effective and inexpensive. Mr. Gupte added that while the importance of scale coming to defence MRO is important, it is also relevant for defence manufacturing since civil aircrafts have long and stable production runs unlike defence, which is more volatile, and the base load of work in civil can bring a tremendous amount of scale to a supplier in India and allow them to work more efficiently and quote more competitively in defence work and ultimately grow both civil and defence businesses parallelly. Mr. Gupte concluded that the scale that came from civil and defence synergy was absolutely critical for a defence industrial base.

Mr S. P. Shukla then asked Mr. Nirgudkar the new areas where US and India could collaborate. Mr. Nirgudkar opined that US-India had a very positive future, because since signing GSOMIA in 2002, India has signed multiple, significant agreements with US, including: LSA to provide logistical support for each other's fighter planes; COMCASA in 2018 to share sensitive communication equipment encryption technology to transfer real-time operational information; ISA, which is an annex to GSOMIA, and is industry security agreement which allows a company like BAE to share classified information with an Indian company and not just the Indian government; and BECA, which allows militaries of the two countries to share geospatial and numerical data on target behaviour. Mr.

Nirgudkar thought this was an appropriate time for the two countries to leverage on these agreements and broaden their partnership. He felt that the two countries now needed to move from a partnership of convenience to a partnership of commitment, now that US had declared India as a major defence partner and now that the statement of intent to demonstrate success of DTTI had been signed.

Mr Shukla then briefly touched on embedding sustainability in supply chain, and said sustainability had many dimensions including resilience and long-term sustainability of manufacturing and not just environment sustainability. In order to have a sustainable supply chain over the long term, he felt both resilience and efficiency were important and it was important to diversify and expand the supply chain and put into place protocols for business continuity so that one could count on the integrity of the supply chain and ensure a truly sustainable support.

**Session 7 focussed on the Knowledge Economy - Education and Skill Across Boundaries.**

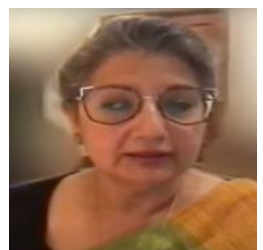
Mr. Samir Somaiya (Chairman, K J Somaiya, Education Trusts, Chairman & Managing Director, Godavari Biofineries Limited) started the session by saying platitude that we are living in a world of constant change, but nowhere have we seen this change so radical, so disruptive and so difficult as during this pandemic. He said education was one pillar which societies learn from to prepare themselves for the future and he wondered about the future of education – online, offline, hybrid – in the new normal where education had transformed to digital delivery.



Dr. Suhas Pednekar (Vice Chancellor, University of Mumbai) began by saying that educational institutions are an integral part of society and they are expected to establish that dynamic equilibrium with society with respect to economic, social and environmental perspective. But he felt that the future of education was going to change rapidly and drastically due to the pandemic and although online mode had its limitations, higher education was increasingly going to be the hybrid or blended form with technology playing an important role.



Ms. Anjali Raina (Executive Director, Harvard Business School India Research Centre) was amazed by the behavioural change introduced by the pandemic. At Harvard alone, they received 29 million extra sign-ups and users of their online educational portal increased from 81 million to 110 million, while BYJU's apps saw 64 million plus downloads. She said there was going to be an embracing of digital learning that was unprecedented and while usually attitude changed behaviour, this was an example of behaviour changing attitude. Ms. Raina mentioned four things that would shape this new world - one was scale; next-gen online learning can be scaled by algorithms, so one can have quality teachers reaching many more students and which so far had been a constraint while grading and evaluation of papers could be automated through digital algorithms.



Two, artificial intelligence and analytics-driven student support and teaching improves student experience in an absolutely extraordinary way as one can analyse similar and different comments. Third, earlier education used to be about getting a degree, so one did under graduation and then post-graduation, but education credentials had changed, just like demand for shampoo shifted from bottles to one-rupee sachets. Educational credentials were becoming like sachets through digital education, with students now preferring certification and life-long learning rather than a one-time degree. Finally, education was a sector that had not really embraced digital with very little investment in EdTech, but the last year saw an enormous increase in the opportunity of EdTech and technology will transform education. However, Ms. Raina maintained that education was about learning and pedagogy in this digital space had to also keep space with it. Accordingly, pedagogy in the digital space had to experiment so that learning could be fun and easy like buying on Amazon or watching Netflix and she cited the experience of Harvard wherein they did 60 prototypes of hybrid classes before being satisfied with the format. This, she felt, provided a huge opportunity.

Mr. Somaiya narrated how they taught students from various demographic backgrounds including tribal India, and needed to teach in Marathi, Kannada, Gujarati, English, Hindi etc. and they faced a digital bridge or a digital divide while developing the new online content. He asked Dr Pednekar about facing digital divide or digital bridge while scaling up learning. Dr. Pednekar answered that homework and research were required and it would vary from country to country and would be influenced by the economic condition and the social structure of the country. In India, it would work in both ways and would have challenges and opportunities at the same time. So while technology could propagate education to hitherto unreached sections through online and blended learning, one also needed to understand the reality in the country. Citing his university, which is one of the largest in the country and spread over seven districts with complete heterogeneity in terms of composition of urban, semi urban, rural, semi-rural and even tribal areas, he said he had experienced the impact of digital learning in a better way and felt that if educationists and the government did not take proper course of action, digital divide would widen and he had already witnessed the same in University of Mumbai this year. Enrolment had declined because either certain students could not afford to have the technology or could not afford to pay the tuition fees because their economic conditions had deteriorated due to Covid impact. Alongside, financial positions of universities and colleges has also been impacted due to the pandemic and it would be a challenge to invest in technology while ensuring the under-privileged are not deprived of education. He therefore felt all stakeholders needed to come together and collaborate while giving topmost priority to education so that one could use technology meaningfully during the current situation and going forward. Alongside, in science and technology, laboratory experiments are a critical component and these cannot be online and while the University was managing, Dr. Pednekar technology wondered whether online education could dilute the education standards. The other challenge as per him was many would remain deprived of education in an online format. He stressed that education is the only profession which creates other professions and it was necessary to consider education as essential services because ultimately all other services which are available today are the outcome of the education system only.

Mr. Somaiya then quizzed the panellists on whether India's new education policy facilitate the transition or whether it would be regulator-driven. Ms. Raina said there 100 million users were from around the world and that was the advantage of online learning were best quality education could be made available to the remotest corner of the world provided the digital pipes existed and these pipes were what the stakeholders needed to put in place. While appreciating Dr. Pednekar's concern, she said inequity existed and that could be addressed only through empathy and ensuring systems were designed that took everybody along. She reiterated inequity existed even in physical schools with facilities and faculty varying across the country and schools in certain remote areas having no toilets or running water. She added that a child who is hungry cannot study and that is why she felt the South Indian schools had done so well by providing midday meal scheme. This as per her was empathy, and the equivalent of midday meal in digital education was to make internet available. She opined that the private sector, and not just the government, needed to work to make the connect possible and this was reflected in the huge investment in global EdTech. The other area she highlighted was that existing institutions did not invest enough in digital with less than 5% of college budgets being dedicated to IT spending. She narrated her own experience at IIM Calcutta 15 years back when professors introduced digital learning but technology was not good enough and students did not embrace it, but felt that if IT budgets were increased now, the reach of teachers would increase. She concluded that digital divide could not be bridged unless there were investments and empathy on the part of the stakeholders and warned that the crisis we are facing in health today due to underfunding would be faced in education a decade later due to underfunding.

Mr. Somaiya then asked Dr Pednekar about the new National Education Policy and how the UGC could enable Indian institutions to reach remote corners of India. Dr. Pednekar lauded the Central government for NEP and for providing autonomy and freedom and for transforming UGC and AICTE from a regulator to a facilitator. He said promotion of education was required to increase the gross enrolment ratio which was below global standards and currently stood at 30% and expected to reach 50% by 2035 if everyone were to adopt online, blended teaching. He said it was important to use technology meaningfully and was happy that NEP 2020 had introduced ABC (Academic Bank of Credit) where the students would be given opportunities to choose what they wanted and accumulate credit from different institutions. He concluded that the future was going to be lifelong learning and anyone could take up education at any time on credit and complete the degree without having a stipulated timeframe.

**In the valedictory session**, the moderator Mr. Richard M. Rossow (Wadhvani Chair in U.S. India Policy Studies, The Center for Strategic and International Studies) pointed out that while United States and India had their ups and downs over the last 25 years, one had to agree unconditionally that the overall trajectory had certainly been up across multiple areas of the relationship. Regarding insights into the future, he felt Mr. Taranjit Singh Sandhu



(Ambassador of India to United States, Embassy of India) and Mr. Tim Roemer (Executive Director and Strategic Counsellor at APCO Worldwide) were the ideal candidates to address that.

Mr. Taranjit Singh Sandhu began by saying the pandemic had demonstrated how US had reached out to India for healthcare partnership and how US and India had collaborated on ensuring the integrity of medical supply chains providing essential medicines and PPEs during the crisis. He continued that the India US partnership needed no specific introduction and while addressing the pandemic would be their top priority, the two countries were also committed on renewable energy, climate change, knowledge, education, innovation, defence and strategic partnerships, and each of these areas represented not only an area of G2G cooperation but expanding economic opportunities in building real values for both the countries. He added that Covid 19 had exposed the acute vulnerability of supply chains and restructuring of the chains were underway and India was keen to tap this opportunity to increase its participation in global value chains through production linked incentives that had been announced for 13 key sectors. He concluded that the PLI schemes were expected to create many positive externalities benefits for the country and he was confident that India would overcome the present challenge with determination and resilience.



Mr. Timothy Roemer said that India's crisis was America's crisis, demonstrated by America's promptness in supplying oxygen related supplies, vaccine materials and therapeutics, immediately after President Biden spoke to PM Modi. Further, Secretary Blinken had a meeting with the USIBC and a host of businesses for providing more resources to India, and he hoped other countries like UK, Germany, France, South Korea and Japan would also pitch in. He encouraged the two countries to begin work on biosecurity, health and vaccine. He also hoped that the two countries would work together in a bipartisan way and encourage to coordinate supply chain between the two countries. Further, he hoped that US and India would be more involved in regional issue like Afghanistan, and India would commit money, resources and people.



Mr. Richard Rossow then asked Mr. Roemer how US reacted to India's crisis. Mr. Timothy Roemer said that given the scale of the pandemic, things had to be done immediately and next week was not good enough. But he admitted there were issues of bureaucratic roadblocks like defence production act, intellectual property issues for pharmaceutical companies, coordination of landing rights, and he hoped the two countries would learn from them and have seamless integration so that US could help India rapidly, effectively and successfully.



Mr. Richard Rossow then asked Ambassador Sandhu the most urgent needs in India where American companies and individuals could contribute during the pandemic. Mr. Sandhu said her would not get into the aspect of timing and appreciated the swift response by the US industry, including setting up the global task force on pandemic response at US Chamber of Commerce, and similar supports from USISPF and USIBC. He continued that the immediate requirements were oxygen and therapeutics, particularly Remdesivir, and India was in close touch with Gilead and other companies. He said there had been a number of recent announcements which would broadly help in these areas, and it had to be understood that it was not that India lacked internal capacity, but this was a global pandemic and it had to be a constant fight against the pandemic, and cooperation between India and US across different boards and especially on the medical side was critical. He concluded that this was an exercise in togetherness and India would be able to overcome the situation with her internal strength and with the support of her friends and partners.

Mr. Richard Rossow then pointed to Mr. Sandhu that pre-Covid, the economic relationship between India and US were going on two tracks, with investments from US into India reaching all-time records while both governments were protectionists under the trade perspective, with US having the largest trade deficit in the world in absolute terms and India having the largest trade deficit as a percent of GDP. He asked the Indian ambassador his views on the upside on the economic relationship and areas of opportunities once the pandemic was over. Mr. Sandhu agreed that a lot of US companies including Facebook, Google, Qualcomm, Silver Lake and US venture funds, had announced investments and rolled out new generation applications in India. He saw opportunities in four baskets, namely healthcare, affordable medicines and affordable vaccines; energy, LNG, renewables, solar and climate change; digital innovation and start-ups; and knowledge and education partnerships, including campus-to-campus relationships, digital education and research.

Mr. Richard Rossow then asked Ambassador Roemer whether he would like to add to the possible areas of economic cooperation looking ahead. Mr. Roemer agreed that Ambassador Sandhu had outlined the possible areas including climate change and technology, energy, healthcare, biosecurity and digital trade. He said there were tremendous changes happening in these areas and US and India should overcome some of their protectionism and breakthrough with some agreements as these are win-win areas for both countries. He said that when America sells LNG turbines or C-17s for disaster relief to India, not only are jobs created in the US but India also benefits through greener environment and improved response to disaster management. So he was confident that the two sides would devote people and resolve the issues to have breakthroughs in the above three-four areas.

Mr. Richard Rossow finally asked about security relationship and security defence cooperation between the two countries, given the China angle. Mr. Sandhu underlined the fact that India - US cooperation stood on its own footing and could not be seen through a third country lens. He pointed out that the India-US comprehensive global strategic partnership had shared objectives and common

challenges, and in addition to defence trade, the cooperation was also about more co-production, more co-development, more defence exercises with expanded frequency and scope, more military to military cooperation, more exchanges in bilateral and multilateral formats, and more industries in both the countries working together. He said the goal was to chart out a more reliable supply chain in the next generation of defence technology areas with more joint R&D and innovation in new domains of defence cooperation, and he was confident India and US would come together to meet new challenges from traditional threats like terrorism and emerging areas like cyber security.

Mr. Timothy Roemer pointed out that both the countries saw China through the same geostrategic lens, and further valued human rights, rule of law and diversity and respect for other countries, and that's where the United States and India could work together through the United Nations and peacekeeping operations and non-proliferation issues. He added that the two nations worked together on the global domain and keeping freedom of navigation in the Indian ocean open to all countries, and wanted to work together on counterterrorism issues, homeland security and anti-piracy issues. He concluded that the dialogues between the United States and India were robust, trusted and fruitful and there was no limit to what the two countries could do together through cooperating.

**The vote of thanks** was given by Mr Dinesh Joshi (Chairman, IMC International Business Committee). Mr. Joshi thanked the participants for the wonderful virtual interactions over the two days which included honourable Union Minister of India, respected ambassadors, diplomats and businessmen. Mr. Joshi felt there was no better time than this to strengthen the relations economically and politically with each other and both the respective nations were and would be partners in progress. He continued that the topics of discussions clearly showed the vision for synergy and noted the Biden administration and the Indian government were working very closely with each other to define a new chapter for the future. He ended the vote of thanks by thanking everyone for making the summit a success, including honourable Union Minister Nitin Gadkari, the ambassadors, the various speakers, the MEA Economic and Diplomacy Division for being the support partner, Dr Mukesh Aghi and his team at USISPF for being the summit partner, Azent Overseas Education and Mitchell Group US for sponsoring the event, ET Now for being a broadcasting partner, all the friends in media for constantly supporting IMC, and finally, the summit organizing committee, the IMC committee and team IMC.



## KEY TAKEAWAYS

The two-day IMC Indo US partnership Vision Summit 2021 focused on net zero carbon, importance and future of health, bilateral cooperation, trends in emerging tech, entertainment, finance and investments, defence and homeland security, and the knowledge economy. A galaxy of luminaries spoke, including Honourable Union Minister of India, the Chief Minister of Gujarat, politicians, ambassadors, diplomats, academicians and businessmen. All the speakers admitted that that India and America were strategic partners, the partnership was people-oriented and people-centred, and the partnership had prospered because of similar value shared between its people including belief in democracy, cultural ties, and human prosperity are similar between the two countries.

Health was a critical focus area of the summit, and not just because of the pandemic. It was agreed that by 2040, it was going to be a different health care platform with focus on data, technology, well-being, and care delivery, and US and India would need to stand behind one another both from a life science and technology perspective. Delivery, innovation, technology and research would evolve not just in medicines but also in prevention, diagnosis and treatment of diseases. However, there needed to be clear lines of communication and understanding of what each stakeholder brought to the table to address the global health which included: first being market access and ensuring that patients have adequate access to life saving drugs, vaccines and therapeutics; second being the regulatory space which allowed necessary patients access to quality drugs and therapeutics through strong predictable policies; and third being the innovative landscape that drove research and development for creation of new vaccines and new therapeutics. Policy frameworks would help in unleashing the collaborative efforts.

It was understood that trade issues would always be present between the two countries as there were different stakeholders, but the beauty of the US India relationship was that it kept moving forward regardless of the governments at the centre. The evolving geopolitical situation called for exploring possibilities for further enhancing regional trade and investment between the two democracies, and it was felt health, education, and infrastructure were areas of potential cooperation between the US and India and had tremendous prospects.

The pandemic has accelerated the development or deployment of emerging technology and the mentality of the people – in terms of their ready acceptance - played a role. There was need for frugal innovation to bring people who cannot afford technology to introduce into the ecosystem. One also needed to move away from balance sheet lending to flow based lending. Computational biology had accelerated development in biosciences and India was very well positioned to build scale in precision medicine and personalized medicine.

There is significant potential for both countries to enhance frontier technologies through collaborate financing and innovative capabilities in health technology, 5-G, AI, Big data analytics, Quantum

Computing, Blockchain and Internet of Things. For example, in health, India can benefit from more intensive use of technology and health care, both in terms of expanding access to public health services as well as reducing the cost of prevention and treatment of common diseases. At the same time, the US companies have access to India's highly skilled technical personnel as well as domain knowledge of appropriate health services in emerging markets. This is best exemplified by tech start-ups in India and how they have been absolute game changers, and how they have been funded by venture capitalists from US. Similar collaboration was required in the entertainment industry too.

The US- India relationship has evolved and become increasingly multifaceted covering cooperation's and presenting opportunities in diverse new areas such as retail, defence and security, space technology and application, media and entertainment and healthcare. Earlier, India was viewed with suspicion and was a country to be managed and not partnered with in the geopolitical game; however, the rise of India's economic power and America's interest in balancing China, reinforced by the strong activism of Indian American community, had fundamentally altered the US -India relationship and now sky was the limit.

India's key focus is now on infrastructure and US, through its expertise in intelligent transportation system like artificial intelligence technology, IOT, GIS, GPS based technology, atomization tools and robotics, could play an important role in India's infra development and digital transformation. There were opportunities in roads, airports, ports, railway stations, metro rails, public transport on electricity, ropeway cable car and railways. Further, India needed to collaborate with US companies regarding soil stabilization techniques, waste to energy, and green building technology.

India was always going to need a lot of investments, given the demographics, infrastructure spending, and consumption uptick. While India had high savings, the high growth meant there was a big gap between investments and savings and India needed foreign capital to bridge the fiscal deficit. As India's capital markets deepened and local flows from local insurance and pension became more robust, more foreign inflows would happen and India would continue to deliver big opportunities for foreign private capital. India needed to focus on continuing to develop its local capital markets, tap into those sources of long-term patient capital that are out there, attract investments in infrastructure, pharmaceuticals, tech and supply chain, and really focus on support of regulations and ease of doing business.

The strategic partnership model under the new defence procurement procedure was 'Buy Global, Manufacture in India' and then drive the development of a defence industrial ecosystem in India from lowest complexity all the way to highest complexity components, and eventually into platforms. India was one of the most important defence markets but was poised to be the third largest civil aviation market. India thus had the advantage of having massive markets in both, which meant that India's capability to serve those markets and manufacturing for those markets would become equally significant. The scale that came from civil and defence synergy was absolutely critical for a defence industrial base.

In the education field, the embracing of digital learning was unprecedented during the pandemic. Though online mode had its limitations, higher education was increasingly going to be the hybrid or blended form with technology playing an important role. Four factors would drive the change: one was scale with algorithms scaling next-gen online learning; two, artificial intelligence and analytics-driven student support and teaching; three, movement from degrees to certificates and credentials; and four, embracing digital and EdTech. However, this was resulting in digital divide, and digital divide could not be bridged unless there were investments and empathy. The future was going to be lifelong learning.

## ABOUT IRR ADVISORY

IRR Advisory Services Private Limited (IRR Advisory) is a Fitch Group company. Fitch Group is a global leader in financial information services with operations in more than 30 countries. Fitch Group is comprised of: Fitch Ratings, a global leader in credit ratings and research; Fitch Solutions, a leading provider of credit market data, analytical tools and risk services; and Fitch Learning, a preeminent training and professional development firm. For catering to the non-rating businesses in India, Fitch Solutions set up IRR Advisory in August 2013.

IRR Advisory is a boutique risk advisory and management consulting firm, offering services in strategy formulation, risk advisory, research, analytics, transaction advisory, due diligence and training. We offer our clients a multidimensional approach to addressing their problems. We adopt a customized, responsive and personal approach to client service and offer a comprehensive range of services across various industries.

Our service offerings include:

PRACTICE AREAS				
BUSINESS STRATEGY	RISK ADVISORY	RESEARCH & ANALYTICS	TRANSACTION ADVISORY	GOVERNMENT CONSULTING
<ul style="list-style-type: none"> <li>• Strategy Formulation</li> <li>• Competitive Assessment</li> <li>• Product Positioning</li> <li>• Business Restructuring</li> </ul>	<ul style="list-style-type: none"> <li>• Credit, Market and Operational Risk Advisory</li> <li>• EWRM</li> <li>• CPRA</li> <li>• Information Technology</li> <li>• Training</li> </ul>	<ul style="list-style-type: none"> <li>• Risk Analytics</li> <li>• Model Validation</li> <li>• Bespoke Research</li> <li>• SME Diagnostic Assessment</li> <li>• Demand/ Price Modeling</li> </ul>	<ul style="list-style-type: none"> <li>• Partner Search</li> <li>• Assessment &amp; Valuation</li> <li>• Project Advisory</li> <li>• Investment Advisory</li> <li>• Bid Process Management</li> </ul>	<ul style="list-style-type: none"> <li>• Tariff Determination</li> <li>• Capacity Building</li> <li>• Policy Formulation</li> <li>• Institutional Reforms</li> </ul>

IRR Advisory and its group companies enjoy the trust and confidence of investors, issuers, Governments, multilateral agencies, and regulators across the globe. Our clients include corporate houses, banks and financial institutions, infrastructure companies, multilateral agencies and government.

*IRR Advisory Services Pvt Ltd (IRR Advisory) has relied on information received from secondary sources for preparing this knowledge paper. The knowledge paper does not constitute an audit or credit rating or legal advice by IRR Advisory. While IRR Advisory has taken reasonable care to ensure that such data/ information is correct, IRR Advisory does not guarantee that the information is accurate and complete. The information in this document is provided "as is" without any representation or warranty. IRR Advisory has no financial liability whatsoever to any user of this knowledge paper.*

For any information on this document, please contact:

**IRR Advisory Services Private Limited**  
Wockhardt Towers, West Wing, Level 4, Bandra Kurla Complex, Bandra E, Mumbai – 400051. India  
T +91 22 4000 1700 F +91 22 4000 1701 [www.irradvisory.com](http://www.irradvisory.com)