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India - China: A Performance Comparison Over the Reform Period 1991-2021

Harshita Shrivastava [1*]
[1] *Indian Institute of Management, Indore, Madhya Pradesh, India*
Email: harshitas@iimidr.ac.in
[*] *Corresponding author: harshitas@iimidr.ac.in*

Abstract: The Indian and Chinese relationship has evolved over thousands of years, from a spiritual connection to closely linked colonial (mis)fortunes to a modern-day rivalry. The rivalry manifests not only in the border disputes but also in economic growth (trade, development, military spending) as well as in soft power extension (cultural influence across the world, global diaspora, diplomacy, sports). While India and China were considered almost at par till about the 1980s, the economic liberalization shaped their paths significantly differently, where the Chinese growth miracle of 30 years has left India far behind on almost every major parameter of global significance. While India has started catching up steadily since 2014-15, there are still a generation's worth of reforms lying ahead of India to catch up credibly with China. Meanwhile, it would not be unfair to assume that the Chinese performance remains uncheckered. In this paper, we compare the performance of India and China across 3 types of parameters: macroeconomic variables, international trade, and human development. The period of comparison is approximately 1991 to 2021 or the closest available year. The objective of this comparison is to understand the past and draw relevant insights for the future.

Keywords: India, China, Economic Reforms, Economic Comparison, One generation of Reforms.

Key Points

- India and China have been among the world's largest and most important economies. While their civilizational links go back thousands of years, their geographical boundary conflicts as well as present day economic rivalries cause international distress.
- While India and China were considered almost at par till about the 1980s, the economic liberalization shaped their paths significantly differently, where the Chinese growth miracle of 30 years has left India far behind on almost every major parameter of global significance.

- We compare the performance of India and China across 3 types of parameters: macroeconomic variables, international trade, and human development. The period of comparison is approximately 1991 to 2021 or the closest available year. The objective of this comparison is to understand the past and draw relevant insights for the future.

- While India has started catching up steadily since 2014-15, there are still a generation's worth of reforms lying ahead of India to catch up credibly with China. Meanwhile, it would not be unfair to assume that the Chinese performance remains uncheckered.

1. Introduction

India and China are two of the most populous countries in the world and among the largest economies on the total Gross Domestic Product (GDP) on purchasing power parity basis. The two giant Asian neighbours share a large geographical boundary as well as the consequential border disputes. Their historical linkages also go back to the ancient times of the Indian Buddhist monks in China and the trade through the silk route and spice route (Frankopan, 2016). The two nations are not only the longest continuing civilizations but also have been at the top of the world economy for almost all of history barring the past 300 years of colonial oppression, each contributing at least a quarter of the total world production till before the colonial era began (Maddison, 2001). For the comparative context, some geographical information related to India and China are depicted in Table 1 along with some relevant maps in the Appendix.

As clear from Table 1, notably, while the geographical area of China is almost thrice that of India, the habitable land is much lesser due to massive deserts on the western side. However, the Indian population density is still thrice that of the Chinese, as the forest cover and water cover area for India are much higher than the same for China, while the population of the countries are closely similar. It is important to note that despite high population densities, both India and China are among the world's most biodiverse countries and rank 8 and 4 respectively in the rank of the megadiverse nations.

On the other hand, on the political structure side, India and China are as different as chalk and cheese. While India chose representative democracy in 1947 and stuck with that for all the while (barring an 18-month period during 1975-1977), China chose a Communist Party dictatorship, which transformed into state communism and economic capitalism after 1978. While the political system and administrative divisions differ between India and China, the Chinese success is often attributed to their lack of democracy. However, among many other costs of communist dictatorships, one evident cost is the loss of linguistic diversity. While China pushed for a uniform version of Mandarin only and caused many languages to vanish, India was able to preserve many small folk-languages also, since every person had a political agency with the state.

Table 1: Introduction to natural and political variables for China and India, 2021

MEASURE	CHINA	INDIA
Area (Sq. km) [Rank]	9,596,961 [4]	3,287,263 [7]
Area under water (%)	2.8	9.6
Forest Cover (%)	17.5	21.7
Biodiversity Index [Rank]	365.84 [4]	301.63 [8]
Population (2022) Billion [Rank]	1.40 [1]	1.375 [2]
Density (Per km^{sq}) [Rank]	145 [83]	418.2 [19]
Government System	Unitary Marxist–Leninist Single Party Socialist Republic	Federal Parliamentary Constitutional Multi-party Republic
Establishment of the Present Modern State Setup	1 October 1949 (Proclamation of Communist Rule, People's Republic of China)	15 August 1947 (Proclamation of Independence from British Colonization)
Administrative divisions	22 Provinces 5 Autonomous regions 4 Municipalities 2 Special Administrative Regions (Hong Kong and Macau)	28 States and 8 Union Territories
Language	Standard Chinese as the main language; 5 Recognized regional languages: Mongolian, Uyghur, Tibetan, Zhuang, Others	Hindi and English as the main official language; 22 other recognised official languages

Source; Wikipedia pages (2023)

The modern era story of both India and China began with their modern incarnation in 1947 and 1949, respectively. While India become a democracy in 1947, China became a communist republic in 1949. Despite the apparent difference, the two nations remained an economically closed and largely isolated for long. India tried and aborted the process of economic liberalization in 1965, and then again, a half-hearted, back-and-forth liberalisation process went between 1977 to 1990 (Mukherji, 2009). India reformed and opened up the economy in 1991 only after a full-blown economic crisis and an International Monetary Fund sponsored bailout. China, on the other hand, began piece-mill liberalisation after the death of the communist dictator chairman Mao and with the ascendance of Deng Xiaoping in 1978 (Swamy, 1979). However, China also started a full-fledged, unhinged liberalisation after 1992 only after the southern tour of Deng Xiao Peng (Gokhale, 2022). While India and China have had some differences in the timelines of their economic liberalisation, the paths and policies chosen remain extremely different. As a result, China gained an abundantly clear lead over India in economic, trade, and developmental domains.

The following paper discusses their 30-year growth story from 1991 to 2021 under the sections of macroeconomic indicators, development indices, trade data and miscellaneous variables of interest. We conclude with some comparative and futuristic thoughts.

2. Macroeconomic Performance

China and India are two of the world's most rapidly developing economies. Rastogi (2022) provide a comprehensive comparison of India, China, and the US for 2021. However, to recapture the main points on a historical basis, we reiterate some information as follows. China and India have respectively become the world's second and sixth largest economies as of the year 2021, based on nominal GDP. On PPP basis, China comes in first place, while India comes in third place. In terms of nominal wealth and purchasing power parity (PPP), respectively, the two nations each hold a share of 21% and 26% of the total global wealth. China and India together account for more than half of Asia's total GDP contribution from the continent's nations. With an 8.9% GDP compared to China's 8.1% GDP in 2021, India has already surpassed China in terms of percentage of the global GDP. On the other hand, when compared to China's GDP amount of 17 trillion, India's economy, which is worth only 3 trillion, is a significant distance behind it. The Chinese GDP has grown by 42.5 times since 1991, going from 0.4 trillion to 17 trillion by the year 2021. In contrast, India's GDP has only increased by 15 times from 1991, going from 0.2 trillion to 3.0 trillion by 2021.

The Chinese government's commitment to market-oriented economic reforms and creation of the country as a global manufacturing hub is primarily responsible for the economy's threefold expansion. In terms of GDP per capita, neither nation has been able to pull ahead of the other until the year 1990. In 1990, India had a higher Gross National Product (GNP) than China did, according to both methods. In the year 2021, China's nominal GDP is around 5.61 times that of India's, while China's PPP GDP is approximately 2.67 times that of India. China and India come in at number 63 and number 147, respectively, in terms of their per capita nominal ranks. In terms of purchasing power parity (PPP), China and India are ranked 76th and 130th, respectively, per capita. In 1998, China became the first country to surpass the $1 trillion milestone, and India did so nine years later, in 2007.

China has become the world's greatest exporter as a result of its position as the cheapest manufacturing giant for multinational corporations (MNCs), its liberalization of global commerce, and its huge investments in industrial output. The country's GDP is now worth 17 trillion dollars. India rose to the sixth spot in this competition from having no ranking 25 years ago thanks to the relaxation of trade restrictions that have occurred since the country's liberalization and the country's strong growth in the services sector, particularly in the fields of information technology, software, and telecommunications. The Chinese economy is expected to reach 25 trillion dollars by the year 2025, while the Indian economy is expected to reach 5 trillion dollars in the same year. Above 8% annual growth is required if India is to realize its ambitions in this regard.

While China moved from an economy based on agriculture to one based on manufacturing, India jumped ahead in the process by going directly from agriculture to the service sector. As a result, India neglected the manufacturing sector until recently, and it is only now beginning to pay attention to that sector in order to make it *Atmanirbhar*, or self-sufficient, and reduce its reliance on foreign imports.

India has maintained its spending in military and has strengthened its defence in the last 20 years and become a nuclear power. China has reduced its similar spending in total percentage of GDP but its GDP growth rate is higher than India hence expenditure is higher. Both countries are heavy spenders in terms of military budget with India being the top importer country in defence in the world with Saudi Arabia only now taking over it.

Table 2: Macroeconomic Indicators for India and China over 30 years, 1991 and 2021

		India		China	
		1991	**2021**	**1991**	**2021**
GDP	% of world	0.92	3.28	1.3	15.12
GDP Growth	%	1.1	8.9	9.3	8.1

GDP	Billion US$	270.11	3173.4	383.71	17,734
GDP (Nominal)	Billion US$	320.98	2622.98	360.8	14722
GDP(PPP)	Trillion US$	1.1	10.22	1.26	27.31
GDP per capita (current)	US$	303.1	1927.7	333.10	10434.8
GDP per capita (PPP)	US$	1795.3	6675.35	1534.71	17602.7
GDP: agriculture	% GDP	29.3	20.19	24.53	7.7
GDP: industry	% GDP	25.4	25.92	25.92	37.8
GDP: Service	% GDP	45.21	53.89	33.69	54.5
GNI (current)	US$	266 bn	3.12tr	384.15bn	17.58tr
Government expenditure	% GDP	11.08	11.36	14	17.13
Government expenditure	Billion US$	29.92	332.42	53.68	2460.73
Unemployment rate	%	5.6	5.98	2.37	4.82
Population	Billion	0.8	1.38	1.14	1.41
Defence budget	Billion US$	10.54	73.86	10.09	178.6
Military expenditure	% Of GDP	2.9	2.9	2.3	1.7

Source: World Bank (2023), CIA World Factbook (2023)

Both countries being two of the most populous countries in the world have had to face issues of unemployment. In both of these countries in the early 1990s, the lack of adequate workforce and resource management was the primary cause of high unemployment rates. However, notably in India in the 1990s, a number of other issues, such as the caste system and society-bound jobs, contributed significantly to the country's 5.6% unemployment rate. As can be observed, the considerable increase that was seen in 2020 on both countries has been attributed to dampened economic activity and consumer sentiment, both of which have been impacted due to the surge in cases of Covid-19.

Both countries have been struggling with population issues, with India expected to overtake China as the nation with the largest population by the year 2030. While both countries experienced a decrease in population growth rates from over 2% to less than 1%, the decline was more significant in China due to the policy measures adopted like that of one child policy initiated in the 1980s which severely restricted the number of children a couple could have to just one leading to a skewed population favouring males due to cultural notions and an ageing population where the average age of a Chinese person is estimated to be around 37 which has started to effect its economic prospects.

The policy has only been updated in the recent past to permit a maximum of three children to be born into each family. With a population that is on average 28 years old and a demographic dividend of over 50 percent, India is poised to have one of the youngest populations in the world. This is because India followed a population control policy that was more natural, consisting of educating and spreading awareness rather than taking a harsh top-down approach. Nevertheless, it remains to be seen how effectively India makes use of this benefit given the lack of proper skill base of its young people.

When comparing the two nations' economies, it can be seen that from 1991 until the present day, the gross saving rate has increased, not only in terms of absolute value but also in terms of relative value. In India, household savings continue to make up the majority of total savings. This heavy reliance on domestic saving is also one of the reasons for low capital formation in India. Additionally, the highly unequal distribution of wealth contributes to a lower amount of savings that can be used for capital formation. On the other hand, in China, high investments in factories and manufacturing institutes along with increases in worker productivity have contributed to higher output production, which in turn has contributed to higher capital formation.

Table 3: International Economy Indicators for India and China, 1991 and 2021

		India		China	
		1991	**2021**	**1991**	**2021**
Gross saving rate	%	22	31	39	45
Gross saving	Billion US$	58.774	817.570	147.603	6556
Gross capital formation	%	25	31	35	43
Household consumption expenditure	Trillion US$	0.18	1.88	0.183	5.61
Household consumption expenditure	% of GDP	67	59	48	38
Inflation rate	%	13.9	5.56	3.6	1
FDI	Billion US$	75.537M	64.362	4.366	212.475
Exchange Rate	US$	22.94	73.92	5.32	6.45
Balance of Payments	% of GDP	(1.6)	(1.2)	(3.5)	(1.9)

		India		China	
		1991	2021	1991	2021
Current Account	Billion US$	(4.29)	(34.65)	13.27	317.3
Total reserves	Billion US$	7.62	638.48	48.17	3.83
Exports	Billion US$	22.94	496.49	55.54	2720
Imports	Billion US$	22.94	725.55	40.75	3090

Source: World Bank (2023), CIA World Factbook (2023)

3. Trade Performance

The 1991 severe economic crisis that was caused by a problem with the country's balance of payments which in turn was caused by the negative impact of high fiscal and current account deficits that were incurred in the 1980s. The most significant factors that led to an increase in inflation were supply shocks, which were caused by a setback in agricultural production as well as a rise in international oil prices, and monetary expansion, which was caused by the automatic monetization of the government deficit. The rate of inflation in India fell after the reforms that were implemented in 1991. The comprehensive character of the changes that were implemented in 1991 can be inferred from the fact that the following actions were taken within a few short months of the reforms being implemented: The complex import licensing system was replaced by a system of tradable import entitlements earned through exports (later replaced by a dual, and then market-determined exchange rate); customs duties were phased reduced; the fiscal deficit was reduced by 2 percent of gross domestic product (GDP); foreign investment was opened up; banking reforms were launched; capital market reforms were initiated; and initial disinvestment of public equities were carried out.

A significant undertaking in economic reform was started in China by the government in 1978, after many years during which the state had maintained complete control over all productive assets. It encouraged the formation of rural enterprises and private businesses, liberalized foreign trade and investment, relaxed state control over some prices, and invested in industrial production and the education of its workforce in an effort to reawaken a sleeping economic giant. According to the vast majority of accounts, the strategy has been a resounding success. For a good number of years, China's inflation rate has remained remarkably consistent at a negligible 0.8%. This has been achieved despite the fact that China has had a fiscal surplus for a number of years running and should instead be struggling with inflation in an ideal world. On the other hand, China has established sovereign wealth funds, which invest the additional cash in assets located outside of China in order to keep the inflation rate at a manageable level. India still continues to struggle with an inflation rate which often breaches the MPC mandated 6%-2% range leading to the Central Bank adopting easing out policies.

India has become a top destination for foreign direct investment (FDI) as a result of reforms that were implemented in 1991 and subsequent reforms that have taken place since then. The government of India currently permits foreign direct investment of up to one hundred percent in a number of industries, including retail, telecommunications, and others. Despite this, India's investment potential is significantly underutilized in comparison to China, which has significantly surpassed India in terms of its ability to attract investments through the implementation of industry-friendly policies.

India uses a floating exchange rate, which leaves it susceptible to the influence of external factors. This is especially true when considering the fact that we are import dependent in the energy sector, importing almost 80% of our crude. This puts pressure on our current account deficit, which is a clear indication that India's economy is not doing particularly well on the external front. Given that we continue to import large volumes of oil, a falling value of the rupee will have an effect on the price of oil, both directly and indirectly, through the cost of transportation. This is because we continue to import large volumes of oil. The prudent management of the yuan exchange rate for the purpose of maximizing China's export competitiveness is a central tenet of China's economic strategy. As is the case with the majority of advanced economies, China does not have a currency exchange rate that is free to float and is instead determined by market forces. Yuan, also known as the renminbi, is the country's official currency, and it is pegged to the dollar. It is frequently referred to as a currency manipulator, and for good reason.

In the early years of their economies, both India and China adopted protectionist policies aimed at reducing their reliance on imports and replacing them with domestically produced alternatives. During that time, China's approach to international commerce was more regimented than India's approach to the same market. As a direct consequence of this, both were negatively impacted by inefficiencies in production as well as technological backwardness. It wasn't until 1978 that China started implementing its 'open door' policy, and it wasn't until 1991 that India adopted liberalization policies. In 1991, China's percentage contribution to the overall export of goods amounted to just 2.8% of the global total. The expansion of China's exports and the country's ability to entice FDI from overseas both played a significant role in the country's significantly accelerated economic growth. India, too, adopted this strategy, albeit with some necessary modifications.

China's efforts to reform its domestic economy were motivated by the country's desire to join the World Trade Organization (WTO). The beginning of China's membership in the World Trade

Organization (WTO) in December 2001 ushered in an era of unprecedented trade liberalization. Access to overseas markets has helped China achieve phenomenal growth in its exports in recent years. In 2009, China overtook both the United States and Germany to become the country with the most merchandise exported. Exports from India also increased, albeit at a slower rate than those from China. Both countries have enormous import bills due to their dependence on foreign energy sources; however, China is able to make up for its import dependence due to its position as the world's largest manufacturer, whereas India continues to run enormous current account deficits due to the fact that its exports are unable to compete on the international market due to the country's high domestic costs.

Despite the fact that India may lag behind China in a number of areas, there is one area in which India has successfully carved out a position for itself. India is currently referred to as the pharmacy of the world, and with good reason. India is the third largest maker of pharmaceuticals in the world by volume, and it also has the lowest cost of manufacturing of any country in the world. The pharmaceutical sector in India is about $42 billion, but the business has grown to significantly rely on its adversary for the source of active pharmaceutical ingredients (API), which are essential for the formulation of pharmaceuticals. It used to be the case that India had a thriving domestic API manufacturing industry, and the country imported only about 1% API from China in the early 1990s. However, that number has since increased to around 70%, and even more than 90% for some antibiotics that are essential for life. All of this changed after India adopted the path of liberalisation after 1991.

The World Trade Organization (WTO) joining date and the reason for that decision also varied between the two countries, which made a lot of difference between the eventual outcomes. Rastogi (2017) analysed the WTO journey of India and China in great detail. To recount and advance that understanding, we proceed here. Because India was a member of the WTO throughout the 1990s, domestic firms were compelled to comply with the product patent requirements of global standards. India came out on the losing end of the rearrangement, which was won by China. China was able to profit from the migration of manufacturers to its mainland in quest of vast markets. China offered quicker economies of scale since institutes that were backed by the state were able to expand despite reductions in earnings. The pollution-heavy industries of APIs came under fire from environmentalists, which resulted in the industries' exodus from India and into the arms of China.

However, at this time India is making an effort to wean itself off of this dependence and has implemented programmes such as the PLI that are supporting the manufacturing of APIs in India. As of right now, 35 APIs have begun production at 32 different factories. India's also encouraging bulk drug parks. Bulk drug parks, which are able to leverage scale to offer infrastructure, process waste, and, as a result, offer cheaper municipal resources and lower production costs, were essential to China's growth in the pharmaceutical industry. China is currently the world's largest pharmaceutical manufacturer. Bulk drug parks that have the capacity to manufacture key precursors in a safe and cost-effective manner will, in the long-term, reduce India's reliance on China. Moreover, they will also make India an attractive prospect for businesses. This is due to the fact that India will be able to provide a more fully integrated pharmaceutical production environment, which will streamline supply chains and make China's business model significantly less unique. In order to encourage the separation of the Indian pharmaceutical industry from its ties to China, the government has set aside more than 2 billion dollars' worth of incentives.

4. Development Performance

According to the data provided by the World Bank, both countries have made significant strides toward improving the health of their citizens or residents, which has resulted in a decrease in the overall mortality rate. The infant mortality rate in China fell from 53.8 per 1000 children to 10.7, a decrease of 80 percent. According to the reports of the WHO, this is because China has been taking the necessary steps to eradicate life-threatening diseases such as malaria, measles, and other communicable diseases, and has also been providing good health facilities for expecting mothers. Under its many different programmes, the government of India has taken decisive action to reduce the number of abortions performed and increased institutional deliveries, to eliminate diseases such as pneumonia, malaria, tuberculosis, and diarrhea through its universal immunization initiative, and to improve unhygienic living conditions. These measures include the provision of appropriate medical facilities, the improvement of unhygienic living conditions, and the reduction of birth complications through the promotion of institutional delivery. Additionally, the government took measures to lessen the number of people who passed away from polio and ensured that all necessary vaccinations were easily accessible.

Table 4: Human Development of India and China, 1991 and 2021

		India			China
		1991	**2021**	**1991**	**2021**
Infant mortality rate	Per 1000 live birth	86	28.71	42	8.96
Life expectancy	Years	58.15	69.96	69.19	77.13
Literacy index	%	48.22	74.04	77.79	96.84
Human capital index	Scale of 0-1	0.4	0.5	0.7	0.81

Human development index	Scale of 0-1	0.43	0.645	0.507	0.761
Birth rate	Per 1000 people	31	17	20	9
Death rate	Per 1000 people	11	7	7	7
Health expenditure	% Of GDP	4.03	3.01	4.31	5.35

Source: World Bank (2023), CIA World Factbook (2023)

Despite the fact that both countries' GDPs began at roughly the same level, China's GDP is now approximately five times larger than India's. The difference in longevity between the two countries is approximately seven years. In spite of the fact that its hospitals and medical professionals are among the best in the world, India suffers from inferior levels of hygiene and medical education in comparison to China, because of the relatively low level of public spending in the healthcare industry in comparison to that of its competitors. The out-of-pocket expenditure continues to be a significant component in the spending mix of Indian households, accounting for more than sixty percent. The health expenditure as % of GDP has seen a decline in India as compared to China which invests a significant portion as health expenditure.

China's higher social expenditure has resulted in faster improvements in literacy and the human development index compared to India's, which is one of the reasons why China's development indices show a better performance than India's do. Before India can catch up to China, there is a lot of work that needs to be done.

5. Miscellaneous Indicators

		India			China
		1991	**2021**	**1991**	**2021**
Mobile cellular subscriptions	Per 100 people	0	83.6	0	119.4
Individuals using the Internet	% of population	0	43	0	70.40
Political Stability		-0.97	-0.86	-0.1	-0.29
Bank branches	Per 100000 people	11.14 (2012)	14.74	7.76 (2012)	8.79
Recorded forest area	% of land area	21.6	24.3	16.9	23.4
CO2 emissions	Metric tons per capita	0.7	1.8	2	7.4

		India			China
		1991	**2021**	**1991**	**2021**
Renewable energy consumption	% of total final energy consumption	57.6	32.93	33.26	14.45

Source: World Bank (2023)

Increasing mobile phone subscriptions have helped both economies. The two nations began at square one in 1990, making baby steps forward during the first decade. By the conclusion of the second decade, the two nations were on equal footing, having made the same rapid transition into the Mobile Age. China's economy has grown significantly in this area during the past decade, surpassing India's by a factor of 40. This is due to the rapid pace at which China's cellular market has adopted new technologies and the fact that new phones are often available in China before they are in other areas of the world.

India is gaining ground in the fight to adopt digital transactions, which had a massive rise after the demonetization decision of 2016. India tallied 25.4 billion digital transactions in 2020. This is 1.6 times as many digital transactions as there were in China (15.7 billion), and it was nearly 21 times as many as there were in the US (1.2 billion). With mobile and Internet banking transactions increasing to 13,615 per 1,000 adults in 2020 from 183 in 2015 and the branch network of banks edging up to 14.7 per 1 lakh adults in 2020 from 13.6 in 2015, which is higher than in Germany, China, and South Africa, India has now surpassed China in terms of financial inclusion metrics.

India has gained an average of 2,66,000 ha of additional forest land annually between 2010 and 2020, placing it third internationally in terms of average annual net gain in forest area; nevertheless, China's efforts to reverse deforestation and forest degradation are noteworthy. This has been made feasible by large-scale tree-planting projects and a focus on the forest ecology as a whole. The planet is greener than it was previously. Compared to 2000, the planet currently has around 5.5 million square kilometres more green leaf area year-round. This increase is largely attributable to greening in China and India. China contributed 25% of this growth, whereas India contributed 6.8% to the global net increase in leaf area between 2000 and 2017.

Despite having a less vegetated area than many wealthy nations, the contribution of the two countries to greening is far greater. China has 6.6% of the world's vegetated area, whilst India has only 2.7%. India's rise in total leaf area is equivalent to that of the United States and Canada, which have three times more vegetated land. In China, 42% of the greening comes from forests and 32%

from croplands, whereas in India, 82% of the greening comes from croplands with only a modest contribution from forests (4.4 per cent).

The rivalry between the two nations is not restricted to the earth's surface; it is also growing to the space frontier, where each nation is vying for its own sector. In 2019-2020, India likely spends approximately US$1.8 billion (S$2.46 billion) on space programmes. The increase from earlier levels of space expenditure has been remarkable, but it is still just one-sixth of China's space budget. China held 13.6% of all earth-orbiting satellites in 2020, while India's share was only 2.3%. However, India is no slouch, having launched 104 satellites in a single shot in 2017 and succeeding in its very first effort to reach Mars at the lowest cost to date. India hopes to send its first people into space as part of the G*aganyaan* mission, while China intends to construct its own space station. Even though China is ahead of India in its spending and ventures in the space sector, India could very well surpass China if it can leverage its global relations in the space sector, given that China has been labelled a security threat due to its pursuit of a military civil fusion strategy in which it uses civilian space endeavours for military purposes, thereby putting the national infrastructure of nations at risk.

6. Concluding Remarks

From the two largest economies and oldest civilizations on Earth to the two major emerging economies, two most populous nations, and two fierce rivals, it is an amusement to be watching India and China. While both nations have taken closely related paths over their modern avatar post the second world war, their outcomes started differing widely whence they started with the force of globalization circa early 1990s. China has grown leaps and bounds on the back of centralized, and therefore swift, decision-making, which is often compared to the Chinese cultural symbolism of the Dragon. India, on the other hand, has grown stronger and sturdier but not fast enough to match the Chinese pace. Therefore, it is often quipped that the Indian 'Elephant' has progressed slower to the Chinese 'Dragon'. However, the post-covid world is bound to witness whether the mythical Dragon resurrects or the consistently moving pachyderm will come out victorious without threat to anyone else.

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