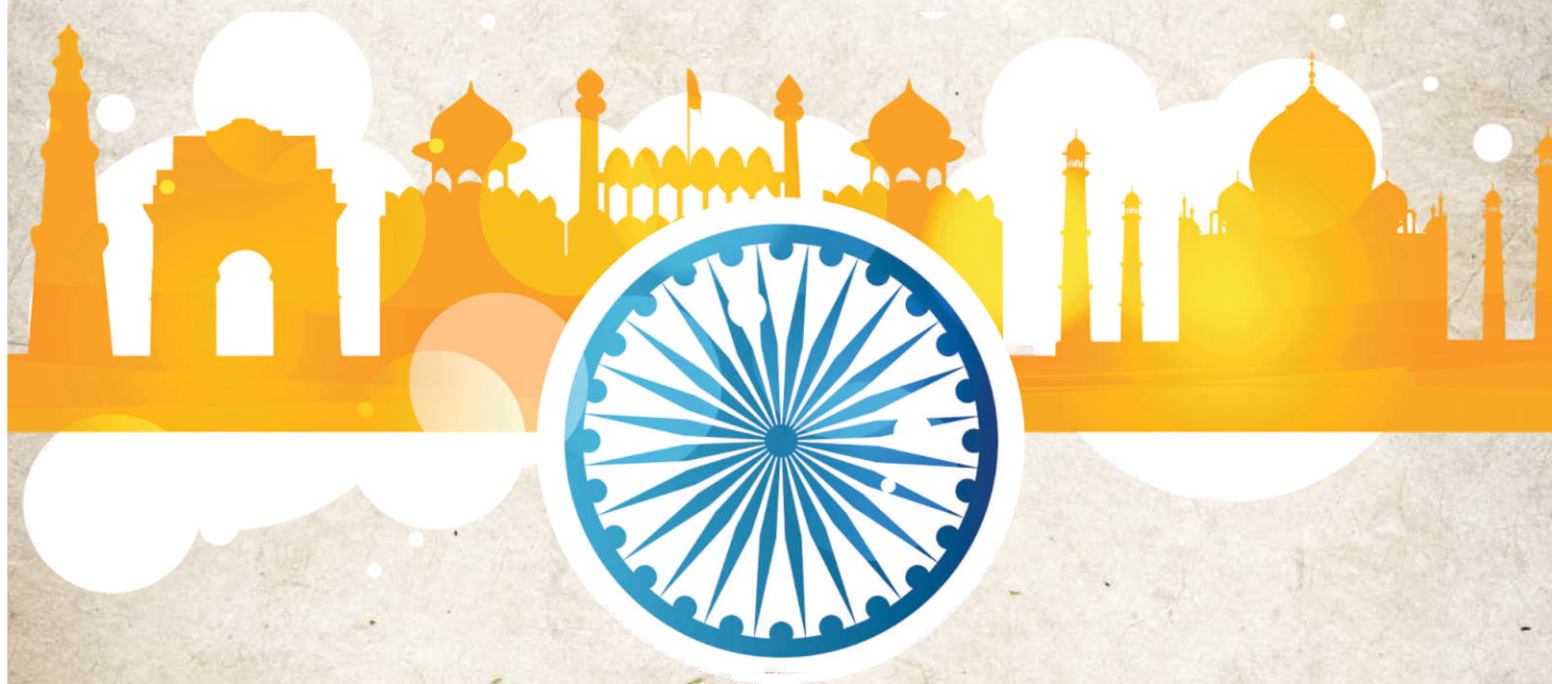


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75
Azadi Ka
Amrit Mahotsav



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HAR GHAR TIRANGA



Message from the BJYM President



Namaskar!

I hope that the August edition of the BJYM Magazine finds you in good health. I express my deepest condolences to the entire BJYM family at the tragic loss of Shri Praveen Netru, who was a strong pillar of the team BJYM in Dakshina Kannada. This brutal murder in Karnataka feels like a personal loss, and I stand with our brave karyakartas in this hour of grief. The brutal murder of our Karyakarta Shri Praveen cannot be treated as a one-off incident. Such acts of terror must be dealt with an iron hand. The serial killings of Hindu activists in Karnataka by Islamists are part of the pre-planned organised crime to terrorise society and sabotage the democratic process. A comprehensive investigation is needed to uncover the entire terror network and its masterminds. BJYM will continue to fight for justice for Praveen and other brave karyakartas. I have full faith that the Karnataka government will bring to justice the perpetrators of this

dastardly act as swiftly as possible.

On July 25th, BJYM scripted history by organising the first-ever political rally at the iconic Lal Chowk, Srinagar in Jammu & Kashmir after 70 years. The momentous event witnessed the participation of more than 2000 nationalists as a testimony to the New Kashmir after the abrogation of Article 370. BJYM National President Shri Tejasvi Surya carried forward the legacy of Prime Minister Shri Narendra Modi, who unfurled the Tiranga at Lal Chowk in 1992 despite the threat by terrorists.

The public rally was followed by the Tiranga bike rally from Lal Chowk to Kargil. Two hundred bikers from across the country participated in the bike rally. Sacred soil from the forefront of the martyred soldiers was brought from different parts of the country by BJYM karyakartas to be offered at the Kargil War Memorial. BJYM is committed to the mantra of 'Ek Bharat Shreshtha Bharat' of Prime Minister Modi and stands as the eternal guardian of the Bharat against the forces of separatism, terrorism & chaos.

Friends! As India celebrates Azadi ka Amrit Mahotsav, Prime Minister Shri Narendra Modi has launched a mass movement of Har Ghar Tiranga. I urge all the karyakartas to make this campaign a grand success by ensuring that Tiranga reaches every home, and on August 15th, your neighbourhood is draped in patriotism and unity. We must set aside our personal and political differences to honour the countless generations of freedom fighters who sacrificed their all over the centuries.

Under the inspiring leadership of BJP National President Shri J.P Nadda, a joint NEC of all the BJP morcha was held in Patna to attain better synergy between morchas striving towards the common goal. I request BJYM karyakartas at every level to co-ordinate and work more closely with the dedicated karyakartas of other morchas, learn from the best practices and develop personal friendships. We are all part of the BJP Parivar and stronger together!

Vande Mataram!

Tejasvi Surya
National President
Bharatiya Janata Yuva Morcha



Editorial

Under the inspiring leadership of Prime Minister Shri Narendra Modi, India celebrates 'Azadi ka Amrit Mahotsav' to mark 75 years of independence from colonial rule. The centuries of heroic resistance against foreign rule began a new chapter in Indian history in 1947 when we started rebuilding our economy, society, and polity. The last 75 years have seen moments of great challenges and triumphs. As India enters 'Amrit Kaal', it is imperative that the youth of India engage with the emerging issues and challenges that will shape the next 25 years.

Rapid technological changes are reshaping the world as we know it. 4th industrial revolution promises to transform not just the economy but also the social structures and polity as we know it. The shift in the global geo-economic and geo-political situation in the post-pandemic world is already visible with the relative decline of the west, causing realignment of global power and opening new avenues of contestation and conflicts.

It places the youth of India at a critical juncture where it must not only respond to the emerging issues but also pro-actively shape the future. We are entering a period of great disruption where the existing economic and political structure and global order can not be taken for granted. We are already facing the challenge from big-tech to India's digital sovereignty. The transformation of the production process and automation has raised questions on the 'future of work' itself. Machine learning and rapid advancements in artificial intelligence open up challenges we cannot yet comprehend. The historic task of this generation will be to manage this transformation which will test its resolve, judgement, and leadership to the limits.

The most important task in the next 25 years will be to rapidly industrialise India in a sustainable manner to create mass employment and prosperity and build up India's manufacturing and technological prowess. Building an 'Atmanirbhar Bharat' is also necessary to face the active and passive threats in the evolving battlefields of the future. It calls for a rethink and renewed commitment to our approach to critical issues like education, health, economic policies, defence policies and governance models.



The youth must also be politically aware and rooted in the civilisational ethos of Bharat. The centrifugal forces of anarchy will also try to take advantage of the changing scenario and redouble their efforts to spread their ideology using the new modes of communication and indoctrination. The only political answer to it is to mobilise every section of the youth based on nationalism for constructive politics in the service of the masses. The BJYM has been striving towards nurturing the youth leadership that can face these future challenges and has the intellectual depth to comprehend and respond to the threats, old or new, under changed circumstances.

This edition of the BJYM Magazine has articles from the BJYM karyakartas and supporters on the policies and issues that will shape the next 25 years and how the BJP government is laying the foundation of the future.



Interview with Tejasvi Surya, National President of BJYM and MP Bengaluru South



India is celebrating Azadi Ka Amrit Mahotsav. How do you see India's journey till now?

It is an extremely inspiring journey displaying the grit, resilience and strength of the brilliant people that Indians are. Looking at where we have come and what we have achieved in the last 75 years is a cause for great joy, celebration, and motivation to do better. Many countries in our neighbourhood and the global south gained independence in the 40s and 50s. We are among the select few post-colonial countries that successfully maintained political stability and territorial integrity under a democratic setup. We have achieved political stability, we have achieved economic progress, and we have made tremendous progress in every walk of national life – these are all great causes of celebration.

At the same time, there is also a feeling that perhaps we could have done much better with better political leadership during our country's infancy. We have examples, especially on the fronts of national, economic, and cultural revival, like Israel, which gained independence in 1948. Around the same time, China started its journey as an independent republic. The same follows for many Southeast Asian countries, which have performed much better in per-capita growth and cultural revival. It has to be taken cognisance of because ever since 2014, India has shown that inherently there is a great strength, great ingenuity in the nation, and great enterprise among our young people.

But poor leadership and a restrictive policy ecosystem had shackled the great Indian nation to a large extent. Once it was unshackled, we see how India is on the rise. But still, there is great joy that we have maintained our unity, integrity and Akhandta as a nation due to our inherent cultural and civilisational

strength, and we have also matured as a modern democracy. These are the big achievements, and we also know that had we got a better quality of political leadership at important junctures, especially during the very initial years of our journey as an independent nation, we would have fared even better. Overall there is a lot of optimism and positivity for the future.

Prime Minister Shri Narendra Modi has given the call for Amrit Kaal. What is the significance of the Azadi Ka Amrit Mahotsav leading up to the Amrit Kal?

Amrit Kal is of great significance to the people of India, not only in their individual lives but also in the collective national life of the country because India is on a different and new path of progress and prosperity for all.

An editorial in the Guardian of 18th May 2014 kind of sums up why this Amrit Kal is important. It said that 18th May 2014 "may well go down in history as the day when Britain finally left India. Narendra Modi's victory in the elections marks the end of a long era in which the structures of power did not differ greatly from those through which Britain ruled the subcontinent. India under the Congress party was in many ways a continuation of the British Raj by other means."

So 2014, in many ways, marked true independence for India – politically, culturally, and economically. That is very important because it opened floodgates of opportunities for the common Indians in every way. The fact that a tea-seller could rise to become the PM electrified the masses. And his relentless war on dynasty politics is creating greater political freedom; it is an unshackling in the true sense. Removing the 'License, Quota, Permit Raj' enabled economic freedom in the truest sense. Today we see first-

generation millionaires, billionaires, and unicorn owners, which is economic freedom in action.

Nehruvian secularism had destroyed and sapped the very vitals of our country's cultural life. Today we have taken a very decisive turn away from it. There is pride in our heritage, in our civilisation, in our languages and in all the different aspects of our culture. The reconstruction of the Ram Mandir is just an example of this cultural freedom we are witnessing. The NEP stresses Indian and cultural-focused education.

But this only started in 2014; therefore, the next 25 years are crucial to achieving two objectives: Economic consolidation and Institutional Decolonization. In the next 25 years, India shall lead the world, be it in foundational technologies, big-tech or the next big corporates. While India shall pioneer at the frontiers of the technology shaping the future, it will also give the template for a harmonious world based on its religion & spiritual strengths. And our generation has a unique opportunity; there never was a better time to be born young and born in India. India's youth must meet their personal goals and ambitions and give solutions to global issues. So the Amrit Kal is an extremely exciting period for India and young Indians where our generation can become the harbinger of a new golden age of India.

You talked about innovation and technology. How do you see the impact of technological disruptions in the coming decades?

If we look at the history of the world and that of India, we know that as long as India had the technological edge over others, we were one of the world's foremost powers. As and when we fell behind technologically, our overall downfall also began. In that sense, technological pioneering and leadership are crucial for any nation in today's day



and age. And India has a lot of catch-ups to do in this very important space. As I said, had we had much better political leadership initially, we would have focused more on core science and research, development, engineering and working on foundational technologies.

But being late is better than never having started the work. We have made tremendous progress in the last few years, whether it is Artificial Intelligence, Quantum Computing, Blockchain, or Big Data. Or Web 3.0 or developing 5G, we are working on technologies that will change the world in ways we can't even fathom. And both from a security point of view and creating prosperity in the nation, investment and leadership in all these areas will be crucial for India. India is blessed with terrific human resources, and our engineers are some of the best in the world. The quality of research that comes out of our universities is also improving. And now that the policy space has opened up, more funding is flowing into these areas.

We have made tremendous progress in niche areas like space technology, where India can fly to Mars or even send the Chandrayan at competitive, low-cost prices. It indicates that we can replicate our success in all other fields. So, this is the time for us to be aggressive, push the pedal on these things, and go the full way.

How do you see polity shaping up in the next 25 years? And, according to you, what would be the emerging issues in the various sections of society?

There are three big changes that Indian polity and society will see. One is India's rapid urbanisation, so I think we will have more urban constituencies in the coming years. We are building several new cities, and our existing ones are becoming big metropolises so that we

would find more seats in the Lok Sabha and the assemblies from urban constituencies. And, naturally, urban issues and issues affecting largely the urban dwellers, including all socio-economic and environmental issues affecting them, would find more space in our public and political discourse.

Secondly, while India is rapidly urbanising, a new middle class is also emerging because of economic growth. So we will witness more debates and discussions around the middle class, including how future tech will affect jobs. Issues like jobs of the future, privacy and big tech etc., will gain more political traction. It would include if there will be large-scale displacement of traditional jobs and how it will affect the economy and society.

What would the new jobs be and the question of new age social security like universal basic income are also some discussions that may come up. Because of the growing middle class and more educated and aware youth, ecology and the environment will also become important issues. Debates around climate change and ecology will have a great impact.

The third issue is the demographic challenge, which will be a cause of concern and debate within the country. How India will approach this change in demography concerning certain sections of the country and how aggressive assertion of community-specific agenda will affect the constitutional framework and governance will become a serious issue. The slowing down of the population growth and an ageing population within a few decades will also pose new challenges like productivity, pension, healthcare etc.

You raised the important issue of slowing population growth. Amrit Kaal is the only window left to achieve mass industrialisation and create mass

prosperity. Do you think we can achieve it? Can India become rich before it becomes old?

See, if we go back and read thinkers like Shri Aurobindo, Ambedkar and Savarkar, they were all votaries of mass industrialisation, even before independence. However, we missed the bus in the initial decades of independence and paid a heavy price. Mass industrialisation is the only way to create mass prosperity. PM Modi also focused on building modern economic growth based on robust manufacturing. We have now introduced the PLI scheme and finally introduced great policy support to manufacturing. These efforts will bear fruits in a short period. It indicates that India can be a very important destination for manufacturing for the world.

The mistrust & the fallibility of the existing global supply chain is also a great opportunity for India to exploit. And in all my interactions with the Indian manufacturers, whether MSMEs or industrialists, I have seen the great spirit of enterprise and innovation. And, I think all of that has finally come to the fore, and we would become the world's manufacturing capital, thereby creating mass prosperity for more than a billion Indians. We need to leverage our core strengths like large workforce, geographical location and work on skilling, infrastructure and logistics to increase efficiency and lower costs in an environment of economic freedom for people.

What do you think the BJP will look like in the next 25 years, and how do you think BJP should innovate to meet the expectations of New India?

The BJP, right from its inception, has stood for the idea of nation First, which has been our core philosophy, and I think whether it is the next 25 Years or the next 50 years, the BJP will always

have this philosophy at its very core. The BJP also had the unique distinction of being the party representing all sections of Indian society. Be it the youth, women, the poor and the backward; everybody has found space within the Sarvavyapee and the Sarvasparshi idea of the BJP. It truly is how a democratic party must be. I think this will continue and is one of our strengths.

Until 2014, we were a party primarily in opposition, so the DNA of our Karyakartas is the DNA of a party in opposition. But now we are the ruling party in the centre and several states. And we will be in power for the next 30 years, so the transition will be from being a party in opposition to a party in governance. So our Karyakartas have to upskill their political skills from agitative politics to more constructive and governance-based politics. And we are already witnessing that transformation in our cadre, and it will become a hallmark of the BJP during Amrit Kal.

The BJP has already produced the finest administrators. The most politically

astute and capable administrators, such as Prime Ministers and several chief ministers, belong to BJP. The BJP is already established as the party of good governance in India, both at the centre and the state level. And in the coming years, this will be further reinforced with the new generation of karyakartas rising to important positions in the party and government. From the panchayat to the parliament, the BJP elected representatives are the ones who will provide the most successful administration and good governance. It will be a very interesting change as we are already working on it.

You referenced the National Education Policy (NEP) earlier, so what are your thoughts on the new NEP policy, and how will it impact the next generation?

As I mentioned earlier, the previous National Education Policies were a continuation of the British education system, intended to create nothing more than supplicants or clerks to assist the British administration in India. It stifled enterprise, ingenuity, innovation, and to use Shri Aurobindo's words; it was good

at producing Indians who were spiritually, physically, and intellectually dead. We have finally moved away from that and have an India-centric education system which will generate intellectually robust, technologically competent and culturally rooted Indians who will become leaders in the 21st century.

It has been well received by all the quarters, including those always critical of the government. NEP has a holistic vision from school education to higher education to universities. It is the policy of a more confident India which is open to the world. I think the NEP has hit the right note on every aspect. The challenge is to execute it effectively and implement it at the grass root level. And going by PM Modi's track record as a brilliant administrator, the NEP would also find successful implementation. It will truly lay the foundation of New India that will lead the Amrit Kaal and beyond.

**Interviewed by: Kunal Tilak,
Vice President, BJYM Pune,
and Rahul Bhaskar,
Editorial Board Member, BJYM**



India at 75 - A quick big economic snapshot

Technological complexity and state capacity are higher than incomes suggest.

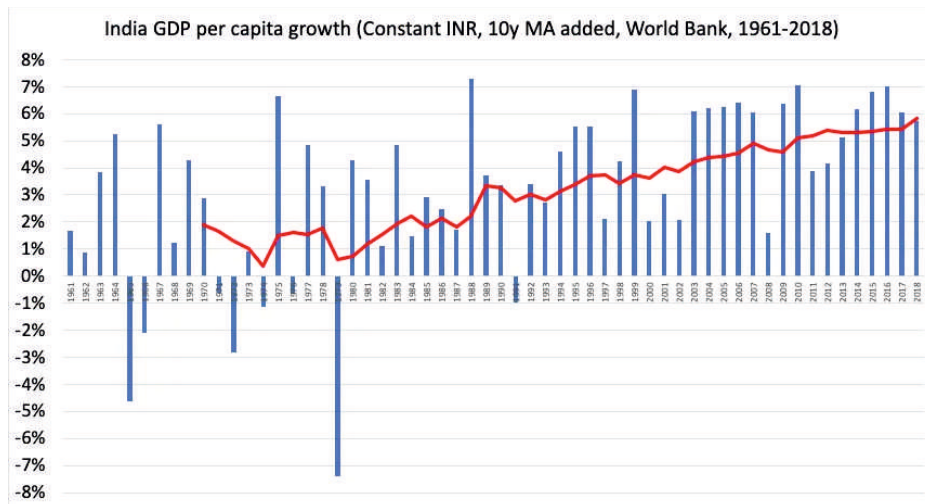
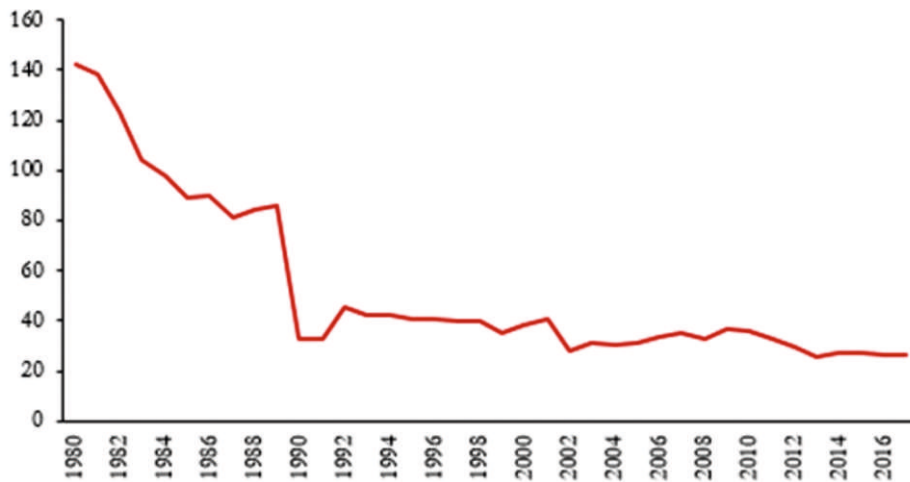
As we enter the month of August 2022 and approach 75 years of Indian independence, some score-keeping is inevitable, and we must not always get caught up in short term analyses. What is the big picture? Where is the Indian economy headed? As the world's largest country as soon as next year in terms of population, what

happens in India matters not just for Indians but for all humanity.

In inflation-adjusted terms, output has increased about 40 times in 75 years¹ which is about a 5% annual increase that has been relatively smooth compared to other countries. Population has increased 4x, and hence **per person incomes are up almost 10x in 75 years, or an order**

of magnitude. Since population growth rate has been slowing down for four decades, this translates into an ever rising per capita growth rate again on a smoothed-out basis. (Rolling coefficient of growth variation graph below via World Bank/Times of India² - lower variation means smoother growth as can be seen in the second graph)

10-year rolling coefficient of variation



GDP per capita, 1600 to 2018

GDP per capita adjusted for price changes over time (inflation) and price differences between countries – it is measured in international-\$ in 2011 prices.



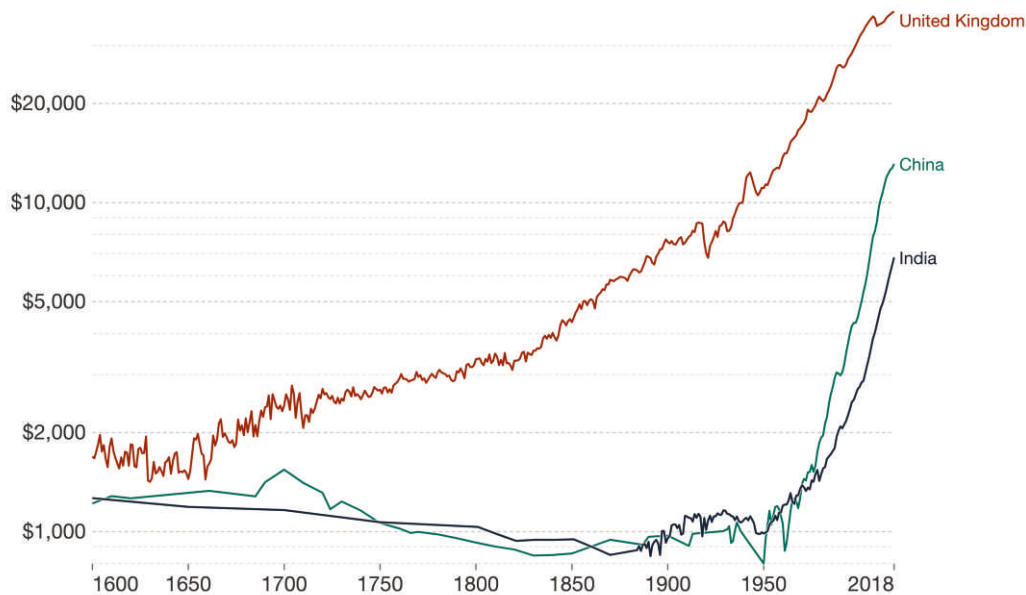
Source: Maddison Project Database 2020 (Bolt and van Zanden, 2020)

OurWorldInData.org/economic-growth • CC BY

The pandemic will put this ‘smooth’ trend out of whack for a few years, but I expect that to even out over time. But we are getting into the details too much for this post. **Let us further zoom out for a second. Over the last almost-half millennium this is how the Indian economy has fared.**

GDP per capita, 1600 to 2018

GDP per capita adjusted for price changes over time (inflation) and price differences between countries – it is measured in international-\$ in 2011 prices.



Source: Maddison Project Database 2020 (Bolt and van Zanden, 2020)

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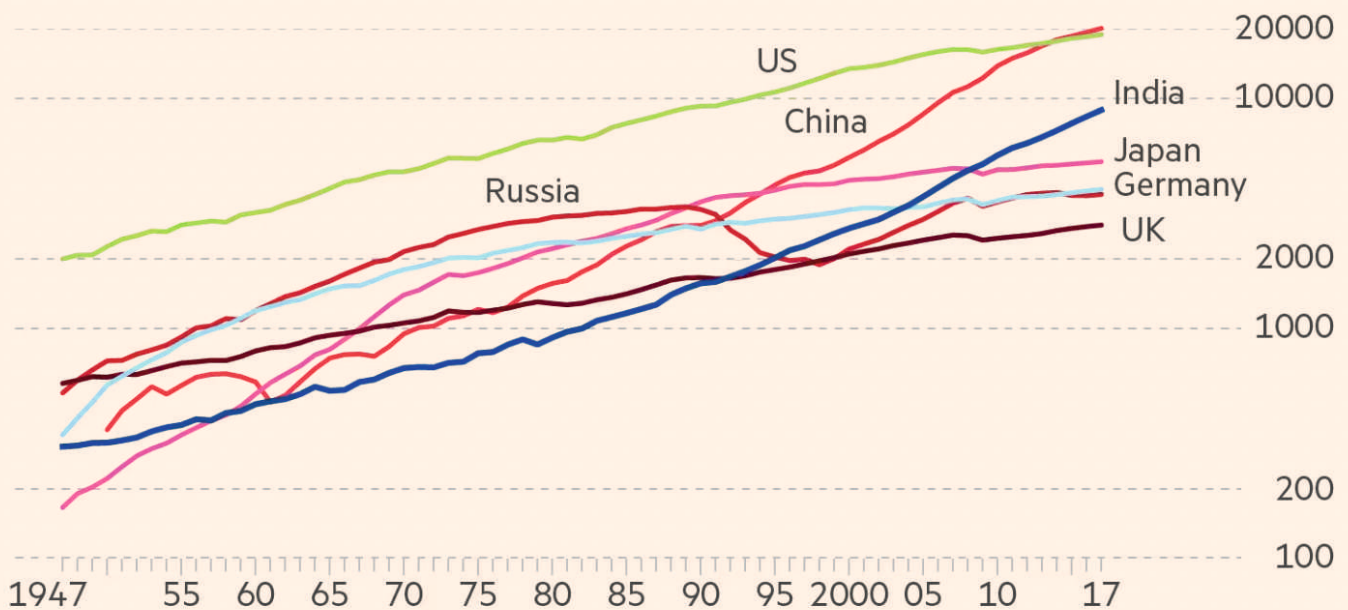
Now let us see the same graph but adding UK and China as well (Europe/West may be a better comparison for all of India/China, but UK/Netherlands and later the US are good proxies for the global economic frontier).





India's rise

GDP at purchasing power parity (\$bn in 2016 prices, log scale)



Sources: The Conference Board; Angus Maddison
© FT

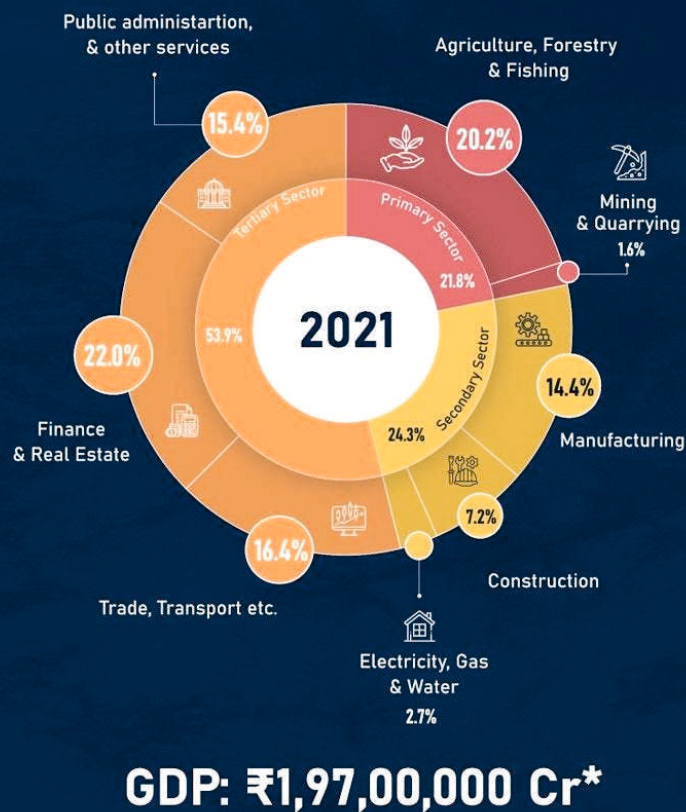
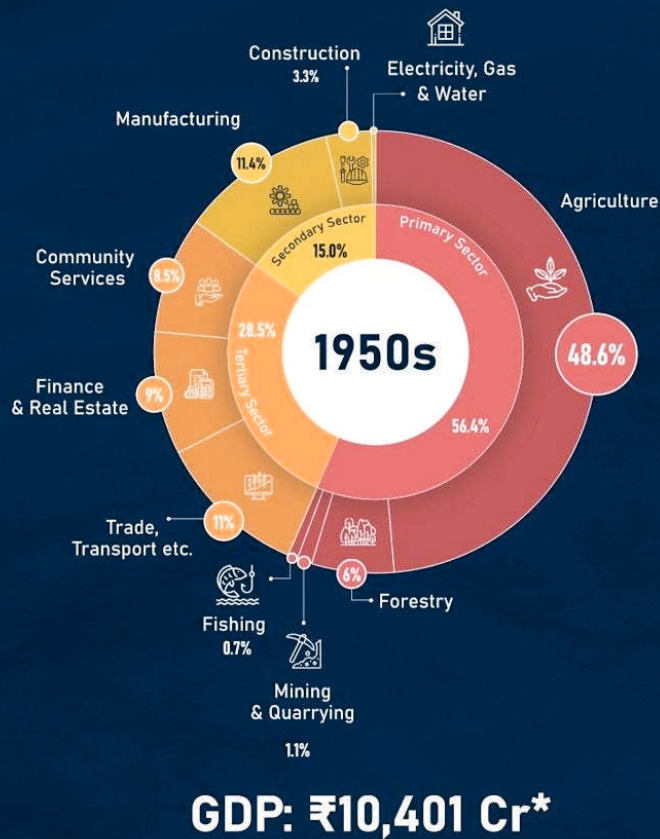
We can see that India was not only far behind the UK in incomes in 1600, but even fell behind China (though overtook it by a bit in the 18th century while still falling in absolute terms) which shows that colonialism of all hues hurt India for a long time. Only in the second half of the 19th century and the early 20th century did India see a mild rise which too was largely reversed just before Independence in 1947.

While per capita figures matter most to understand human progress, overall weight matters as well for international influence. Market exchange rates are no doubt very important, but purchasing power parity numbers in effect incorporate future influence as well as the fact that military spending etc in a lower-income country goes further than in a higher-income one. **Here too, India's rise has been significant overshadowed only by China's.**



How sectoral contribution to GDP has changed since Independence

Sector wise % contribution to GDP



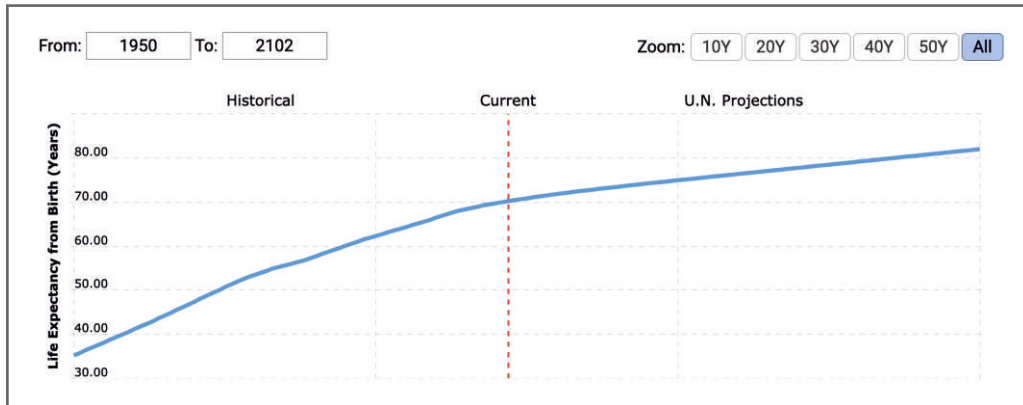
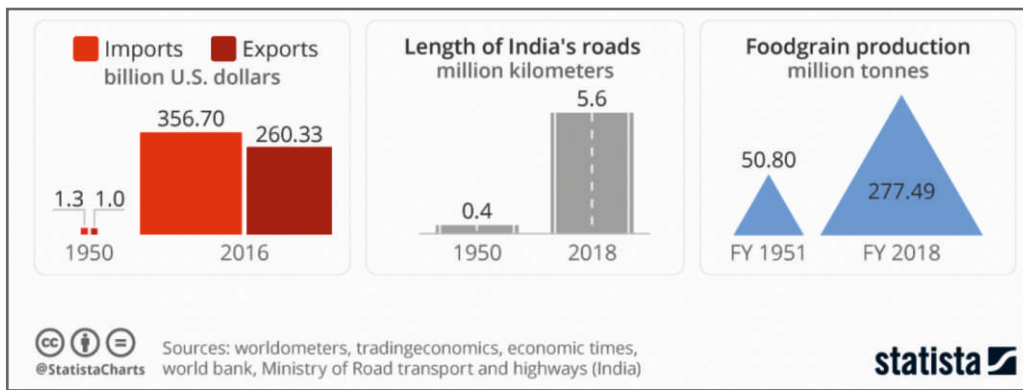
Source: rgu.ac.in, indiabudget, MOSPI
*GDP at current prices



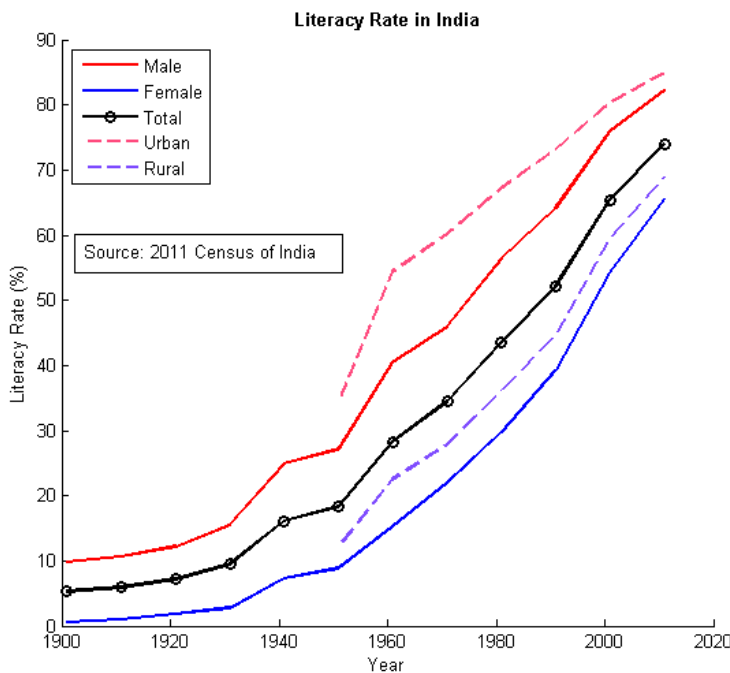
India has food security (population increased 4x, food production increased ~6x) but not yet energy security - and both this 'plus' and 'minus' have come to the forefront during the recent rise in inflation/geopolitical tensions. India has much better physical infrastructure though there is still a long way to go.

And despite a flirtation with autarky and license raj after Independence, India is much more globally inter-connected today and domestically freer for commerce while still not being averse to industrial/trade policy in a delicate balance that is being played out³. **Its economic base is much more complex today** with high-end services and, to a lesser extent, manufacturing both doing well albeit in a domestic consumption led framework (the positive aspect is that since India's growth model is not as export dependent as others, it is likely to be more sustainable.) Agriculture and allied sectors today constitute a fifth or less of the output though have a higher share in employment.





Coming to human capital, India’s literacy rate 75 years ago was abysmal. Today, by some reports, India has perhaps the world’s biggest cohort of university students and youth literacy is near-universal (for both boys and girls) though median education quality is still sub-standard anecdotally (we do not have many quantitative international comparisons and the few dated ones are not encouraging). Life expectancy has also been going up. Meanwhile India is leading the digital public goods revolution.



The stage then is set, both in secular and (critically for the impatient) cyclical terms, for India’s \$2.5k per capita market exchange economy to gradually reduce the gap with richer economies including the global frontier aka United States’ \$75k per capita income - more on that in the coming posts/book that I am currently writing.

Hint: The Ss of Scale, Skills, Sustainability, State capacity would be critical for overcoming the so-called middle-income trap.

Author: Harsh Gupta Madhusudan, Investor, Writer. Coauthored 'A New Idea of India' (Westland), Derivatives (Cambridge University Press)

This article was first published in Long India on 31st July 2022

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- <https://fred.stlouisfed.org/series/RGDPNAINA666NRUG> (from 1950 to 2019, roughly extrapolated to 1947 and adjusted for 2022 estimates, this is based on 2017 US\$ Real GDP)
- <https://blogs.worldbank.org/endpovertyinsouthasia/india-s-remarkably-robust-and-resilient-growth-story> - interestingly even the pandemic time-graph in India in terms of cases/deaths, despite potential underestimates, showed a symmetrical/relatively smoothened nature due to a combination of size + diversity perhaps.
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Healthcare in the Centenary Year of Independence

For decades India fought poverty and tried every means to bring people out of the dismal situation. However, poverty remained high, and poverty reduction was a slow process. It changed under the Modi government, wherein rural poverty declined massively by 10.3 percentage points from 2015 to 2019, from 21.9% to 11.6%, compared to 4.4 percentage points decline between 2011 and 2015. India's poverty fight was challenged by not just a high base but systemic issues in various sectors.

One such sector is healthcare. It was reported that until 2014, 6 crore Indians fell below the poverty line due to sudden

and exorbitant healthcare expenditure. In 2014, the central government under PM Modi started looking at this and formulated multiple programmes to deal with it quickly, efficiently and at scale. In this direction, PM Modi launched Ayushman Bharat, a paperless scheme covering 50+ crore Indians. These people form the bottom 40% of India's economic pyramid, and they receive annual access to 5 lakh rupees per family for healthcare treatments. It saves them from catastrophic expenses and provides free medical care at public and private hospitals, thus improving their access and quality of services.

The Prime Minister launched the

Ayushman Bharat Digital Mission to support India's integrated digital health infrastructure. It aims to develop a robust digital technology backbone, encompassing the unique Ayushman Bharat Health Account (ABHA) health ID, Healthcare Professionals Registry (HPR), Unified Health Interface (UHI), and Health Facility Registry (HFR). It is not just enabling patients to access their medical records at the click of their phones but also forms the base of many healthcare-centered innovations centered around data, Machine Learning (ML) and Artificial Intelligence (AI). The Modi government's teleconsultation services, including eSanjeevani, have



Image credit: Manoj Paateel



used Information and Communication technology to remotely diagnose, treat, and manage diseases. In March 2022, the eSanjeevani telemedicine service crossed a milestone of 30 million tele-consultations. It also set a record by completing 170,000 consultations in a day. By enabling millions of tele-consultations, it has played a significant role in boosting the acceptance of tele-health services in the country.

The use of machine learning and artificial intelligence for preventive healthcare and the Jan Aushadhi programme are taking forward the government's plan of affordable healthcare for all. The government is ensuring the availability of over 1,600 affordable yet high-quality medicines to the general public through ~8,800 Jan Aushadhi outlets across India. Last but not least, the Cowin platform imagined by the visionary leadership of PM Modi

enabled India to provide 2 billion vaccine doses within a short span of time, a scale and alacrity unimaginable to the world earlier.

Taking these initiatives further, the central government is supporting the private firms to develop products like tracking disease outbreaks using newspaper reports from across the nation (including vernacular languages), and developing an AI-based system to interpret X-ray reports based on an India-specific database. To tackle the humongous task of transforming India's creaky health system, the Modi government effectively leveraged the foundational power of information and communications technology (ICT) to create digital platforms that are accessible to the poorest sections of the population, thus empowering patients.

As we enter 100 years of independence, India is sure to see a diametrically

different way of working in its healthcare domain and citizens not having to fall into poverty due to catastrophic costs. By the 100th year, India would probably have rolled out universal health coverage for secondary and tertiary treatments, built smart primary care clinics across the nation, digitized health data for the majority of its citizens, and reached every corner of the nation with quality tele-service solutions and built indigenous solutions to the various unique problems it faces.

A few years ago, no one would have imagined such revolutionary changes happening in India within the next few years. It shows how PM Modi has altered the basic governance framework and how an average Indian citizen has become the center of the government's priority at the very top.

Author: Lakshit Mittal,
Member BJYM Policy and Research Team

Shaping our Green Future

With the Covid-19 pandemic slowing down and the economy recovering underway, India's development pathway must focus on two key areas: climate change and job creation. The next decade will be decisive in achieving these twin goals. Our laws for 2047 should be based on the understanding that environmental costs are skyrocketing. So, it is imperative that government policies focus on large-scale organisations and substantially help small and medium-scale entrepreneurs create a green footprint.

The Intergovernmental Panel on Climate Change (IPCC) has recommended that the world reach zero carbon emissions by 2050 to ensure that global average temperatures do not increase by more than 1.5 degrees Celsius above pre-industrial levels. More than a hundred countries have committed to reaching

net zero by 2050, including the United States (US). China has announced that it will reach net zero by 2060. The laws in India should be shaped to transform its current development pathway in the coming years into a deep decarbonisation pathway by the end of 2047.

Today, India emits about 3.5 billion tonnes of carbon equivalent GHG emissions per year, including agricultural emissions that are about 1 billion tonnes. Strict rules should be set for carbon emission so that India should adopt either a low carbon pathway that keeps emissions flat at 3 to 4 billion tonnes per year or an ambitious zero pathway to reach net zero emissions by mid-century.

We will commit to a legally binding net zero target by a fixed year if the laws are strictly incorporated and our Parliament passes a target. In that case, it will

necessitate each ministry and state government to define the annual carbon budgets needed to reach net zero by the end of the century.

Furthermore, once a target is set, the Central and State Governments will have to build the necessary state capacity for monitoring and compliance quickly. India requires trillions of dollars in green investments to reach a net-zero target by 2050. Together, a legally binding net-zero target and supportive government policies for the next two decades will lead to massive investments in green technologies and equipment. It will thoroughly transform electricity generation, transportation, construction, real estate, agriculture, cement, steel, and many other industries—a private-sector transformation driven by private-sector capital. Green technologies are more cost-effective than brown technologies now. Massive investments



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in these green technologies will naturally result in higher GDP growth, job creation, and lower energy imports while reducing carbon emissions and air pollution. Decarbonisation pathways have been observed to improve the GDP by one to four per cent annually.

It would mean that over the next two decades, hundreds of billions of dollars spent on fossil fuels will be substituted by renewable energy, green hydrogen, and biofuels. The government regulations should focus on the following:

Decarbonisation in the electricity sector:

- Pursue the well-managed retirement of coal power plants and make significant investments in transmission and distribution infrastructure, demand response, and a doubling of storage capacity. These efforts will prepare India's electricity grid to become more flexible and ready for a renewable energy-powered future.
- By mid-century, implement a carbon-free electricity standard to achieve 90 per cent of electricity from non-fossil fuel sources.
- Subsidise costlier emerging technologies such as off-shore wind in the near term, and then reduce the subsidies as the technology becomes cost competitive.

- A new policy framework should come into force as early as possible. Thermal power plants today emit over 40 per cent of India's carbon emissions, which needs to be progressively reduced.
- In the next few decades, India should commit to building no new coal-fired plants and retire its existing fleet of thermal power plants.
- Along with the generation system, the transmission and distribution systems will have to be rapidly re-engineered for large-scale storage and remote evacuation.

In the transport sector, India could:

- Incentivise the build-out of electric vehicle charging infrastructure alongside implementing EV sales mandates.
- Implement an EV sales mandate that increases over time along with a gradual decrease in purchase incentives to ensure that the passenger segment (cars and two-wheelers) can become mostly electric by mid-century.
- Establish stricter fuel economy standards for heavy-duty vehicles in the near term and a longer-term policy to convert the fossil-fuel-dependent heavy-duty vehicle segment to electrification and hydrogen.

- Mode shift at least one-third of passenger vehicle demand to electrified public transport options.

In the Agri sector, India could:

- Incentivise farmers to use renewable energy like solar for their purposes.
- Generate renewable generate which can be contributed to global usage, and farmers can earn income on it.
- Adopt policies to discourage farmers still contributing to emissions and unsustainable farming.

India should focus on 100 per cent electric, biofuels, or green hydrogen vehicles by 2047. Our current policy of encouraging this transformation should be reinforced with more incentives and infrastructure. Industrial and commercial usage of fossil fuels (in industries such as cement, steel, and fertiliser) should be progressively restricted through a carbon emissions trading system. Under such a system, large corporations must provide detailed climate disclosures and be granted a carbon allowance. A global system for pricing and trading carbon emissions will have to be coupled with import duties to ensure a level playing field for all countries.

The next decade will also be decisive in establishing its development pathway: Is India going to race to the Green Frontier, or will it be relegated to a global laggard? A transition is underway in India—also necessary is the re-invention of downstream sectors, especially steel, cement, automobile and fertilisers. However, the rapid energy transition and industrial transformation required to address the climate crisis cannot be an isolated technological exercise. It will require global cooperation, harmonisation of standards, technology sharing and flow of investments to developing countries.

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India at 100: Our New Destiny



Unto 2047:

A century may be a blip in the timeline of human existence but the first century of our existence as a republic has been an era which transforms us from a basket case at the cusp of freedom to a basket full of hopes which will culminate fully at 2047.

In the last 8 years we have moved from waiting in queues to using QR codes, from standing in lines to moving online. India gallops ahead on to the fast track of economic growth & individual empowerment by unshackling the spirits of the Indian investor to freeing our depressed sections from the clutches of stigma & poverty under the able leadership of PM Narendra Modi, a day at a time.

Amrit Kaal and Technological Superiority:

From our 75th year of independence to our 100th; the *Amrit Kaal* of a quarter of a century will be like none other witnessed before. The new India doesn't seek a top down approach to changing the status quo but embraces change bottoms up. The new India is an oasis of harmony and progress in a neighbourhood marked by disquiet & strife.

The fundamental pillars of rewriting the Indian success story should stand on certain basic yet endearing constructs. India is slated to be the most populous country in the world by 2023. When data is the new oil, India contains 17% of the global population with the cheapest data

rate. Big tech of the GAFA(Google, Apple, Facebook, Amazon) fame do roaring business in India. To be a technological superpower we need to have homegrown GAFA equivalents.

In the year ending FY '22, foreign Big techs earned revenue upwards of US\$ 200 bn from India alone, a large chunk of which flows out. From computer chips to satellites, we must be a technological superpower. For this to fructify we need to not just bridge but eliminate the digital divide. Our society cannot be divided into segments of digital 'haves' & 'have nots'. Smartphone penetration is impressive with DBT's now being the bulk of government welfare spending.

When Bharatnet, the world's largest rural



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internet connectivity program reaches saturation, no village will feel left out of the Indian growth story. The benefits of Bharatnet will truly be realised when data is democratic & Indians can choose their data storage location with a right to date being deleted at a mouse click. 'Swamitva' will be a gamechanger with geospatial mapping of land holdings eliminating all doubts & litigations among landowners thereby providing harmony amongst neighbours and to realise the full potential of land. Land disputes would be history when India steps into 2047.

Justice and our Heritage:

Justice is a prerequisite to human progress. An unjust society can never live up to its full potential. The tallest amongst those who authored our constitution: Dr BR Ambedkar wanted affirmative action only for a defined time period so all sections of society could reach the same basic level of empowerment & then seek the destiny that awaits them. Society should be empowered as such that a clarion call comes from within the various marginalised communities that affirmative action would not be needed further when they have been uplifted at par with all other communities. A small community in Tamil Nadu, The 'DevendraKula Vellalars' have done just this by asking that they be excluded from the benefits of reservation.

The next 25 years would be a saga of enlightened social justice. The wheels of natural justice would spin harmoniously in sync with that of social justice. India is the only country where the higher judiciary is self appointed thus doing away with the scope of checks & balances amongst the 3 branches of the government. The present government brought in a very far sighted NJAC (National Judicial Appointments Committee) bill which never saw the light of day due to various vested interests. A higher judiciary appointed

by the executive & endorsed by the legislature(as is the case in various nations, among them the USA) would not just be legally responsible but morally correct as well. This will lead to faster judicial appointments and hence reduce the pendency burden on courts. Justice would be delivered in a lifetime & not later.

Skill Development and the Youth:

PM Modi has repeatedly emphasised that India must be a nation of job creators & not merely job seekers. Societal burden makes millions of our youth chase the chimaera of a few thousand government jobs. Those who don't make the cut question their abilities. As Einstein famously said 'Everybody is a genius, but if you judge a fish by the ability to climb a tree, it will live it's whole life believing it is stupid'. Our youth needs to be empowered to think beyond the mirage of government jobs for it is not the government's job to give jobs but rather create an environment conducive for the market to create jobs. A skilled India will be a job ready India. Skilling must be made mandatory at schools with a focus on aptitude appropriate skills.

The Future is Dharmic and Green:

India is going green at a tremendous pace, we are leading the International Solar Alliance & building climate resilient infrastructure at a dizzying pace which should lead to 'Net zero' or a carbon neutral economy by 2047. India didn't pollute the world into a climate catastrophe like the industrialised nations of the global north. India will lead the global south in providing the solutions from carbon capture to an emission free transport network to 're-green' our planet in line with our civilization values of 'Vasudhaiva Kutumbakam'. Our children deserve a better world than the one we inherited.

A nation rooted in its civilizational values will endear for ages to come. Once civilizational values wither away

in the sands of time, a nation becomes prone to eventual decay and destruction. In the 100th year of our republic we must strive legally and morally to be a republic based on *Dharma*. India must be the natural homeland of persecuted Indic faiths and communalism originating from the foreign religions that led to the vivisection of India must be eliminated from our body politic once and for all. The fifth column must be named, shamed and eliminated from our soil. Just as India rose like a Phoenix from the ashes of partition, at year 100 it will fly like an eagle unchained by the hesitations of history.

The Conclusion at 2047:

In conclusion, India will see more changes in the next 25 years as compared to the last 75 years. The fundamental challenges of feeding & clothing a largely illiterate population in 1947 would be a distant memory. The challenges of the next 25 years would be for India to have \$8-10 Tn GDP and rapidly rise up to occupy pole position with an unskewed distribution of wealth resulting in a high per capita income. Regional inequalities will have been eliminated leading to an India seamlessly connected for each region to realise its aspirations but also to fuel the India growth story. The India of 2047 will have beaten basic & complex vulnerabilities to give each of its citizens the opportunity to realise their full potential whilst fulfilling their duties. We will be an India that seeks changes to the status quo while maintaining its civilizational bearings. An India that is a change maker & not merely a change taker.

In the words of noted Bengali poet Atul Prasad Sen 'ভারত আবার জগত-সভায় শ্রেষ্ট আসন লবে' (India will occupy the pride of place in the comity of nations')

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India@ 100: India's Energy Policy

The Legacy:

Indian history is full of exceptionally visionary teachers, from Aryabhata, to Sushruta to Chanakya. Each one of them have been regarded highly for their teachings, disruptive inventions and discoveries. In a similar fashion, India is leading the path in the modern world to make it a better place.

The rise of the Industrial Revolution led to widespread development of inventions, thus leading to an increase in consumption of power for fueling industrial growth and travel. Power was the center of development, which was primarily generated from fossil fuels – especially coal, oil and gas. The increase in population and development of electronic products led to the increase in demand of power and thus increase in carbon generation as well, which in long-term started causing climate change

which further led to natural calamities.

Energy and Economy:

India has been one of the fastest growing economies of the world in the last couple of decades which further led to an increase in demand for power by industries and domestic use due to ever improving lifestyles facilitated by an increase in household income. India ranks third in the world in electricity consumption followed by China and the USA. While it accounts for more than 17% of world population, the per capita demand is one of the lowest in the world.

We broadly have two different categories of energy requirements. First is the energy required for electricity that in turn is used for lighting for domestic and commercial use and the other requirement is for transportation

purposes. We as a nation are well dependent on fossil fuels for both these requirements. In the current scenario of electricity generation i.e., in 2022, out of India's total installed capacity of power generation ~59% are from fossil fuels, ~13% from Hydro power and ~24.4% are from wind and solar energy. In the last 8 years of the NDA government from 2014-22, India has taken a strong leap in using renewable energy and installed a total power capacity of 160.8 GW, out of this the share of non-fossil fuels is a whopping 45%.

The above data clearly shows that energy consumption in India is increasing rapidly and so have the power plants. The rapid development across the sectors from infrastructure, retail, real estate to increase in industrial output has also led to increase in carbon production but still we are one of the lowest carbons

Image credit: Ashley Cooper pics





producing nations per capita. In the last 8 years of the Modi Government, we have seen a strong focus towards renewable sources of energy and huge investment in that front.

The Solar Way:

The present government has done tremendous work in this field. India is one of the initiators of International Solar Alliance (ISA) which is an organization of 107 countries to harness the benefits of solar power. India being a tropical country and a member of ISA has 300+ sunny days and the present government used that potential by setting up 2 of the world's largest 3 solar plants with a combined capacity of ~4.3 kW in Rajasthan and Karnataka, respectively and solar power capacity is more than 56 GW in 2022. India as a world leader in taking the initiative of solar power has put forward a concept of "One Sun, One World One Grid" for the world.

India was one of the 193 nations, which signed the Paris agreement on climate change and as a part of it, we must limit

our greenhouse gasses emission and become net zero carbon emission by 2070 and fulfill 50% of energy requirement by fossil fuels and of which I think latter could be achieved well in advance.

On the other front, we are making strong progress in developing alternatives to crude oil to reduce our energy dependency on imported fuels and be cost effective. There have been multiple trials of using biofuels, Ethanol and trials are going on for the usage of hydrogen fuels as well. Central government introduced a subsidy on EV vehicles, thus increasing their usage and development. We have started seeing the result of this promotion by regularly glancing at EV vehicles on the road and major auto manufacturers have announced the EV variants of their popular car and bike models.

Our nation has set up an ambitious goal of making our energy quest self-sufficient, reliable and reducing pollution for a safe and green earth. The government policies of promoting Solar energy and other renewable energy

sources, promotion of EV vehicles & alternate fuels, promoting industries to adopt sustainable goals have laid the foundation for a bright future.

Conclusion:

In 2047 when we will be celebrating our 100th year of Independence, we will see a strong, energy surplus Bharat leading the world in the usage of renewable energy, innovation and cleaner fuel options. The lesser dependency on fossil fuels would reduce imports and save billions of dollars in foreign exchange. India's lead in green energy could open an economic opportunity for us, we could export the power and alternate fuels generating more job opportunities and increase in GDP. Growth of India along with its 1.3 billion population in the energy sector is growth of the world and with its ancient ideology of taking everyone together in the journey with an aim to make the world a better place to live in.

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India@100: दृष्टिकोण एवं उपलब्धियाँ

15 अगस्त 1947 को जब भारत ने विदेशी आक्रांताओं की लंबी दास्तां से मुक्त होकर स्वतंत्रता के अमृत कलश को चूमा तो प्रत्येक भारतवासी ने अपने मन में देश के उज्ज्वल भविष्य के लिए सुनहरी सपने बुने थे। स्वतंत्रता के यज्ञ में शहीदों की आहुतियों की प्रेरणा तरूणाई के रक्त में दौड़ रही थी। मगर चुनौतियाँ भी कोई कम न थीं। स्वतंत्रता की खुशी बटवारे और सांप्रदायिक हिंसा के गम में गुम हो गई। विकास पथ पर अग्रसर भारत पर फिर चीन युद्ध का ग्रहण लगा। जिसमें हमने एक बड़ा भूभाग खो दिया। अपनी गलतियों से सीख हमने राष्ट्र का पुनर्निर्माण प्रारंभ किया। पड़ोसी देशों ने हमें बार बार परखा, लेकिन हर बार हम कुंदन बनकर निकले।

आजादी से लेकर अब तक हमने एक लंबा सफर तय किया है। इस सफर में हमने कई गर्व करने वाले मुकाम हासिल किए हैं। लेकिन बहुत कुछ ऐसा भी है, जो किया जा सकता था लेकिन हुआ नहीं। आज सन् 2022 में हमारा देश आजादी का 75 वां अमृत महोत्सव मना रहा है। इस 75 वें मील पत्थर पर खड़े हम पीछे मुड़कर देख सकते हैं कि हम कहां से चले थे, हमने क्या पाया और क्या छूट गया? और यहां से अपने आगामी सफर की दिशा भी तय कर सकते हैं। जिस सोने की चिड़िया भारत को विदेशी आक्रांताओं ने सदियों तक गिद्धों की तरह नोचा, आज पुनः उसे दुनिया एक उभरती शक्ति के रूप में देख रही है। जिस देश को पश्चिमी देश कभी सपेरों का देश कहते थे, आज उसी भारत के युवा कंप्यूटर के माऊस से पूरी दुनिया को नचा रहे हैं। लेकिन पुरखों के अधूरे स्वपनों के माऊट एवरेस्ट पर चढ़कर शहीदों को पुष्पांजलि अर्पित करना अभी बाकी है। उन सपनों को साकार करने का दायित्व अब हमारे कंधों पर है। हमारा

कौशल, दूरदर्शिता, साहस, मेहनत और विवेक ही तय करेगा कि हम अगली पीढ़ी के हाथों में कैसा भारत सौंप कर जाते हैं।

स्वतंत्रता से अब तक का सफर

आजादी के तुरंत बाद ग्रह मंत्री वल्लभ भाई पटेल ने 562 रियासतों के विलय से राष्ट्र का एकीकरण किया। और आजादी के तीन वर्ष बाद डा भीम राव अंबेडकर के नेतृत्व में भारत को अपना लिखित संविधान मिला और भारत एक गणराज्य बना। मौलिक अधिकारों व लोकतांत्रिक प्रणाली ने नागरिकों के मानस में एक नई स्वतंत्र सोच विकसित की। ए आई आई एम एस, आई आई टी, साहित्य अकादमी, ललित कला अकादमी, संगीत नाटक अकादमी, सी एस आई आर जैसे संस्थानों की नींव रखी गई। कई बड़े बांध, नहरें, हाईड्रो इलैक्ट्रिक पाँवर स्टेशन होंद में आए। लेकिन 1948, 1965, व 1971 में पाकिस्तान, और 1962 में चीन से हुए युद्धों ने बार बार देश के विकास में अवरोध पैदा किए। भाषाओं के आधार पर राज्यों के पुनर्गठन ने भी एक आंतरिक कलह को जन्म दिया। और फिर देश ने 1975 की एमरजेंसी का काला दौर भी देखा। प्रधानमंत्री इंदिरा गांधी की हत्या और विभिन्न राज्यों में आतंकवाद, नक्सलवाद से भारत माता को आहत भी देखा। 1991 में भारत की अर्थव्यवस्था ने एक नई दिशा में लंबी उड़ान भरी, जिसने देश को एक नई दिशा दी। और फिर हमने भ्रष्टाचार में लिप्त नेताओं को चारा, कोयला, तोपें खाते भी देखा। लेकिन इन सब आंतरिक व बाहरी अवरोधों के बावजूद हमने विभिन्न क्षेत्रों में विकास की इबारत लिखी। जो कि दुनिया के समस्त विकासशील देशों के लिए एक प्रेरक कहानी है।

अनुसंधान और विकास के क्षेत्र में भारत

की उपलब्धियाँ

इसरो: 1969 में विक्रम साराभाई के नेतृत्व में वैश्विक ख्यातिप्राप्त संस्थान इसरो की स्थापना हुई।

परमाणु विस्फोट: 1974 में भारत ने पोखरण में अपना पहला परमाणु विस्फोट कर दुनिया को अपनी शक्ति का अहसास करवाया।

आर्यभट्ट: अप्रैल 1975 को भारत के वैज्ञानिकों ने अपना पहला सैटेलाइट आर्यभट्ट को अंतरिक्ष में स्थापित किया। इस सैटेलाइट का उद्देश्य एकसरे एस्ट्रोनॉमी, एरोनॉमिक्स और सौर भौतिकी में प्रयोग करना था।

सैटेलाइट टी वी: 1975 में ही एक अगस्त को सैटेलाइट निर्देशात्मक टेलीविजन प्रयोग (साइट) का इस्तेमाल हुआ। साइट डॉ. साराभाई का सपना था, जो 1975-76 के दौरान अमेरिका के एप्लीकेशन टेक्नोलॉजी सैटेलाइट (एटीएस -6) से तैयार किया गया था। साइट ने भारत जैसे विकासशील देश को टेलीविजन के क्षेत्र के लिए बहुत बड़ा हथियार दिया। पहली बार देश के छह राज्यों (राजस्थान, बिहार, उड़ीसा, मध्य प्रदेश, आंध्र प्रदेश और कर्नाटक) के कुल 2,400 गांवों में लगभग 400 कम्प्यूनिटी टीवी सेट स्थापित किए गए।

टेस्ट ट्यूब बेबी: 1978 में देश में पहली बार टेस्ट ट्यूब बेबी के जरिए किसी बच्चे का जन्म हुआ। दुनिया के दूसरे और भारत के पहले टेस्ट ट्यूब बेबी का जन्म कोलकाता में तीन अक्टूबर 1978 को हुआ। टेस्ट ट्यूब के जरिए जन्मी बच्ची को दुर्गा नाम दिया गया था।

हैंडपंप: देश में पहली बार 1978 में हैंडपंप का इस्तेमाल हुआ, जिसे मार्क-II (Mark-II)



नाम दिया गया। इस पंप को भारत सरकार ने यूनिसेफ और विश्व स्वास्थ्य संगठन के सहयोग से तैयार किया था।

सुपर कम्प्यूटर: 1991 में भारत के पहले सुपर कंप्यूटर परम (Param) से दुनिया रूबरू हुई। यह देश में विकसित पहला सुपर कंप्यूटर था।

पहला फोन कॉल: 31 जुलाई 1995 को देश में पहली बार मोबाइल फोन से कॉल लगाया गया था। पहली बार मोबाइल फोन पर केंद्र सरकार में तत्कालीन मंत्री सुखराम और पश्चिम बंगाल के सीएम ज्योति बसु के बीच बात हुई थी।

नाविक: इसरो ने 1 जुलाई 2013 को स्वदेशी जीपीएस इंडियन रीजनल नेविगेशन सैटलाइट सिस्टम को लॉन्च किया, जिसका ऑपरेशनल नाम NavIC रखा गया। नाविक का सपोर्ट अब भारत में बिकने कई स्मार्टफोन में भी मिलने लगा है।

यू पी आई: यूपीआई भारत का पहला रियल टाइम डिजिटल पेमेंट सिस्टम है। प्रधानमंत्री नरेंद्र मोदी द्वारा लॉन्च किया गया पेमेंट एप भीम (BHIM या Bharat Interface for Money) भी यूपीआई पर ही काम करता है। यूपीआई पेमेंट सिस्टम ने भारत के लोगों और कारोबारियों को वो सुविधा दे दी, जिसके बारे में किसी ने शायद ही कल्पना की थी।

प्रौद्योगिकी अनुसंधान: भारत विज्ञान और प्रौद्योगिकी अनुसंधान के क्षेत्र में अग्रणी देशों में सातवें स्थान पर है।

बुनियादी अनुसंधान: इंडियन साइंस एंड रिसर्च एंड डेवलपमेंट इंडस्ट्री रिपोर्ट
2019 के अनुसार भारत बुनियादी अनुसंधान के क्षेत्र में शीर्ष रैंकिंग वाले देशों में शामिल है।

प्रत्युष: मौसम पूर्वानुमान एवं निगरानी के लिये प्रत्युष नामक शक्तिशाली

सुपरकंप्यूटर बनाकर भारत इस क्षेत्र में जापान, ब्रिटेन और अमेरिका के बाद चौथा

प्रमुख देश बन गया है।

नैनो तकनीक: नैनो तकनीक पर शोध के मामले में भारत दुनियाभर में तीसरे स्थान पर है।

India@100

अर्थव्यवस्था: सन् 2047 में स्वतन्त्रता के 100 वर्ष पूरे हो जाएंगे। अगले 25 वर्षों में राष्ट्र के उत्थान के लिए तरुण चेतना संचार करना होगा। देश की आधी आबादी, महिलाओं को सशक्त कर अर्थव्यवस्था में बराबर का भागीदार बनाना होगा। अर्थव्यवस्था का एसा माँडल खड़ा करना होगा जिसमें सबसे आखिरी व्यक्ति को भी धनोपार्जन के बराबर अवसर मिलें। देश तभी मजबूती से खड़ा होगा जब प्रत्येक वर्ग, प्रत्येक व्यक्ति मजबूत होगा। भारत वर्तमान में विश्व की

पाँचवी सबसे बड़ी अर्थव्यवस्था है। स्वतंत्रता के 100 वें वर्ष तक देश को पहली तीन अर्थव्यवस्थाओं में खड़ा करना हमारी वर्तमान पीढ़ी की उपलब्धि होगी व स्वतंत्रता की देवी को स्वर्णिम मुकुट का उपहार।

तकनीक आधारित विकास: हमें स्थाई व निरंतर विकास के लिए भविष्य में तकनीक आधारित विकास की ओर बढ़ना होगा। कृषि, लघु उद्योग, हस्तशिल्प कला, निर्माण, अक्षय ऊर्जा के क्षेत्र में अभी भी असीम संभावनाएं हैं। और ये क्षेत्र विशाल स्तर पर रोजगार दे सकते हैं। इन क्षेत्रों में नई अत्याधुनिक तकनीकों के उपयोग से प्रगति की गति को असीम रफ्तार दी जा सकती है।

शोधकार्य व अनुसंधान: वर्तमान में विश्वविद्यालयों में शोधकार्य व अनुसंधान के बारे में CSIR का एक हालिया सर्वे बताता है कि हर साल लगभग 3000 अनुसंधान/शोध-पत्र तैयार होते हैं, लेकिन इनमें कोई नया आइडिया या विचार नहीं होता। हालाँकि विज्ञान एवं तकनीक के क्षेत्र में नवाचार को बढ़ावा देने के लिये सरकार प्रयास कर रही है, फिर भी इस दिशा में और अधिक प्रयास

करने की आवश्यकता है। प्रतिभाशाली छात्रों के लिये विज्ञान, शोध और नवाचार में करियर बनाने के अवसर प्रदान करने की आवश्यकता है। इससे नई तकनीक व आविष्कारों का मार्ग प्रशस्त होगा और भारत के युवा निर्यात के माध्यम से विश्व में अपनी धाक जमाएंगे।

शिक्षा: शिक्षा के क्षेत्र में सुधारों की असीम संभावनाएँ व अतिआवश्यकता है। युवाओं को व्यवसाय आधारित शिक्षा की ओर अग्रसर होना चाहिए। विश्वस्तरीय विद्यालयों व विश्वविद्यालयों के निर्माण की आवश्यकता है। ता कि प्रत्येक क्षेत्र में कुशल, गुणवत्तापूर्ण, व बेहतर कार्य शक्ति/श्रम शक्ति खड़ी हो। प्राचीन काल की भांति भारत विश्व को ज्ञान प्राप्ति के लिए आकर्षित करे।

स्वास्थ्य: स्वास्थ्य के क्षेत्र में भी नए आयाम स्थापित करने की आवश्यकता है। प्रत्येक नागरिक को सुलभ व सस्ती स्वास्थ्य सुविधाएँ मिलें, उस दिशा में हमें बढ़ना होगा। इसके साथ ही हम सब की नैतिक जिम्मेवारी बनती है कि हम स्वच्छ व सुंदर भारत बनाने में सहयोगी हों।

न्याय: अंग्रेजी की एक कहावत है कि जस्टिस डिलेअड इस जस्टिस डिनाईड। नागरिकों का कानून के प्रति विश्वास हो, इसके लिए प्रत्येक व्यक्ति को समय से न्याय मिले, यह राज्य का प्रथम कर्तव्य बनता है। मगर लाखों केस देश के विभिन्न न्यायालयों में लंबित पड़े हैं। समयबद्ध न्याय न मिलने से निराशा व कानून में अविश्वास पैदा होता है। जो कि विभिन्न अपराधों की जड़ है। एक सफल व सुदृढ़ राष्ट्र, सुखप्रद समाज के निर्माण के लिए मजबूत न्याय प्रणाली की व्यवस्था करना अत्यावश्यक है। भारत को विश्व गुरु व शक्तिशाली राष्ट्र बनाने के लिए कानून व्यवस्था को सुचारू, सुदृढ़ व समयबद्ध करना बेहद लाज़िमी है।

लेखक: वृंदा काल्हेर,
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India@ 100: From a Rural India to an Urban Bharat

A hundred years ago, Mahatma Gandhi had said that 'India' lives in its villages and saw 'India' emerging as a nation of autonomous villages. He regarded the growth of cities to be evil and unfortunate for mankind. These thoughts have deeply impacted his followers and our nation's policymakers for decades and hence none of the "Five-year plans" post-independence focussed on urban development and neither were any policies or reforms announced to strengthen the cities. Nehru, our first Prime Minister and an ardent follower of Gandhi believed that cities could take care of themselves and it was the rural areas that required the government's attention. Abiding by this philosophy, the leaders of the 20th century kept ruling the rural areas while sitting in the urban areas, which were broadly limited to metropolitan cities.

The leaders had adopted the idea 'Rural India' from the Britishers, who had portrayed India as a third-world nation that must depend on the western countries to understand the development and they had embedded this in the minds of our citizens. The political leaders, businessmen and the elite sitting in the urban areas were moving towards westernisation because that is what development was "supposed" to mean. More than three-fourths of the citizens who were residing in the rural areas engaged in agriculture and the rest of the country was being 'developed' by westernisation. By the end of the 20th century, the disparity between rural and urban areas was at its peak, however, the development was limited to a select few urban areas. However, with the beginning of the 21st century, the

government started understanding the importance of cities and urbanisation. In the year 2004, it was for the first time that a Prime Minister of India talked about the importance of urbanisation in the Indian economy. The UPA era between 2004-14 saw the announcement of some schemes for infrastructure development and urban redevelopment. Re-development programmes such as JNNURM and various other smaller projects & schemes were proposed that aimed at infrastructure development. However, most of these projects failed due to a 'shortage of funds' majorly due to the massive corruption at all levels of the government. Another significant reason was the lack of interest by the leadership towards developing infrastructure and promoting urban areas. It is evident from the fact that only 31 percent Indian population lived in urban areas as per the Census of 2011 as against 27 percent in 2001.

The NDA government led by Prime Minister Narendra Modi has brought a new era of urban and infrastructure development. In the last eight years, many flagship programmes of the government have focused on the redevelopment and rejuvenation of urban areas. The Smart Cities Mission has spread development with a plan to develop a hundred smart cities across the country. In order to promote inclusive urbanisation and reduce slums in the country, the government has allocated a massive amount for affordable housing under PMAY-Urban. To improve civic facilities in the urban areas and ensure proper sanitation in the cities, the government launched the AMRUT mission to ensure essential infrastructure services such as water supply, sewage,

parks and green spaces, etc. Unlike the UPA era, the schemes announced by the Modi government were not just limited to papers and files but were implemented on the ground. While Rs. 1.57 lakh crores were spent by the UPA government during 2004-2014 on urban development, the NDA government spent more than Rs. 11 lakh crores between 2014-2021.

Along with developing the urban areas, the government has widely focussed on infrastructure development, especially by expanding the road, rail and air network to every corner of the country to ensure that every region, including the smallest areas, is connected to the mainland. The number of operational airports in India has doubled from 62 to 130 from November 2016 to December 2021 primarily due to the government's UDAN scheme. Furthermore, the train network has widely expanded and many new trains have been introduced. And, the number of highways and expressways that have been constructed over the past eight years showcases the government's seriousness towards bringing inclusive development and achieving a US\$ 5 trillion economy. These transport networks not only improve the connectivity and expand business prospects but also play a major role in building new towns and cities, thus subsequently improving the economic activity in the existing cities. A fine illustration of this is that the Delhi-Mumbai Expressway will pass through six states and more than ten major cities. While these major cities are bound to witness incremental economic activity, many business opportunities will arise in smaller towns and cities from where the expressway will pass.



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Furthermore, many restaurants, food courts, hotels, hospitals, etc. would come up, which will give birth to new entrepreneurial and job opportunities. Also, developing smaller corridors like Delhi-Meerut, Delhi-Chandigarh, etc. will help spread development to smaller regions and reduce congestion from bigger cities.

With these continuous efforts, many rural areas are transforming into urban areas and there has been a large-scale migration of people from rural to urban areas over the last decade. Studies have indicated that India's urban population is expected to have crossed 50% by 2021, however, these numbers will be only confirmed when the latest census data is released. Urbanisation and the development of cities are the key engines behind the growth of a country, and this can be understood from the fact that more than 80% of tax revenues in our country come from urban areas. Cities contribute close to two-thirds of our GDP and have the potential to contribute much more. Various studies have indicated a strong positive correlation between urbanisation and GDP growth. Indian cities have the ability to not only generate resources for self-sustenance but also have the capability to fund rural development and poverty alleviation programmes. However, with rapid urbanisation being expected in the future, India needs to prepare its cities to face the challenges

of a large-scale infrastructure deficit. For the six decades post-independence, infrastructure development was never an agenda for the government. While the last eight years have been focused on infrastructure and urban development, the coming two decades will have to continue pressing the accelerator in the same direction.

Budget 2022 highlighted the next twenty-five years as the 'Amrit Kaal' for 'Bharat' to reach new heights. The government in its budget had announced the PM GatiShakti and elaborated upon the National Infrastructure Pipeline. These two are essential milestones since they provide a plan to the market for the long term. Private players and foreign investors are willing to pitch in funds and partner with the government in the development journey, however, the prerequisites for the same are policy certainty and a long-term road map of the government. The commitments and allocations that have been given by the government in consecutive budgets have assured all stakeholders about the government's vision for infrastructure development. The development process has not just improved the physical outlook of the country but has played a significant role in bringing a psychological change in the mindset of the citizens, especially the youth. Today, we are not only producing for ourselves but are also exporting to other countries. We have exported infrastructure to other

countries not only for trade but even to those in need. We are no longer the 'India' that relies on other countries but a 'Bharat' that provides for others. This has proved to be a major development in boosting the confidence of the people and making them place their trust in a 'Bharat' that has always been a prosperous 'Sone ki Chidiya'.

The development that is being talked about today sharply contrasts with the development discussed a decade ago. Before the NDA government in 2014, development was often misunderstood to be synonymous with westernisation. For common citizens like us, infrastructure was what we saw in Hollywood movies or heard from our fellows studying or working abroad. A progressive way of living was again misunderstood to be synonymous with western culture. However, the last eight years have changed the outlook of ordinary citizens. Today, a common citizen travels on a pucca road and easily accesses railway stations even in rural areas and people living in urban areas have access to expressways, metros and airports. To understand infrastructure development, we no longer have to refer to western countries, as several examples are available in our very own 'Bharat'. Similarly, with the changing global world order and the growing importance of Bharat, the citizens have started believing more in their ancient roots. The growing confidence of the youth in our Bhartiya roots is a positive sign for our culture that the termites belonging to the western culture were eating. Thus, we are moving on a path of leaving the Rural India whose citizens lived in its villages towards an Urban Bharat that lives in urban areas, uses modern technology, has access to infrastructure, yet believes in its Bharatiya roots.



Image credit: alexlmx

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Envisioning India's Role on the Global Stage



Image credit: Reuters

The COVID-19 pandemic and its aftermath have upended the global order in ways few could imagine. They have tested relations between close allies, aggravated several geopolitical fault lines, disrupted global supply chains, raised concerns about multilateral institutions, and have prompted a rethink on many first principles of global politics and statecraft. For India, these disruptions arrived around the time our economy was gearing up to reap the benefits of several reforms the Modi government undertook in recent years.

Even though the pandemic and subsequently the conflict in Ukraine created headwinds for India, it is increasingly clear that India continues to stand out at the brightest spot in the global economic landscape. But India's

exceptionalism during these turbulent times is not confined to the economic realm alone. It has stood out as a reliable strategic partner for like-minded countries, an upholder of global governance frameworks, and a supplier of life-saving medical goods. It has been made possible because of India's rising stature and capabilities, which is finally realising its true potential under the visionary leadership of Prime Minister Narendra Modi.

As we step into the Amrit Kaal, the 25 years leading up to the 100th year of India's independence from British colonial rule, it is opportune to envisage the possibilities of India's role on the global stage in the future. It spans geopolitics, norms and ideas, tackling global challenges like climate change and driving global economic growth.

One of the principal security challenges for a wide array of countries worldwide, particularly in the Indo-Pacific region, is the increasing belligerence of China. While the Communist regime of China has delivered economic growth to its people over the last few decades, it is well established that it has done so at an unacceptable and unethical human and environmental cost. In more recent years, China's rise has stirred up problems that go well beyond its borders—bullying its smaller neighbours in the littoral of the South China Sea, resorting to unprovoked aggression at the LAC with India, compromising the integrity of multilateral institutions like the WHO, exercising a damaging influence on political systems and public institutions of other countries, encouraging Pakistan's use of terrorism as state policy. As countries increasingly





realise the need to safeguard themselves against these threats, they will find a reliable partner in India. At a time when the West in general and the US, in particular, is rethinking and, to an extent, downsizing its global leadership role, the emergence of a more powerful India can help restore the balance.

Another major theatre for India's leadership on the global stage is the realm of norms and ideas. For far too long, many countries worldwide have mistakenly assumed that the West is the best producer of ideas and the rest are better off just by blindly following them. But such assumptions are increasingly called to question in the face of global challenges like climate change or more local phenomena of populism and polarisation seen in Western societies. India can provide very useful alternative paradigms across a plethora of pressing challenges. For instance, our

civilisation's view of nature is that of harmony and is refreshingly different from the consumerist and grossly anthropocentric worldview of the West. Similarly, the Purva-paksha style of debate does far more to resolve differences and co-create solutions than the current style of rancorous debates seen across the world.

Finally, India can be a steady driver of economic growth in the increasingly uncertain world we live in today. India is the rising tide that can lift many boats, including our neighbourhood. The slew of economic reforms undertaken by the Modi government has set the stage for high growth for many years. From defence manufacturing to vaccine production, there is no area where India hasn't accelerated its arrival under the Modi government. India, therefore, has the potential to emerge as the centre of economic activity. It is probably the only

country in the world with the potential to be many things simultaneously, from a hub of finance to a hub of tourism to a hub of mass manufacturing.

As the world grapples with various threats and challenges, India has the opportunity and responsibility to emerge as an anchor of stability and prosperity. With a thriving democracy, energetic youth population, burgeoning economic potential, and most importantly, a value system that seeks the wellbeing of all, India can and has begun to demonstrate to the world that India's rise is a force of good. Guided by the vision of our civilisation's great thought leaders, from Swami Vivekananda to Pandit Deen Dayal Upadhyaya, India can realise its true potential in the years to come.

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Restructuring the State

Technology and infrastructure have been put at the forefront of economic growth while the role of government continues to shrink



IN 2015, Prime Minister Narendra Modi raised an unprecedented aspiration when he asked, “Can we not dream of a \$20 trillion economy?” In his 2021 Independence Day address, as India entered its 75th year of freedom, the prime minister spoke of the next 25 years as India’s “*Amrit Kaal*”, whose purpose was “to better the lives of citizens, lessen the development divide between villages and cities, reduce government interference in people’s lives, and have the latest technology so

that we are not behind any country in the world”. Finance Minister Nirmala Sitharaman’s Budget speech also echoed the *Amrit Kaal* vision set out by the prime minister and supports the realisation of the vision through concrete policy choices and programme commitments in technology and infrastructure.

India’s defence sector has long ailed from two interrelated afflictions—insufficient capital expenditure, and a heavy reliance on

defence equipment imports. Endemic corruption meant that governments would even desist from equipment modernisation. The cost of such political expediency and irresponsibility has been a chronic lack of readiness to manage all eventualities, including a possible two-front war with China and Pakistan. Under the present Government, the defence sector has seen a series of structural reforms, from the creation of the Chief of Defence Staff office to the corporatisation of the Ordnance Factory Board. In the Budget, Sitharaman took the reforms further by announcing that 25 per cent of India’s defence R&D budget, amounting to approximately ₹ 2,000 crore, would now be opened up for industry, academia and startups.

While this is a small beginning, it represents a paradigm shift in the way India will develop defence equipment, embracing private sector capabilities fully and investing risk capital with engineers and technologists outside of the government establishment for the first time. Additionally, 68 per cent of defence capital procurement (previously 58 per cent), or about ₹ 84,598 crore, would be from the domestic defence production industry. There would be substantial downstream benefits from both these decisions, as India builds new capacities in aerospace and defence which heretofore were the preserve of government bodies and public sector companies alone. The bold initiative of building a defence-tech-industrial ecosystem led by the private sector would not be possible unless driven by a clean, honest Government that has built high credibility and earned widespread public trust. Additionally, the Government announced the creation of

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thematic funds in sunrise sectors, such as deep technology, climate action, pharmaceuticals and agri-technology that would be managed by private fund managers and would further support the country's growing domestic private equity and venture capital industry.

The coming together of the defence sector, which was largely cut off from the private sector for nearly the entire post-Independence period, and the technology industries, which, while newly prominent on the corporate landscape, have quickly become its principal change agent, will generate several positive spillover effects and prove to be shapeshifting for economic growth. Early benefits of the defence-tech-industrial ecosystem for national security can already be seen in the way high-tech drone and artificial intelligence startups are working with security forces and contributing new capabilities to India's arsenal.

Broad-based 5G network penetration will unlock new opportunities for hardware and software makers. They

will have access to India's vast consumer market, already among the world's most rapidly expanding technology startup ecosystems

Along with committing to the rollout of optical fibre internet connectivity to all villages by 2025, the finance minister also affirmed that 5th generation (5G) telecom services, which will provide ultra-high-speed data combined with low latency, would be launched in India this year. Several leading economies, including the US, China, South Korea and the UK, have already launched 5G services—so India is already behind the curve. The telecom industry has gone through a series of upheavals, with several companies going bankrupt or shutting down, and finally saw long overdue reforms that reduced commercial uncertainty for the surviving businesses. This turmoil likely delayed India's 5G rollout. The advent of 5G creates opportunities for new hardware players to emerge and promises to enable a new category of software services and virtual experiences, given

responsiveness and data speed that would be several times faster. With the India Stack-powered Unified Payment Interface (UPI) established as an unqualified success, India is already at the forefront of digital payments globally.

As India attempts to drive digitalisation across health, agriculture, education and retail through private entrepreneurship—alongside government initiatives, such as the National Digital Health Mission, Agri Stack, Digital Ecosystem for Skilling and Livelihood, and the Open Network Digital Commerce that would collate and supply the primitives for businesses, just the way UPI did for payments—achieving swift and broad-based 5G network penetration will unlock altogether new opportunities for hardware and software-makers alike. Unlike in earlier cycles, both electronics hardware manufacturing and software services industries are growing rapidly in India, and in the next phase these businesses will have access to a growing



The New Delhi-Varanasi Vande Bharat Express (Train 18) (Photo: Getty Images)

suite of digital public goods as well as India's vast and unified consumer market, already among the world's most rapidly expanding technology startup ecosystems on parameters such as growth in funding, emergence of unicorns and creation of new ventures.

In a 2013 speech, then-Gujarat Chief Minister Modi had emphasised the power of technology to transform governance. He described government as the process of rulemaking and defining outlays, and governance as the delivery of public services measured by outcomes. As we close in on nearly a decade of Modi as prime minister, the Government has pushed to rearchitect the state and to restructure the economy—through efforts like the indirect tax reform, bankruptcy code, Aadhaar-powered direct benefit transfer (DBT) and other signature initiatives—in service of the vision of providing India with new rules and tangible results.

Two of the early actions had set the tone and direction of where Modi wanted to take India—first, dissolving the Planning Commission and replacing it with NITI Aayog, and second, the thrust given to the Pradhan Mantri Jan Dhan Yojana. The former brought a structural change in government by ending the fund allocation powers of political appointees over elected chief ministers, and along with the dissolution of the extra-constitutional National Advisory Council (NAC), the policymaking authority of the Cabinet and the Prime Minister's Office, defiled under Congress-UPA Governments, was restored. The Jan Dhan Yojana would go on to become the first letter of the now-famous JAM (Jan Dhan-Aadhaar-Mobile) trinity that has unrecognisably transformed welfare delivery and citizen services by enabling DBT into the recipient's account, and it is technology that underpins the JAM trinity, as today it includes practically the entire

population of the country and is the backbone of fast, seamless, targeted welfare delivery. The DBT platform has been a superpower for India through the pandemic—even as some advanced economies struggled to deliver welfare benefits in the form of printed cheques, India transferred cash and benefits of over ₹ 10 lakh crore over two years electronically, straight to the recipient's bank accounts.

It is useful to remember a bit of history to see how far India has come over the last eight years. In the lead-up to the 2014 General Election, a yearning for change had emerged from the environment of despondency and hopelessness engulfing India. Inflation was raging, corruption scandals galore had dented public confidence in the political class, investors had become sceptical of the India story, and India Inc was seen in a poor light, having been in cahoots with the Government through many of the scandals and precipitating a banking sector crisis visible on the horizon. When Modi took office, the new Government had multiple crises to handle—from arresting a raft of economic challenges to rebuilding public confidence, all the while meeting the high expectations of voters, was a monumental task. In the last eight years, technology has emerged not just as an indispensable tool of governance across domains but it is now both the growth engine for the economy and a powerful catalyst to shake up incumbents across industries, motivating them to take more risks. Alongside technology, infrastructure creation has received relentless focus and it is inarguably the one area where the Modi Government has excelled, exceeding even an optimist's expectations.

AS THE SECOND critical driver of India's path to a \$20 trillion economy through *Amrit Kaal*, infrastructure and logistics require continued investment and comprehensive upgrade. While great

strides have been made, with highly successful outcomes in highway construction, air connectivity, railways modernisation as well as port development, India has long ways to go. India needs to invest upfront so that infrastructure capacity across the country increases before the demand for it fully emerges, and that is what the Budget envisions by aligning the seven key areas of the PM Gati Shakti Plan—namely, roads, railways, airports, ports, mass transit, waterways and logistics infrastructure—with the related areas of the ₹ 1.97 lakh crore National Infrastructure Pipeline. To take one example, by ending the practice of the separate Railways Budget and giving the responsibility of running the railways ministry to able technocrats, the railways received the commercial focus and capital investment they sorely required. Between 2014 and 2022, the capital expenditure by the railways increased fivefold, and the electrification of the entire rail network will be completed by December 2023. The chief minister who had quipped in 2013 that if private cars can run on public roads, why can't private trains run on government-owned rail tracks is also striving to make that happen as prime minister, with efforts on to have private businesses operate trains.

India needs to invest upfront in infrastructure capacity. That is what the budget envisions by aligning the seven key areas of the PM Gati Shakti plan—roads, railways, airports, ports, mass transit, waterways and logistics infrastructure

The finance minister announced that effective capital expenditure would be ₹ 10.68 lakh crore, or 4.1 per cent of GDP, and with the fiscal deficit projected at 6.4 per cent, the Government is wisely betting on growth rather than tightening its belt too quickly. It should be borne in mind that quality of spending matters as much as the quantum of spending—and India is investing in the creation of



productivity-enhancing physical infrastructure as well as high-impact social infrastructure programmes such as the Jal Jeevan Mission, which is on track to bring piped water to all households by 2024. The effect of programmes such as Jal Jeevan and PM Ujjwala Yojana should also be analysed from the perspective of the time saving they enable at the household level—one person in the household, typically a woman, is saved from the daily drudgery of chores like collecting firewood and water just to provide the most basic facilities for the rest of the family.

The Budget has provided a clear statement of intent by putting technology and infrastructure at the forefront for *Amrit Kaal*. It is policy and technology that are the principal drivers of change in an industry, thus affecting firms on aggregate. As industries change, so does the economy, where India has been trying to bring a balance between agriculture, manufacturing and the services sectors.

Much has been done to shore up competitiveness in manufacturing—among other efforts, the Economic Survey noted that 17 states had drafted rules for the labour law reforms passed by Parliament in 2020. While contact-intensive services industries are still reeling under the pandemic's impact, the Government provided a boost to the IT services sector by overhauling rules for BPO service providers, enabling BPO providers to operate under more relaxed rules that permit remote working. This is contributing to a mushrooming of such jobs in tier-2 and tier-3 towns.

Agriculture, which has been the most resilient to the pandemic-induced economic crisis, remains the least reformed, as the crucial farm law reforms were unfortunately withdrawn under agitational pressure. A segment

where over 40 per cent of the labour force is dependent continues to enjoy tax-free income—this is an arrangement that is not sustainable and must be changed. While the Constitution doesn't permit the Union Government to apply a tax on agricultural income, states can do so.

At the very least, farmers earning above a certain threshold should be made to pay taxes. Related to this is the long-pending issue of direct tax reforms, which was once again not addressed by the finance minister. India needs comprehensive changes in direct taxation to fix anomalies in how capital assets are taxed. The rates for the highest bracket are also very high—and this is a consequence of a farrago of exclusions and exemptions granted over the years to different categories, thus transferring the responsibility onto the top income group. Direct taxes need a GST-style structural change to broaden the tax base and widen the tax net, including as many individuals and entities as possible.

While privatisation found no mention in the Budget, there has been enough action with the sale of Air India and Neelachal Ispat to generate confidence that the new policy committed to, whereby the Government would maintain only a “bare minimum presence” in selected strategic sectors and privatise all other Central public sector enterprises (PSEs), will be implemented wholly. While Union Government PSEs are analysed carefully for their performance or lack thereof, scrutiny should also be done for the state government-owned PSEs, many of which are veritable black holes of waste and corruption. Where Air India was pilloried for racking up ₹ 20 crore per day in losses, state PSEs have cumulatively incinerated on average ₹ 215 crore per day. In the spirit of federalism, states should follow the

Union Government in ending this colossal abuse of public money.

It seems clear that the intent of the Government is to deemphasise the Budget as the forum for making all important policy announcements, and it has done so successfully. The transparency with which the accounts are being presented is welcome for analysts and economists, once again building public trust in the Government's intent and integrity. The Budget should now be seen as one of many policy statements made in the year by the Government. The discipline and focus with which the Government has worked bears out another observation made by Modi in his 2013 speech—he had jocularly said that India would be much better off if government leaders said “No” more often and bureaucrats said “Yes” more often. In the last eight years, by and large the prime minister and his Government have resisted populist pressures and lobbying by interest groups, sticking to an economic strategy. At the same time, the prime minister has managed to get buy-in from bureaucrats to execute on big-ticket programmes and projects, thus bringing new rules for the New India while delivering results that are affecting the lived reality of all Indians, especially the poor. If India can persist on this path, restructuring the economy with an eye on competitiveness and rearchitecting the state to focus only on select core functions, we may achieve the prime minister's target of a \$20 trillion economy well before the close of *Amrit Kaal* and the centenary of independence.

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Modi Government Blueprint for Trillion Dollar Dalit Enterprises



Image credit: bluebay

'There are two types of castes. First is Rich and second is Poor.'

The above line has created more impression upon myself than any other lines on economic inclusion. Today India is proceeding towards a 5 trillion economy. If you study economics, there is a common phrase that crops up which is 'a golden era of opportunity, where all sections of society get equal representation and participation and where money flows in every hand in a structured manner'.

The Modi Government already had the

blueprint for a 1 trillion economy for Dalit's in place. Various channels of the economy were tapped to make it more inclusive. Financial inclusion of the Scheduled Castes & Tribes was made possible through the launch of 1 crore window lending under the Standup India scheme while reducing the costs of incorporation from 25% to 15%. BJP ruled states further uplifted the SC-ST enterprises by providing 25% subsidies in the Scheme, to make them

competitive and to strengthen them in the global market.

The Modi Government also accelerated the era of startups. Government data shows a huge gap between SC-ST entrepreneurs of the rural level & the urban level. Government launched a scheme under the Ministry of Social Justice and Empowerment known as ASIIM (Ambedkar Social Innovation Incubation Mission). Under this scheme Scheduled Caste youths were to be





Image credit: jjomathaidesigners

identified with a startup idea through use of technology and incubators would further guide them and fund them to a tune of 30 Lakh Rupees for a period of 3 years as an equity funding. Qualified and successful ventures would be further funded up to 15 crore from the 'SC Venture Capital Fund under IFCI'. Approximately 120 companies were funded in a special drive under the ASIIM Scheme through the 'Dr. Ambedkar Young Entrepreneur League'. Along with that one special award was also identified by the Modi Government which was also given under the Ministry of Social Justice and Empowerment, the 'Ambedkar Business Excellence Award'. First generation entrepreneurs are mentored by professionals appointed as Honorary Mentors for guiding them towards a successful business venture. The Modi Government also came out with a participation procurement scheme

under the Ministry of MSME. The scheme enumerates a 4% procurement policy in the public sector under which the Government of India will purchase a minimum 4% from SC-ST enterprises for their sustainable and quality production as per the global market.

The Modi Government under the New Education Policy has decided to infuse one Dalit entrepreneur in each of the premier educational institutes like the IIT's & the IIM's. Today we can proudly acknowledge that IIM Jammu has a Dalit Chairman of the Governing body in Padmashri Dr. Milind Kamble. First diversity cell was launched by our Hon. President of India Shri Ram Nath Kovind in 3 IIM's.

Modi Government has also identified and targeted the below poverty line population to make their contribution to the nation through launching PM-AJAY (Pradhan Mantri Anusuchit Jaati

Abhyuday Yojana) scheme through which the minimum family income was risen to 8 lakhs, thus enabling more and more families to get benefit under the same. This scheme will speedup our objective to reach the landmark 5 trillion target. PM-AJAY will introduce entrepreneurship at village level mainly focusing on villages having 50% SC population.

We witnessed history being created as India elected its first scheduled tribe President in Hon Draupadi Murmu, thus further promoting the scheduled caste and tribes.

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How to Ameliorate India's Innovationscape?

In the contemporary world we live in, innovation and investment in science and technology is a priority. There is no country that does not want to harness the benefits of expanding and supporting the tech corporations and scientific behemoths working with and within them. The majority of 'Unicorns' i.e. privately held technology start-ups valuing at \$1 billion or more, are centred in the United States and China. But currently India is experiencing one of the most explosive growth stories internationally. India now has more than 100 unicorns, having seen Neobank Open as its 100th entry in the elite league! And this boom is not just a reinforcement of crony capitalism, since the advantages of this evolution have been seen in everything from fiscal and

medical to agro and pedagogical technology sectors.

Recently, Shri Rajeev Chandrasekhar, Union Minister of State for Entrepreneurship, Skill Development, Electronics & Technology, expressed optimism and support for India's unicorn culture by predicting a tenfold increment in the country's unicorn population over the next 2-3 years, which he envisions approaching more than 1,000. The Indian government also stated that it anticipates the country's Tier 2 and Tier 3 cities to produce the majority of the country's upcoming young entrepreneurs, underlining the egalitarian approach in the deployment of such technology. Given India's human resource and the quality thereof, coupled to a surefooted stride in the direction of

enhancing skills and technological innovations propelled by the Government of India under the leadership of PM Shri Narendra Modi, it was inevitable that India would become a hub for technological innovation on a global scale, even in unforeseen directions and dimensions.

In his Independence Day speech in 2021, PM Modi announced the launch of the National Hydrogen Mission to make the country a hub of production of green hydrogen, while the Pilot-sonde Method of Upper Air observations helps to gather data in all weather conditions with minimum human intervention. The National Digital Health Mission (NDHM) is one of the pioneering initiatives that the Indian government has made to address the issue of big data



Image credit: greenbutterfly



in healthcare, while the Atal New India Challenge (ANIC) program has been launched to directly aid startups with technology-based innovations. The nation now has been undertaking a concerted push in the direction of Quantum Computing and Communication, with the government having invested \$1.2 billion in quantum technology development under the aegis of its National Mission on Quantum Technologies & Applications (NM-QTA), which was launched in 2020, while Artificial Intelligence and Machine Learning is seeing a much-needed surge of activity and interest, with PM Modi having announced Digital India Bhashini with its focus on building AI-based solutions for Indian languages and creating multilingual datasets as well as 'AI for All', a website dedicated to AI and raising awareness of the same in citizens. Budget 2022-23 was focused on the sunrise sectors like drone technology, genomics, geospatial systems, clean tech, semiconductors and space tech. But the key question is: what

is the way forward? Are there any key areas of S&T policy, both for the public and private sectors, that can make this growth story reach newer heights in the next 25 years?

Capacity Building and Development

Bharat Ratna Shri A. P. J. Abdul Kalam, 11th President of India, once said, *“Building capacity dissolves differences. It irons out inequalities.”* We must aim to achieve sustained investments in science and technology that are required to spur innovation, instill a scientific mindset in citizens, and meet the nation's varied requirements. India needs to create an ecosystem that relies on its own capabilities, power, and resolve rather than borrowing from others, with a multivariate framework that rests on a stable platform by instilling a genuine scientific temperament, discipline, and integrity, as well as national pride and camaraderie. As a result, national as well as decentralised benchmarking (in a hierarchical mode) is needed, both in the

formal and informal learning environments, to ensure that no silos of ignorance are formed and the human resource of the country is used in a competitive and efficient manner. A new culture of *'Atmanirbharta'* (self-reliance) must be promoted that has as its pillars the triumvirate of *'Atmachintan'* (self-assessment), *'Atmavishwas'* (self-belief) and *'Atmasamman'* (self-respect). This would be true for individuals as well as institutions and companies working in science and technology. We must be able to create a self-sustained Science and Technology environment that has the capacity to equip the other critical requirements of the system and the country, with assurance and quality.

The government has been trying to promote Cluster School and Innovation hubs in partnership with higher education institutes, private industries and local communities. The idea behind these semi-autonomous entities is to facilitate the sharing of resources and capacities across the different stakeholders. The Pradhan Mantri



Innovative Learning Programme - DHRUV has been started by the Ministry of Human Resource Development, Government of India to identify and encourage gifted children to augment their skills and knowledge.

While we must strengthen our indigenous and intra-national core in the S&T sector, we also must facilitate internationalization of R&D in India to encourage brain gain. Innovative programmes like the GIAN (Global Initiative of Academic Networks) and Visiting Advanced Joint Research (VAJRA) must be presented and their scope must be expanded for international faculty, scholars as well as students. There has to be an increased focus on skill-building through hands-on training, in a decentralised manner, possibly with tie ups between local educational as well as research institutions and regional MSMEs and industrial players.

Young minds must be given a piece of the cake when it comes to decision making, to promote novel thinking paradigms. Diversification as well as increase of extramural funding in line with national priorities is essential. Optimizing the STI financial ecosystem by giving extant financing organizations more power and independence with the aim of fostering both multidisciplinary and intersectoral research as well as sector-specific innovation. It will be reinforced to have suitable methods for financing decisions that are predicated on responsible peer assessment and a balanced expert committee in terms of expertise, maturity, and gender. To ensure easier access for private actors, the incentivization framework will be distinguished by effective regulation. India must become a leading force in the world of science and technology, from the bottom-up, across the distinct research-sectors and levels of research-pursuits.

Greater Industry-Academia Integration and Indigenisation

There is a need to promote utilitarian aspects and avenues of science in the country. Science for science's sake is key, given the nonlinear ways in which science progresses, but tempering or balancing it with the highlighting of applications is also important. We must establish a supportive ecosystem for the germination, maintenance, and expansion of specific applications of science and technology pursuits undertaken in India.

In the west, this is done with industry-academia tie-ups, such as Hitachi and Toshiba with Cambridge University and IBM with Harvard University. A natural question to ask is why can we not have the same here? We have eminent institutes like IISc, IITs, IISERs and state universities along with companies like Wipro, Infosys, Tata and Reliance. Why can the two planks be brought together, possibly even with intra-university hubs of some of these S&T giants or greater opportunities to work on the technical and innovation-oriented side of the workings of these companies in-house? To assist science and technology-enabled entrepreneurial advances from conceptualization to prototyping, we must have a continuum of well-integrated financial and technological support programs. In order to better support early-stage S&T-enabled enterprises, we must increase program implementation reliability, timeliness, coherence, and accountability. We must also consider how to include grassroots innovation and Traditional Knowledge Systems (TKS) into the larger academic, scholarship, and innovation system. This requires the establishment of an institutionalized framework on the premises of various technical and research institutions so that we can identify and assimilate grassroots visionaries into the mainstream, thereby inspiring youngsters to be innovative.

In order to create technologies in a way that is both aligned with national

interests and works toward building an economy that is self-sufficient, a two-pronged strategy will be used, involving both producing homegrown innovations and adapting imported ones. The exchange of nuances of work between cooperating agencies, technical institutes, and industry would improve indigenous innovation and development of essential goods and components with the necessary financial resources being provisioned mostly from the stakeholders themselves.

Even if better technology is available elsewhere, indigenous innovations should be supported by the government, along with seeing how to develop such technologies so that they bridge the conceptual and technical deficit as well as are more effectively positioned in the international marketplace. Recently, an umbrella organization called the "Strategic Technology Board (STB)" was proposed by the Department of Science and Technology, Government of India, to serve as a liaison between various strategic agencies and to monitor and suggest technologies to be purchased or made in-house in the strategic agencies, private sector, or educational establishments in line with India's goal of becoming self-sufficient, along with a Strategic Technology Development Fund (STDF) to encourage the private sector and higher educational institutes to develop strategic technologies.

To evaluate the innovations produced in academic and research institutes, funding methods will be established. The terminologies, hazards, and financing patterns alter at diverse levels - higher education institutions, industry, and grassroots are quite distinct. To develop a conducive atmosphere for translational research, interaction and collaborative gaps between these levels will be overcome. Wherever possible, novel approaches with institutional links for translational research resulting in emerging companies and scalability



chances will be established. Furthermore, funding organizations will be recommended to establish sector-agnostic but stage-specific programs to support all stages of research and innovations. A policy enabling stage-specific lateral admittance into projects would enable a scientist or researcher, who has the understanding and freedom to constructively reinforce the project, to reach out for deployment based on the project's 'Readiness Level.'

Open (and Responsible) Science: Increased Accountability of Science

Open science is a set of initiatives intended to increase the openness and accessibility of scientific outputs and procedures. It does this by utilizing new tools, adjusting motivations, and transforming mindsets in order to create a more rigorous and verifiable science. As per the Science, Technology, and Innovation Policy (STIP) document released in December 2020, the government intends to establish a National STI Observatory, which will be a central repository for all sorts of data related to and generated from the STI ecosystem, and has also declared its move to develop a dedicated portal – Indian Science and Technology Archive of Research (INDSTA) to provide access

to the outputs of all publicly-funded research. When it comes to journal access, one problem is that of subscriptions that a common man who is not associated with a research institute cannot access. The government's One Nation, One Subscription model can help get around that, with a centrally-negotiated subscription for all citizens.

I think we must also shift the focus on our own journals in India, so that research done in our country does not seek constant validation from the West. Science may be borderless but many-a-times it is afflicted by biases and systemic barriers. An encouragement of Indian journals as well as greater outreach, with strict measures against fake journals and any semblance of pseudo-science, can help bring forth good science in India to the world. Besides in the world of journals and outreach, we must also build towards making learning spaces more universally accessible, as per international guidelines and standards, especially for people with special needs. This, however, has to be done with efficiency and performance as preeminent, be it with a tiered model wherein there is a pyramidal access structure based on how involved and sophisticated the research-

procedure is or through the use of an outreach and access cell for research institutions across the country. There are various questions still to be addressed in this policy-area: what data really needs to be shared, when must they be shared and exactly how easily reusable must it be? The question is about standards and accountability, and given the monetizable as well as public expenditure aspect of S&T in different sectors, we have to raise the bar when it comes to what can be and cannot be funded.

The need of the hour is to create a comprehensive and nuanced policy framework for S&T in India, building on the achievements of the NDA government led by Shri Narendra Modi. Inter-sectoral linkages, optimisation of existing elements, disruptive policy strides and pursuits, increased accountability of research, greater integration of academia and industry, indigenisation of strategic technologies, promotion of grassroot innovators as well as general capacity building and development are all priority areas in this direction. India is poised to reclaim its place as a Vishwaguru in the innovationscape at the empirical level, and all we must do thereof is to ensure that it has the firepower and capability to push forward full-steam. I look forward to seeing the government, institutes of excellence, industry, state agencies and universities as well as civil society come together to help facilitate a more competitive and yet egalitarian scientific and technological thrust for our nation in the next 25 years. That alone shall help us come into our own on the 100th year of our modern existence as well as manifest the soul of India, which was always about the pursuit of realisation and knowledge for an ameliorated human condition.

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Image credit: chanpipat

Vishwaguru Bharat @100

“Every nation has a message to deliver, a mission to fulfill, a destiny to reach. The mission of Bharat has been to guide humanity” : Swami Vivekanand

The next 25 years will be crucial for both India and the rest of the world as India celebrates 100 years of Independence. Prime Minister Narendra Modi has asked everyone to work together over the next 25 years to make our country great again in every way and in every sector. The current western economic model and philosophies have done little to benefit the world in terms of happiness, peace in individual lives and within societies and countries, increased environmental damage, and exploitation of developing and poor nations. Even though developed countries have advanced materially in many ways, violence, mental, physical, and social issues are on the rise, while happiness is on the decline.

Bharat will play an important role in the economic, social, and spiritual aspects of humanity and the environment. Modi Government's focus on building strong economies while also focusing on social, spiritual, and environmental aspects to improve not only Bharat but also the entire world's prospects for living with dignity, peace, joy, and belonging for all.

The fact that the economy is gaining traction while the rest of the world is in crisis is entirely due to current government policies and actions. To achieve a 30 trillion dollar economy by 2047, a different perspective and policies are required to put the country on a higher growth trajectory than China and the United States. The focus is on each sector with Aatmanirbhar Bharat and training youths through New Education Policy to develop as entrepreneurs rather than job seekers with an innovative and research-oriented

mindset. Foreign policy's important aspect is to respect and value each nation, rich or poor, for their culture and traditions. Corruption is a major source of concern. However, only stricter laws and technology-driven work will not significantly reduce corruption. The greater the emphasis on developing personal and national character, the less corruption and exploitation will exist. The qualitative implementation of new education policies and spiritual education from an early age will undoubtedly make a difference, and it will undoubtedly be worked out with the continuation of the current regime for the next 25 years.

In the coming years, the rising traction of the Bharatiya way of economic and spiritual model will make Bharat the center of attraction for meeting the world's aspirations and material needs. Though we are currently struggling to reach a 5 trillion dollar economy by 2025 due to COVID and war crises, once this initial jerk is removed, the economy will accelerate in the direction of reaching around 30 trillion dollars by 2047.

Bharat will monitor, guide, and control global health through its holistic approach to treatment, healthy living, and environmental balancing. Bharatiyas will have a strong potential in this area to help their own economy as well as the global economy, with a focus on a healthy and peaceful world.

Bharat is made up of villages, and approximately 6 lakh villages will change the fortunes of Bharat in the next 25 years. Policies should prioritize "Village Entrepreneurship Development" while preserving the great culture, traditions, environment, and Bharatiyatva in villages. This will result in a significant reduction in

unemployment, drug abuse, unnecessary conflicts, and, most importantly, the "slavery mentality" that has developed over time.

“The preservation of freedom is not the task of soldiers alone. The whole nation has to be strong” : Lal Bahadur Shastri

Another critical aspect is to prioritize research and development. 'The key to success is incremental innovation.' The new education policy emphasizes research and development as well as the development of personal and national character. Governments and other stakeholders should focus on implementing it judicially, passionately, and to completion over the next 10 to 15 years. Industry should also focus on and promote innovative ideas, as well as provide youth with new skill sets and opportunities in R&D. It will completely change the mindset of youths to focus on their creative and innovative abilities, indigenous development of new technologies, and providing solutions to the world's problems.

Bharat is known as the 'farmer's nation'. Current policies encourage the use of best practices and technology to increase output. The agriculture sector in Bharat is expected to generate better momentum in the next few years due to increased investment in agricultural infrastructure such as irrigation facilities, warehousing and cold storage. We need to create more supportive and encouraging policies that encourage organic farming so that we can become self-sufficient while also supporting the majority of the world without exploitation. Organic or non-chemically treated food will help to prevent soil, water, and air pollution, as well as contribute to the development of a healthy society and economically stronger farmers.



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The nation's electrical energy requirements are enormous; the current government's emphasis on building additional capacity using renewable energy sources is commendable. India is the third largest producer of electricity in the world. The national electric grid in India has an installed capacity of 403.759 GW as of 30 June 2022. Despite the fact that coal-fired power plants pollute the environment, we continue to rely on them for our needs. Focused and effective renewable energy policies must be strengthened so that we can become self-sufficient in terms of total renewable energy by 2047 while also assisting other nations with their electricity needs.

We import a large amount of fossil fuels, which has an impact on our economy because it weakens our currency and is a major source of pollution. As a result, the policy of giving weightage to electric vehicles and renewable sources of energy will help to build the economy, strengthen the rupee, and reduce pollution.

The health of a nation is determined by the state of its resources. Each work's efficiency, effectiveness, and quality are determined by one's health. We've been dealing with more serious issues on this

front. Quality health services are lacking in large parts of the country, and even when they are available, they are prohibitively expensive for the average citizen. Quality health care at a lower cost is urgently needed to make a difference for the socio-economically disadvantaged as well as the middle class. The Modi government's Ayushman Bharat policy is critical, but more policies for holistic practices and treatment, preventive care, and quality services must be implemented over the next 25 years.

According to a recent World Bank report, extreme poverty in India has more than halved between 2011 and 2019, falling from 22.5 percent to 10.2 percent. The reduction was greater in rural areas, ranging from 26.3% to 11.6%. When compared to 2011-2015, the rate of poverty decline between 2015 and 2019 was faster. The current government's emphasis on making life easier for ordinary Indians through schemes such as the Ujjwala Yojana, PM Awas Yojana, Swachh Bharat Mission, Jan Dhan, and Mission Indradhanush, as well as the Deendayal Antyodaya Yojana-National Rural Livelihood Mission and expanded coverage under the National Food Security Act. Poverty

is a curse for any society or country. Inequality breeds hatred, enmity, unhealthy competition, exploitation, and religious conversion. As a result, the next 25 years will be critical in eradicating poverty. Policies implemented and efforts to provide quality education and various skills will empower them.

In the last eight years, the rise of Hindutva has been attributed to many people around the world realizing that Hindu Dharma respects everyone, believes in the philosophy of 'Vasudhaiva Kutumbakam', which means the entire world is my family, and this has been demonstrated on the ground by the Modi government by assisting during the Corona crisis, war situations, natural disasters, and economic crises. By 2047, many countries around the world will begin to follow Sanatan or Hindu Dharma principles, and many will practice Hindu Dharma on their own to spread happiness, sharing, and caring, and to put a smile on everyone's face. The current government's foreign policies and actions have created a strong bond and respect for Bharat and each Bharatiya, and it will continue to do so.

M. S. Golawarkar Guruji stated "Dharma is the universal code of right conduct that awakens the common inner bond, restrains selfishness, keeps the people together in harmonious state without external authority". He further added, It is devotion to one's motherland, society and tradition experienced under the concept of nation that inspires the spirit of real service and sacrifice in the individual.

A new Vishwaguru Bharat will emerge, not to exploit other nations or seize land or natural resources, but to strengthen each nation in order to make the world a better place to live.

**Author: Pankaj Jagannath Jayswal,
Author & Columnist**



Foregrounding a Nationalist Imaginary for India@100

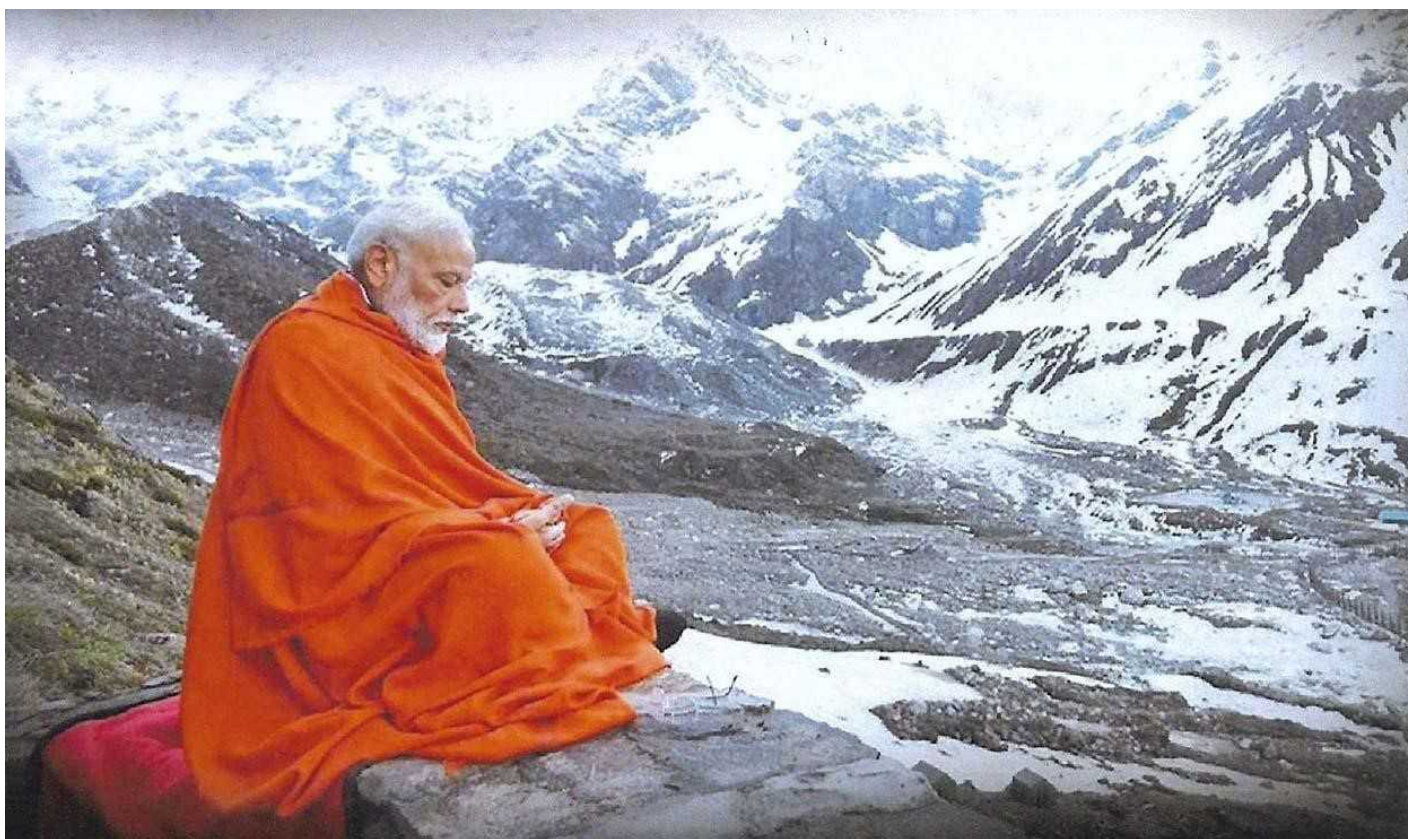
As a ten-year-old, verging on eleven, on the cusp of India's 50th Independence Day in 1997 on a grainy satellite feed of Doordarshan in Muscat in the Sultanate of Oman - I remember Prime Minister Deve Gowda's address to the Parliament remembering the freedom at night moment. Growing up in the temporary guest worker Gulf diaspora with teacher parents, the 50th year of Independence was a joyous occasion marked by the recording of the session for posterity on the VHS tape. I am not sure where the tape is at present, however it has left an indelible mark on my psyche as a proud Indian who was raised overseas and writes mainly on transnational Indian spaces in the Gulf and Southeast Asia. The diaspora in the Gulf is almost

entirely Indian by citizenship, waiting for a flight back home as was evident by the incredible '*Vande Bharat Mission*' feat during peak pandemic mayhem under the astute leadership of the Modi government.

The recalling of this anecdote is a reminder that I have spent most of my life between the 50th and the 75th Swatantrata Diwas where the enthusiasm for 'India 2020' was the flavour of the season. As the nation moved into the busyness of the everyday, strategic goals lost its essence as a guiding force and became a hollow reminder of the golden time stamp of yesteryears. The act of marking these major spatial temporal milestones is an act of remembrance through resistance, which many a naysayer had suggested during

Independence that the nation which is a sacred geography is on the way towards balkanisation. India, 75 years later, is a victory with myriad challenges that it faces each day.

Future scenario building is a consultant's pet peeve and a standard tool in the arsenal of strategic thinkers. The ritual of thinking about the future is a generative frame, and often is a projection of the biases of the present rather than a useful prognosis of the future. As this edition tries to imagine and conceptualise the frameworks and the issues which would be potential winners and chalk out hindrances for our polity, I would like to step back and question the basis of assumptions that the intelligentsia has utilised to imagine so called future projections. The usual



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basis of assumptions is hollow as these frames are often rooted in a tick box exercise, rather than a meaningful initiative to generate a cohesive collective consciousness in nation building.

The mainstream vision documents are a touch point for policy and program building as a part of a master plan, both at the national, regional, and local scales of governance. Having been an environmental & social planner in these master planning endeavours- the reference point for such infrastructures of imagination is often Eurocentric in character, as our predominant history is critically interpreted and written through a colonial lens. As we attempt to paint a nation for 2047, I beg to unpack the frayed edges of our status quo - 'Is there a Hindu Nationalist vision of an India at 100 years?'

I had coined the term 'Hindu Nationalist Intellectual Architecture' which was referenced by noted public intellectual Dr Sanjaya Baru in this book 'India's Power Elite: Caste, Class and Cultural Revolution' which was conceptualised in a Tilak Chronicle article. This intellectual architecture is often

justifiably preoccupied with a reworking of our '*itihaasa*' or histories which were defanged by the Marxist school of historians who were shamed by anything Hindu. A sense of being wronged by the past masters could be channelised into a sense of creating an India which is strong and secure. However, the challenge is to move from thinking about the past to thinking about the future, in a lexicon which is rooted in cultural nationalism.

Anticipatory knowledge building such as scenario analysis needs a geographical anchor in its conceptualisation. So, when we are thinking about the next quarter century, we need solutions fit for citizens - from Balia to Bolpur to Bellary, rather than the global coastal cosmopolitans from where theses are written. What are ways which we could think about for a prosperous India from our towns, that are anchored in our Hindu ethos. There could be insights from which we could learn, such as, the Hindu Tamil Maritime Empires who had ruled Southeast Asia in terms of looking beyond one's shores. There are prominent Hindu diaspora political and business leaders who are success stories

globally, yet as the Singaporean Prime Minister Lee Hsien Loong once mentioned that 'India is a model on to itself' and correctly so as our scale and its subsequent complexity would entail any model from the outside to be custom built for us, such as our imported cars. The present articulations of progress have worked well for us until now, but we could strive towards a Hindu Rashtra which is a global leader at the human scale of the citizen and the nation by novel ideas followed by robust program delivery.

There is something energetic about Prime Minister Narendra Modi ji's call for a 'New India'. A clean break from the pathos of the past is needed to create a fresh runway for taxi and take-off. The idea of New India is of a confident nation which takes pride in its cultural moorings. That Hindu approach needs to be fit for purpose for India and Indians. A call for 'Hindu Futures' need to be made here, to decolonise our thinking incrementally towards alternatives stemming from our cultural resources, rather than merely parroting uncritically a boilerplate template which would be slightly unsuitable in the contexts we inhabit in India. Decolonisation is a free for all, open ended intellectual buffet that needs to be refined for the Hindu Nationalist Intellectual Architecture as contextual specificity is the point of potency as we reimagine our 'Hindu Futures'.

A particularly striking optic was when Prime Minister Modi ji sat for a yagna ahead of the construction of an important cultural nationalist monument such as the Ram Mandir in Ayodhya where he wears his identity on his sleeve. A pride within is vital to our confidence in expressing our aspirations for the next quarter of a century.



Image credit: arindambanerjee

Author: Prasad Manishankar,
Author & Columnist



Industry 4.0 – India's Semiconductor Mission

“A country that does not adopt modern technology is left behind, as had happened to India in the Third Industrial Revolution. But today we can proudly say that India is guiding the world in the fourth industrial revolution, Industry 4.0.”

Addressing the launch program of Digital India Week 2022, Prime Minister Shri Narendra Modi affirmed the leadership role that India is going to assume in driving the technology led fourth industrial revolution. He also emphatically said that today India aspires to become a chipmaker from a chip taker, thus stressing the importance of the role India's Semiconductor Mission will play in bringing the Fourth Industrial Revolution.

Why are Semiconductors Critical?

Semiconductors — also known as microchips, integrated circuits, and processors — are embedded in all electrical and electronic devices. Most devices comprise an ecosystem of chips controlling different functions.

Semiconductor is the heart of modern economics. Chips are integral to just about everything electronic: smartphones, cars, trains, washing machines, traffic lights, computers at the stock exchange, fighter jets. Also, with the emergence of e-vehicles, the demand for semiconductors is expected to see a big boom. But they didn't invite much public attention until there was a shortage stemming from supply disruptions due to Covid lockdowns. The Covid-19 pandemic has shown that the demand for electronic gadgets will only go uphill from here. India's own consumption of semiconductors is expected to cross USD 80 billion by 2026 and to USD 110 billion by 2030.

India, currently imports 100 per cent of

its chips, was hit hard by the worldwide chip shortage, exacerbated by Covid and the Russia-Ukraine conflict. Like the rest of the world, the country is keen to achieve some chip self-sufficiency. There are not many countries in the world that manufacture these chips. The industry is dominated by the United States of America, Taiwan, South Korea, Japan and the Netherlands. Germany is also an emerging producer of ICs. Given the circumstances, the Modi government proactively understood the importance of getting early on the bus and thereby launched the India Semiconductor Mission program, first of its kind in India.

What is the India Semiconductor Mission (ISM)?

In the light of the criticality of chips to national and economic security, The India Semiconductor Mission (ISM) was launched in 2021 with a total financial outlay of Rs76,000 crore under the aegis of the Ministry of Electronics and IT (MeitY). It is part of the comprehensive program for the development of a sustainable semiconductor and display ecosystem in the country. The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem.

Envisioned to be led by global experts in the Semiconductor and Display industry, ISM will serve as the nodal agency for efficient, coherent and smooth implementation of the schemes. Under ISM in April 2022, for the first time in India's history, Hon. Prime Minister Shri

Narendra Modi inaugurated a conference just about semiconductors, 'SemiconIndia 2022', sending a clear message that the tiny chips had become important enough for the country's premier to put his face to.

Major Components of ISM

Setting up Semiconductor Fabs in India

It provides fiscal support to eligible applicants for setting up of Semiconductor Fabs which is aimed at attracting large investments for setting up semiconductor wafer fabrication facilities in the country.

Setting up Display Fabs in India

It provides fiscal support to eligible applicants for setting up of Display Fabs which is aimed at attracting large investments for setting up TFT LCD / AMOLED based display fabrication facilities in the country.

Setting up Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India

The Scheme provides a fiscal support of 30% of the Capital Expenditure to the eligible applicants for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including MEMS) Fab and Semiconductor ATMP / OSAT (Outsourced Semiconductor Assembly and Test) facilities in India.

Design Linked Incentive (DLI) Scheme



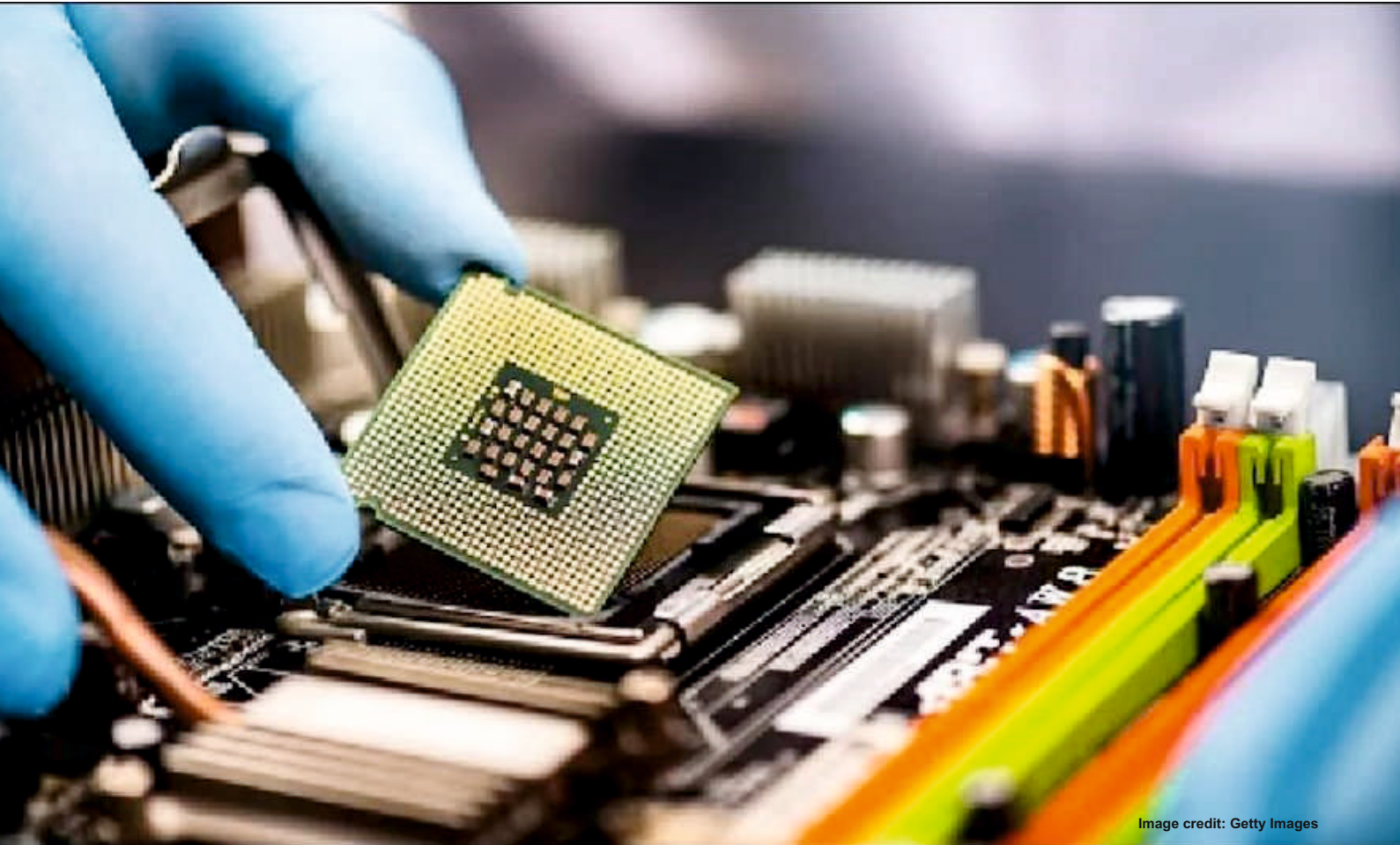


Image credit: Getty Images

It offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores and semiconductor linked design.

Way Forward

Semiconductors and displays are the foundation of modern electronics driving the next phase of digital transformation under Industry 4.0. Therefore, the following steps are needed.

Maximizing Self-Reliance: Future chip production must develop an end-to-end ecosystem from design to fabrication, to packing and testing.

Out-strategizing Designs and Functionalities: Given the long gestation periods and rapid technology changes, India must out-strategise on design and functionality as the end product will be

out only after three-four years from the moment work begins, by which point the prevailing chip shortage would have been resolved, while technology would have advanced further.

Role of Public Sector Enterprises (PSEs): India's PSEs such as Bharat Electronics Ltd or Hindustan Aeronautics Ltd can be used to set up a semiconductor fab foundry with the help of a global major. The immediate need for the Indian government is to connect related industries in India to create the chip manufacturing ecosystem. National capability needs to be enhanced.

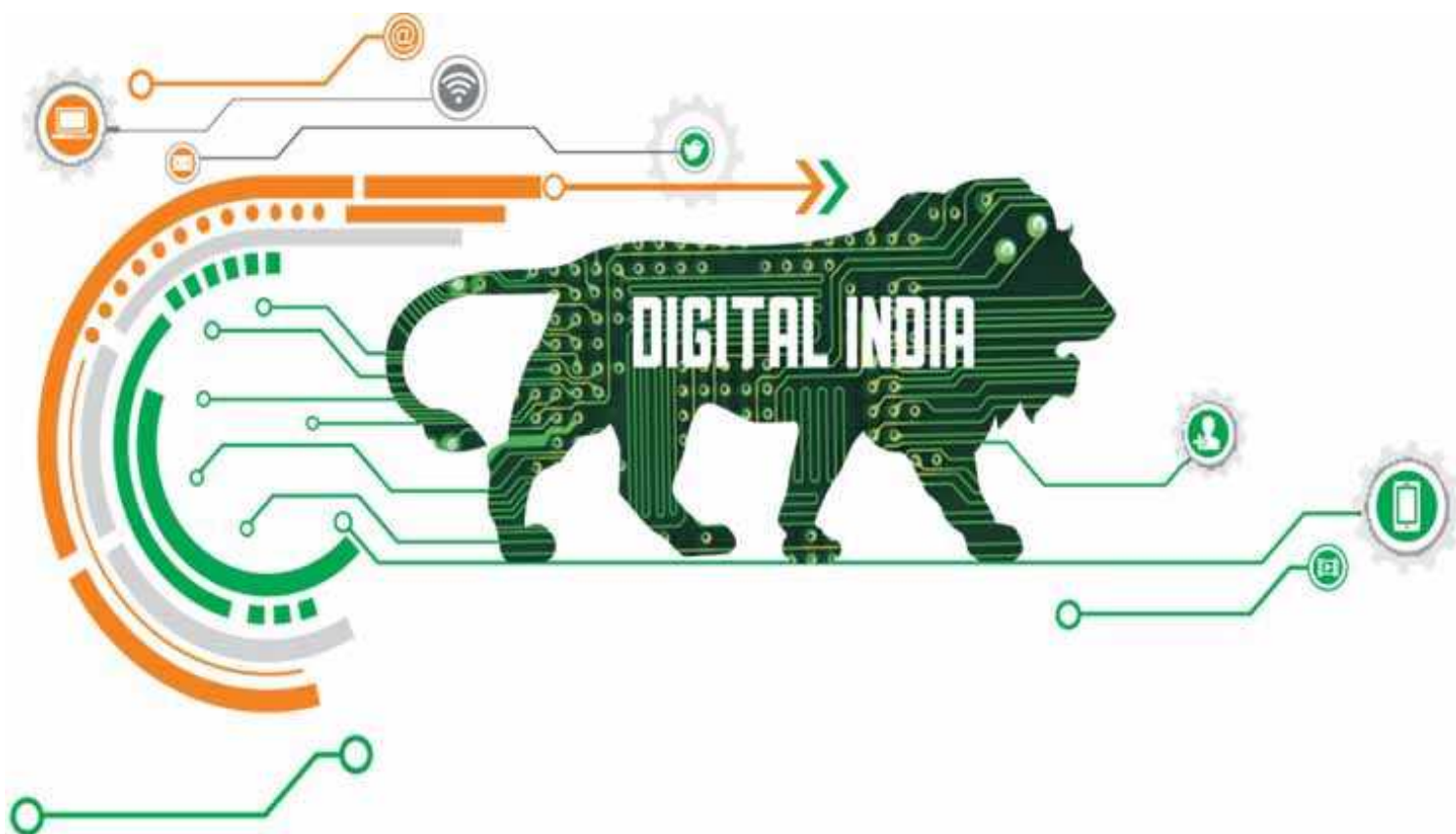
Leveraging Groupings such as Quad: For developing such critical and emerging technologies, multilateral cooperation is a necessity for India. The Quad Semiconductor Supply Chain Initiative is a good starting point. India needs to push for a Quad Supply Chain

Resilience Fund to immunize the supply chain from geopolitical and geographic risks

India has realized that being entirely dependent on global supply chains for something as critical as semiconductor chips is not sustainable in the long run given the ever changing dynamics of international relations. Thus, self-reliance in the semiconductor industry is crucial for both national and economic security of India. The Modi government's decision to simultaneously establish an India Semiconductor Mission helmed by 'global industry experts' to drive long-term strategies for the sustainable development of the chip and display industry is a visionary step in the right direction.

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Global Digital Revolution - The India Way



As we celebrate India's foray into the Amrit Kaal of Independence, we should take a look at how far India has progressed in the field of Digital Communications. With more than half a billion internet subscribers and increasing every day, we are the largest and one of the fastest growing markets for digital consumers. Under the leadership of Prime Minister Shri Narendra Modi, India has been at the forefront of global digital transformation, achieving excellence in the development and use of Information and Communication Technologies.

Several initiatives, like Digital India and Bharatnet are taking optical fibre to 600,000 villages, of which 175,000 are already connected. National Broadband Mission to ensure high-speed internet has been taken to ensure a digitally empowered society and knowledge economy. India has made significant strides in digital health, education, financial transactions, e-governance etc. We are committed to leveraging ICTs to realize Sustainable Development Goals (SDGs).

It took more than a decade to arrive from 2G to 3G, but now India is developing

fully indigenous 5G mobile communications technology and has already taken steps to develop 6G technology in future. India is a vast country with large rural and remote areas. To cater to the telecommunications needs of India in such areas, we have developed a set of customized 5G standards. These standards are among the first 5G standards, which have been approved by the International Telecom Union and have also become part of Globally harmonized 3GPP standards. These will be immensely helpful for countries with



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similar geographical spread. India is poised to play a leadership role in the global digital revolution.

Thirdly, we are creating open public digital platforms. These are all open-source platforms, for example, a unified payment system that any bank can join today, and millions of transactions are safely happening on it. India's Universal Payments Interface or UPI has crossed

USD 1 trillion in transactions in the Financial Year 2021-22, with the number of transactions hitting 5 billion in April 2022. Digital Inclusion is possible in India due to the JAM revolution– Jan Dhan Yojana provided bank accounts for 440 million unbanked persons for the first time, Aadhaar or Biometric Identity for 1.33 billion residents and 1.16 billion Mobile connections.

India initiated path-breaking reforms in Wireless Licensing in September 2021, and the target was November 2022. The task was completed in May, six months ahead of the target.

When the nation celebrated Drone Mahotsav, the world saw the creativity and potential of Indian Drones and technology. Faraway from Delhi, in a pilot project, a drone flew 46kms in less than 30 mins and delivered important medicines. India has not only ensured the last mile delivery of all benefits and schemes but also incorporated the latest technology to keep us at par with global organizations.

These past 8 years have been technology-led 'Antyodaya, which is about ensuring that the last person in a remote village is not deprived of the fruits of development. It can be said without a doubt that these past 8 years of the Narendra Modi government have been of Seva, Sushasan and Garib Kalyan.

The Hon'ble Minister of State for Communications recently led the Indian Delegation to participate in the ITU's World Summit of Information Society. India has been a member of the ITU since 1952 and has played a leading role in realizing ITU's goals. In recognition of this, the ITU has approved establishing an Area and Innovation Centre in India to give thrust on ICT developmental activities in South Asia. The Innovation Centre will contribute to global innovation in ICTs.

As we believe in 'Vasudhaiv Kutumbakam', India shall remain committed to making the lives of everyone across the world easier with innovative and affordable technological breakthroughs, especially in the Radiocommunications sector. And we shall lead India and the entire world towards the 'Amrit Kaal.'

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पंचायती राज- सफर और सम्भावनायें India@100

गांधी जी का दृढ़ विश्वास था कि गाँवों को सशक्त तथा उनकी स्थिति में सुधार करके ही देश को हर प्रकार की दृष्टि से अपराजेय बनाया जा सकता है। उन्होंने गाँवों की अनेक आवश्यकताओं को पूरी करने के लिये अनेक छोटे-छोटे संस्थानों को स्थापित किया तथा ग्रामवासियों की शारीरिक, आर्थिक, सामाजिक और नैतिक स्थिति सुधारने का भरसक प्रयत्न किया। उनका मानना था कि सच्चा लोकतंत्र गाँवों के हर व्यक्ति के सहयोग से चलता है और इसी मंशा से उन्होंने पंचायतों को अधिक से अधिक सशक्त और समर्थवान बनाने की वकालत

की। स्वतंत्रता के पश्चात सत्ता के विकेंद्रीकरण की दिशा में 73वें संवैधानिक संशोधन के द्वारा पंचायतों को संस्थागत और संवैधानिक दर्जा देकर उसे प्रभावी बनाया गया। इसके लागू होते ही भारत में त्रि-स्तरीय पंचायती राज व्यवस्था की शुरुआत हुई। पिछले 29 वर्षों के सफर में पंचायतों ने भारत में 'लोकतंत्र की मूलभूत इकाई' के रूप में लोगों की भागीदारी, कानून के शासन एवं जवाबदेहिता के साथ जनकेन्द्रित दृष्टिकोण से स्थानीय स्वशासन की अवधारणा को साकार किया है। पंचायती राज व्यवस्था को इसके अधिकार क्षेत्र एवं कार्यप्रणाली के कारण

स्थानीय स्वशासन भी कहा जाता है, जो इस सिद्धांत पर आधारित है कि स्थानीय लोगो को वहाँ की समस्याओं और मुद्दों के बारे में गहराई से जानकारी होती है और ऐसे में वहाँ के प्रबंधन और प्रशासन को स्थानीय स्तर पर चुने गए प्रतिनिधियों को सौपा जाता है। सर्वविदित है कि स्थानीय इकाइयों ने हर परिस्थितियों में बेहतर प्रबंधन और परिणाम दिए हैं। संविधान का 73वां संशोधन पंचायतों में महिला आरक्षण की व्यवस्था के वजह से भी युगांतरकारी और महत्वपूर्ण कानून है। अब तक के सफर में यह साफ नजर आया है कि पंचायतों सरकार की सभी



जनकल्याणकारी योजनाओं को सहजता से जमीनी स्तर पर सुलभ कराने के साथ-साथ राज्य और ब्यूरोक्रेसी को जनता से संस्थागत और नीतिगत रूप से जोड़ने में ब्रिज का कार्य करती हैं क्योंकि पंचायते तीन प्रकार से प्रभावी होती हैं पहला, वे जमीनी वास्तविकता एवं जनता से जुड़ी हुई होती है और सन्दर्भ विशेष में स्थानीय जरूरतों को समझने के साथ-साथ पूरा करने में भी सहयोगी होती हैं। दूसरा, आसानी से जनता तक पहुंच और समाज में जबाबदेहिता की जिम्मेदारी उन्हें जिम्मेदार बनाती हैं। तीसरा, स्थानीय सरकारों में प्रतिनिधियों से जनता की प्रत्यक्ष सम्बंध उन्हें अधिक भरोसेमंद और वैधता प्रदान करती हैं, ऐसे में राज्य द्वारा किये जा रहे नीतिगत पहल और स्थानीय वास्तविकताओं में एकरूपता और सामंजस्य आता है। इन्ही कारणों से पंचायते सभी मंत्रालयों, राज्य सरकारों, समुदाय आधारित संगठनों आदि के साथ मिलकर गरीबी उन्मूलन, खाद्य सुरक्षा, स्वच्छता, पेयजल और मनरेगा आदि क्षेत्रों में उल्लेखनीय कार्य कर रही हैं।

मोदी सरकार ने अपने कार्यकाल के शुरू से ही स्थानीय स्वशासन को स्वावलंबी, सुदृढ़, सक्षम और सशक्त करने की तरफ अनेक कदम उठाए गए हैं साथ ही नियमन और निगरानी तंत्र को भी अधिक पारदर्शी और सबल बनाया गया है। 2015 में

पंचायती राज मंत्रालय में ग्राम पंचायत विकास योजना(जीपीडीपी) की शुरुआत करने के साथ ही ग्राम विकास अनुदान राशि को बढ़ाना, बेहतर प्रबंधन, एजेंडा(एक्शन) रिपोर्ट तैयार करने, नियमन, निगरानी और पारदर्शिता को बनाने के लिए ग्राम सभाओं की प्रगति रिपोर्ट, लाभार्थियों की सूची और तमाम विकास कार्यों जैसे मनरेगा, खाद सुरक्षा, सड़क, बिजली और अन्य कार्यों आदि की वार्षिक रिपोर्ट को ऑनलाइन कर जनता के लिए सुगम बनाया है। राष्ट्रीय ग्राम स्वराज मिशन, स्वामित्व योजना की शुरुआत और ई-गवर्नेंस के दिशा में पंचायतों को जोड़ते हुए ई-ग्राम स्वराज पोर्टल एवम ऑडिट ऑनलाइन एप्लीकेशन को लांच किया है जिससे ग्राम पंचायतों के काम-काज में पारदर्शिता और जवाबदेही आने के साथ-साथ जागरूकता, सुशासन और जवाबदेही आ सके। इसके साथ ही सरकार हर वर्ष 24 अप्रैल को ही पंचायतों को प्रोत्साहन देने के उद्देश्य से विभिन्न पुरस्कारों से भी सम्मानित कर रही है जिससे प्रेरणा के साथ पंचायतों में अधिक लगन से कार्य करने का वातावरण बन सके।

समग्र रूप से देखा जाए तो पंचायतों में संधारणीय और समावेशी विकास सुनिश्चित करने के लिए आपार और असीम सम्भावनाएं हैं। कृषि प्रसंस्करण, विपरण, कौशल विकास, ग्रामीण उद्यमिता, उत्पाद

अनुकूलन, ऋण, बीमा और वित्तीय प्रबंधन आदि के क्षेत्रों में दिन प्रति दिन अवसर बढ़ते जा रहे हैं ऐसे में व्यापक और बहुआयामी अवधारणा के साथ प्रभावी रणनीति को अपनाकर 'विकास लक्ष्य' को प्राप्त किया जा सकता है, इससे अर्थव्यवस्था को रफ्तार मिलेगी। पर्यावरण अनुकूल किफायती प्रौद्योगिकी, संसाधन प्रबंधन, नवीकरणीय ऊर्जा, अपशिष्ट प्रबंधन, कचरा संग्रहण, सेवा वितरण, डेटा विकेंद्रीकरण, ई-शासन और नवोन्मेष आदि जैसे क्षेत्रों में स्थानीय निकायों को शामिल करके सतत विकास लक्ष्यों की दिशा में काफी कुछ हासिल किया जा सकता है इसके साथ ही उन्हें वित्तीय अधिकारों, संसाधनों की उपलब्धता, पर्याप्त क्षमता निर्माण, अवसंरचना विकास और प्रशिक्षण आदि के माध्यम से ग्रामीण क्षेत्रों में मानव संसाधनों का भी विकास किया जा सकता है। आज़ादी के इस अमृत काल में पंचायतों को सशक्त करने की दिशा में सार्थक लक्ष्यों को हासिल किया है।

जब देश अपनी स्वतंत्रता के सौ वर्ष मना रहा होगा उसवक्त हमारी पंचायती राज व्यवस्था कैसी हो इसको लेकर कोई संशय नहीं होना चाहिए। जिस तेज़ी से हमने विकास किया है ऐसा में अगले ढाई दशक में हम यह कल्पना कर सकते हैं कि हमारी पंचायत इकाई जहाँ पूरी तरह आधुनिकता से जुड़ जायेगी बल्कि पारदर्शिता और शत प्रतिशत कार्यों को डीलैवर करने की महत्वपूर्ण उपलब्धी हासिल करेगी। गौरतलब है कि पंचायतों में सम्भावनाएं और लक्ष्यों के दृष्टिकोण में शत प्रतिशत कामयाबी के साथ सभी हितधारकों को साथ लेकर सक्रिय रूप से भागीदारी सुनिश्चित करना आवश्यक है। जिसके परिणामस्वरूप पंचायती राज संस्थाओं की कार्यकुशलता और प्रभावशीलता सुधरेगी एवं समग्र और समावेशी विकास को सुनिश्चित कर इन्हें पारदर्शी एवं रचनात्मक संस्था बनाकर सहभागी लोकतंत्र और आत्मनिर्भर भारत का लक्ष्य हासिल हो सकेगा।



लेखक: शिवांशु राय,
अध्येता, बनारस हिंदू यूनिवर्सिटी

India Tech: Stay in India to Combat Lack of Technical Talent

“The Chinese dream of national rejuvenation can only be realized by gathering the brightest minds under heaven to serve China”

- Xi Jinping, The Chinese President

The Chinese Communist Party began implementing a talent-building strategy as early as 2002. Xi Jinping has long branded 'talent-building and retention' as a core pillar for China to achieve global economic dominance. At the CCP's Central Talent Work Conference in September 2021, he spelt out the strategy to make China a global talent and innovation hub. The three-phased blueprint aimed at gathering a large pool of strategy-driven talent in key sectors, including leaders and teams ideating in science and technology by 2025. By 2030, the strategy vied to complete the setting up of a structure which would attract world-class talent in disruptive technologies. And by 2035, establish China as the world's leading talent centre by rolling out an exemplary international talent recruitment centre.

The world is undergoing unprecedented times, and the world order is up for grabs for all able and willing nations. The ever-changing engineering innovation and technological advancements drive geopolitics by shaping global engagements. The emergence of disruptive technologies like Artificial Intelligence, Blockchain, 5G, etc., forms the emergence of, what is colloquially being referred to as, the fourth industrial revolution. These technologies, on one side, are improving the lives of humanity as a whole, and on the other side, they provide the canvas for contestations and conflicts. World over, competing nations are all up for exploiting each other's dependence on

technology. Cyberspace, for one, provides the immense potential to turn geopolitical equations around. From providing waivers in the form of a special category in Visa routines to welcoming talent-based citizenship, a lot is being done to attract the talent needed for critical nation-building.

India today stands third in the list of the most lucrative investment options globally. The Economic Survey 2021 notes India's Gross Expenditure on Research and Development (GERD) at 0.65% of our GDP. The Medical Technology sector crossed US\$ 7.8 billion in 2020 and is forecasted to cross US\$ 9.6 billion in 2022. That amounts to a heartening 12% growth expectancy. The argument is further emboldened by our high amount of national capital incorporated into technological infrastructure. Owing to this firm determination, India ranks 46 in the coveted Global Innovation Index 2021. From being the fastest growing digital economy leveraging the Aadhar to putting together the UPI framework leading to record-breaking digital transactions, much has been going into making India a digital powerhouse of the world. For years, we have been known as the software superpower of the world. We unprecedentedly drove the software outsourcing boom in India for the last three decades, and today Indians dominate the tech giant's Silicon Valley technical workforce. But back home in India, our competence as a nation to identify, nurture, and retain such skilled human resources and technology leaders

needs an urgent overhaul.

Behind the much-celebrated success story of Indian software engineers globally lies a massive failure of our national skill and talent management policies and ecosystems. The best of our software engineers being produced at India's flagship Indian Institutes of Technologies and other premier universities, which disseminate world-class education subsidized by the taxpayer's money, have continuously left the motherland searching for greener pastures overseas. The unprecedented efforts by the government to turn the tide and stop the brain drain by creating ease of business and a favourable startup ecosystem resulted in stellar technology startup growth. Still, several tech startups that once stabilized and started profit-making have been shifting bases to the USA, Singapore, or Dubai. It is mostly due to lower tax rates, ease of compliance and tremendous respect for talent and red tape-free business environment in those countries. Our soldiers helped the British win the world wars, and our technical experts who could have made India a Cyber Superpower are today helping western countries win the technology wars.

The cybersecurity industry provides a unique opportunity to the software industry in the country to take a mammoth lead in the global arena. However, recent trends have indicated that we are letting this opportunity fleet away in front of our eyes. We are failing to educate our engineers with new skills or even reskilling our existing workforce





Image credit: sdecoret

to convert them into cyber warriors with niche skills. While success in the cyber domain largely hinges on formal training, the value-add of the right attitude for this vocation cannot be emphasized enough. As a nation, we have only been able to produce a few hundred cyber warriors. Most of these are self-taught cyber geniuses, making their mark in bounty programs and hackathons worldwide. It is alarming that such rare, much-needed talent is also leaving India for better opportunities overseas or working for foreign companies in India, while Indian defence and public sector struggle to hire able cyber security experts.

The cyber domain, which could have helped increase India's defence exports, and reduced our tech dependencies on foreign products, may become a lost opportunity. Defence export of cybersecurity tools can help us align our national motives in ways more than one. The asymmetrical nature of cyberspace provides a conducive environment to

steer defence-export-based diplomacy and allied manoeuvres. The situation is such that we are not only losing on potential business, but also struggling with non-stop cyberattacks on our critical information infrastructure by our good old adversaries - China and Pakistan. The need of the hour is to muster the technical workforce with structured reskilling into cyber security operational requirements and train them to convert them into a formidable offensive cyber workforce.

The present regime has been trying to turn the tide by taking creative steps in the last eight years. Making way for creating significant intellectual wealth in India, boosting the tech startup space by easing enterprise building, and promoting academic excellence - the reforms brought in during the last eight odd years are now reaching the stage of fruition. The philosophy of Atmanirbhar Bharat beautifully couples the technical zest (Digital India) with nation-building (Make in India). However, to ensure that

these efforts do not fizzle away, we need to ensure that the highly skilled cyber entrepreneurs and the cyber enterprises which get nurtured by scaling these pipelines stay within India and do not go washed away to the west or Singapore and Dubai. Lower tax rates, ease of compliances, better remunerations, binding policies, perks, and privileges - whatever the price, we must do all that it takes to keep our rare cyber talent within India.

If we desire to build India as a leading offensive cyber power, which can bring hostile neighbours to their knees during new age digital conflicts and connected wars, the fruits of revolutionary Startup India and Make in India program, have to be strongly backed by "Stay in India" policy which is critical for making India an "Atmanirbhar Bharat" and "Shashakt Bharat."

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India at 100 with the BJP

Bharatiya Janata Party, the party has more than 25 lakh party workers all over India and it is the largest political party in the world. The party has been working for the people of India without any discrimination of religion, race, caste, or sex. It has upheld democratic values in decision making and promoted the marginalised to new heights, of which the current President of our Republic, Draupati Murmu is a prime example.

The vision for the next 25 years, leading on to the 100th year of India's independence should be intertwined with what the BJP has as a vision for the upcoming 100 years of India. We all know that India is a democracy and no office of power or part is permanent in a

democracy. But the BJP has worked hard enough for the people to remain in power over the next 25 years if not in perpetuity. .

Here are a few suggestions which the BJP should plan when it is the ruling party, the 5 Pillars which would make BJP last an eternity to the heart of the People.

The pillars are as follows:

Youth Leadership

We all know that India is a country of youths. with 66% of our population under 35. One suggestion here is that from the college level, the Party should make student leaders have a role in learning the functioning of the Party, like an internship with senior leaders, to

prepare them for the future ahead. Also the Party policies should be in accordance with the percentage of the population and be more and more youth oriented which the present leadership had done so rightfully, furthering the image that BJP is a Party of Youth .

Encourage Women Empowerment

In this New India, that is focused on the youth, young women have the capability to serve the Nation just as much as the men. In senior leadership as well we see women taking India forward to new heights, mentioned may be made of the Finance Minister here. It is suggested from a youth like me that the party may further encourage women at grass root politics which because of our social





norms remain driven in large part by men, for which the party may further create more enabling institutions.

Statistics Analysis on a time period of every 5 year

Owing to the huge population of India, it may sometimes be next to impossible to have a hands-on statistical analysis of the performance of the BJP and the government. But with advancement in computer and statistical sciences, the hands-on analysis of the ground situations may be aided more easily than before. In this regard, election Data, qualitative and quantitative, from the Panchayat Elections to Loksabha Election, may give a reflection of the people's opinion that can be incorporated in the training of the karyakartas.

Maintenance of the Democratic Ethos of the BJP

Democratic decision making and democratic structure is the ethos upon which the BJP is built and it must be maintained at all cost. And as such, these democratic cultures inside the party must be carried down in the next generation of leadership, beyond the next 25 years. We can boast of the fact that there is no room for nepotism in the BJP unlike Congress or other parties.

Strengthening the Presence of Social Media

As the role of social media advances we lay deeper in need of expertise in social media outreach through it. The expansion and training of Social Media handling for all karyakartas become in one sense pertinent, as all karyakartas will wage an ideological war against those that seek to destroy the ethos of the party and those that stand against the

integrity of our nation. Also beyond ideologies, connecting to the people in this age of social media creates a democratic inclusion, making the party stronger.



Author: Mrityunjoy Talukdar,
Assam

Policies Required For A Better India



Image credit: Hilch

This year, India will complete 75 years of Independence. The celebrations have started in full swing for the culmination of Azadi Ka Amrit Mahotsav. In these 75 years, India has achieved a lot. From a nation fighting for independence to an emerging global power, India has come a long way. It wasn't without changes and some important policies that India managed to achieve all this. Since its independence, India has been implementing various policies across various areas. NITI Aayog (earlier known as Planning Commission), and Finance Commission were pivotal in making policies for the country. Policies

like MGNREGA, Right to Education, National Pension System, National Health Mission, etc were introduced by these commissions. Recently schemes like Agnipath, Swamitva, Jal Jeevan Mission, and NEP (National Education Policy) have been introduced. These schemes and policies are proving beneficial for the youth of the country.

India is developing rapidly and with development, the need for new policies arise. The youth of India are open-minded, responsible, and eager for new changes. They have a new vision of how they want their country to be. Awareness in this aspect is seen amongst them. The areas in which they want changes to take

place are the education system, employment, the safety of women, etc.

One of these much-awaited changes, the New Education Policy will soon be implemented across the country. This is a well-planned policy and there are high expectations for its outcomes. The much-required change is in the employment sector. Employment in India has increased from 428.4 million in March 2022 to 437.2 million in April 2022. This growth in employment comes after a 12 million fall in the labor market in January-March. However, the numbers of livelihoods lost during the lockdown are much higher. Despite having schemes like MGNREGA, India



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needs to update its employment policy with the changing times. The government should look at why there are a massive number of unemployed people despite so many schemes and policies introduced to generate employment. Another aspect of this employment issue is the youth of our country going abroad to seek better education and employment opportunities. If the education system and employment sector undergo a positive change, the young generation would be saved from the trouble of raising a huge amount for their education in foreign countries and they will get their dream jobs in their homeland. At the same time, efforts should be made to attract people from other countries to study here, thus helping the economy.

The safety of women in India has always been a matter of concern. There are a lot of incidents in India where a woman who has been through rape or sexual assault is scared to speak up due to the fear of being attacked by the criminal. Sometimes, the woman is killed so that she won't be able to complain. It is clearly visible that there is no fear in the minds of these criminals. Fear should be instigated in their minds by enforcing stricter laws for women's safety. Sex education and educating girls how to defend themselves must be mandatory at schools. Special police teams should be created to look out for the safety of women. Stricter punishments should be enforced. There are thousands of cases regarding this issue. It takes years for the victim to get justice. More fast-track courts should be established to give justice to the victim as fast as possible. The government should establish special therapy centers for victims to help them overcome their trauma. We often see women being told to dress appropriately, not go out late at night, judged for having male friends, etc. Blaming women for the violent acts that occurred to them makes their recovery from trauma harder. This is why it is also

important to educate society on this issue. For example, radio shows, TV shows, workshops, distribution of books and magazines on this issue by the Government will be a step toward changing this mentality.

We are moving towards a digital world. All our work, payments, entertainment, etc is being done digitally. During the lockdown, the internet was a boon to schools, colleges, firms, and almost everyone. This brings us to an important point. Despite the internet being a boon, it also has its dangers. Cyber security is an area in which an upgrade is needed. Government should provide smartphones and internet connections to the needy in every village. They should also be taught the benefits as well as risks of the internet and how to avoid getting scammed.

Disaster management should be made more efficient. Frequently flooding parts of the country, for eg. Assam, should be given more attention. They should get better and advanced techniques to tackle these hazards. Law enforcement agencies and other Government offices must be instructed to be quicker in their work. Government hospitals and other essential services should be made better by providing them with better machinery and infrastructure. Hygiene should be maintained in all public places.

The armed forces play one of the most important roles in the development of a country. Their wellbeing should be prioritized. They should be given the latest weapons. Obsolete and hazardous machinery, weapons, and vehicles must be discarded. Corruption in the armed forces should be ended as quickly as possible. Their work-life balance and mental health should be given more importance.

We also see instances of hatred among groups belonging to different religions, castes, regions, etc. More efforts should be taken up by the Government to prevent this from happening. Any

problem occurring among these groups should be solved amicably. Any form of violence, slurs, and threats should be condemned and those who do it must be counselled. If the act is grave, quick and severe punishment should be given. Internal and external security must not be compromised at any cost. Appointments of government officials should not be stalled. Important posts like judges of courts shouldn't be left vacant for a long time to prevent the inconvenience of thousands of people.

After passing bills and laws, the Government should see to it that these laws are being implemented at ground levels. The bills passed by the Government are really useful and necessary. However, not all of them get implemented the way they should be. Any person who indulges in corruption should be suspended then and there to prevent further instances and to send a message out in society that corruption won't be tolerated. A check must be kept on how the Government funds are utilized. At the end of each financial year, the accounts must be tallied. If any discrepancy is found, the person responsible for it must face consequences then and there.

A survey should be taken by the Government each year to find out what the citizens want and policies should be made accordingly.

Along with all this, the Government should see to it that the Indian culture and heritage won't get lost by focusing on development. Historical monuments, books, ancient arts, medicinal knowledge, yoga, etc should be passed on to the next generations.

If all this is carried out in a good manner, it won't take long for India to become one of the most progressive countries in the world.

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India@ 100 – Reimagining Future and Reclaiming Legacies



India will complete 75 years of its independence on Aug 15, 2022. If we divide the century of Indian independence into four quartiles, the three gone by have a story to tell and the one coming up holds immense promise and new challenges.

The first quartile, from 1947 to 1972 – was simply the 'freedom dividend' years. India inherited the British political system, British bureaucracy and British thinking with the white men replaced by brown men with white minds. Congress enjoyed the freedom dividend – the goodwill of having led the country to

independence. India not just survived; it thrived as a modern nation-state.

Things turned in the early 1970s when political alternatives to Congress started strengthening. The next twenty-five years saw this political churn leading to a Congress vs anti-Congress battle.

While the anti-Congress camp prevailed a few times, it could not dislodge Congress from its pre-eminent political position. The country went through ups and downs but eventually proved antifragile enough to emerge as a force to reckon with.

From 1997 to this year, the third quartile

refined the battle lines from Congress vs Others to Congress vs the Bharatiya Janata Party (BJP). This quartile finally saw the political balance shift away from the Congress and the BJP becoming the new pole of Indian polity. With this shift, the nation-state also rediscovered the pre-colonial values and ways of thinking.

Each of the past three quartiles has thus led to fairly deep-rooted political changes, resulting in institutionalizing new ideas. This is the backdrop to the upcoming Amrit Kaal – the next twenty-five years which lead to 100 years of





Indian independence.

How should India look at 100? What should these twenty-five years achieve? Crystal ball gazing is fraught with the banality of eventual binary assessments of success and failure. For a civilizational state, standing firm on the bedrock of values and cultural continuity, moulding into a new-age nation-state should be an exercise in creating a virtuous horseshoe effect.

Can India bring together the civilizational ethos to a world where India is a middle-power with competing interests and conflicting considerations of geopolitics, geoeconomics and social upheavals? Can the strengths of the past help propel India into the future? These puzzles, if solved efficiently and orderly, contain the potential to redefine the next quartile.

There are three key elements to consider.

To begin with, India will have to define its place in the global order. A country which is one-sixth of humanity should very much be entitled to have its own side, to see the world from the prism of its values and interests. Currently, the world does not afford India this luxury. The fifth-largest global economy but a very low per capita income of just over \$2,100 succinctly defines India's multispeed evolution. There may be

aspects of living in India that may be best in class globally. And then other aspects may remind us of the third-world tag.

What is India's place in the world? What thought leadership do we bring to the table to claim one edge of the anisotropic world? These are the challenges that face political leadership. Instilling this confidence and self-belief comes at a price. The critics label such attempts as revisionist. Creating headroom in a world used to unipolarity or, at most, bipolarity is not an easy task. A middle power to the top of the table transition will remain the biggest opportunity and the biggest challenge of the *Amrit Kaal*.

Then comes the question of the levers that enable such a potential transition. The most critical lever would be *Atmanirbharta* – having access to what is critical without external dependence. Self-sufficiency does not mean closing the doors to the world. It means ensuring that India does not have to shop around or go with a begging bowl to others for critical aspects of day-to-day life when the world faces tail events like wars and pandemics.

This view again goes against the popular dogma. Neoliberal economics has always been around cooperation and healthy competition. It concedes no role for irrational geopolitics. The pundits of

Chicago and their votaries in Indian academia assume that economics will drive the world into a more open, soft-border aggregation of a massive blob of humanity. This assumption has not just been challenged but decidedly disproven time and again. And yet, it is tough to overcome when formulating enabling policies that reimagine a flexicurity – the security of *Atmanirbharta* and welfare state brought together with the flexibility of interacting with the world but not limitlessly.

The last missing piece in the jigsaw will be the underpinnings of such a mental and physical change. What values define these changes? How do we rely on what our civilization knew in running nations and creating policies and programs contextual to the Indian milieu? What core societal values need to be preserved, nurtured and rejuvenated? What is their relevance in a world which is instantly connected and has deep interlinkages across geographies? Can the foundations of our society rest on ideas and themes passed on in India from generation to generation? Making sure that the Indian lived reality is not lost sight of when plugging ourselves into the world at large will keep the country grounded.

India's uniqueness, scale and ways of working are non-trivial aspects that require governance considerations. The next quartile of the independence should promote these aspects as active allies in policymaking rather than elements of derision, as has been the case since the independence.

The trifecta of India's Place, India's Way and India's Wisdom will drive the *Amrit Kaal* that begins in August 2022. There is no reason to believe that Indian society and politics will not bring these ingredients together to ensure that today's middle power evolves into tomorrow's global pole.

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