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These are tough and slightly unpredictable times for the global economies. Inflation is a key concern area which is having a ripple effect on many other variables. Given this background, it is important for India to focus on factors that can strengthen the Indian economy.

Hence, in this edition of the Monthly Policy Note, we look at the EoDB in India while also highlighting how technology in Govt services, development in key states like J&K, global co-operations in defence as well as the growth of the GIFT City can contribute in various ways in helping India grow and be slightly more resilient to global shocks.

The last few years, in ways more than one, have resulted in the global geopolitics staying in a very fluid state, while the issue of climate change continues to be a concerning factor. As another potential pandemic awaits in the form of AMR, it is important to work across sectors like healthcare and education.

Our expert speak features Mr. Baldev Harpal Singh, IAS (1989 batch) as he highlights Maharashtra's vision towards enabling the growth of industries in the state.

"Education is not the learning of facts but the training of the mind to think"

- Albert Einstein

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Expert Speak:

Mr. Baldev Harpal Singh, IAS (1989 batch) – Former Additional Chief Secretary (Industries), Industry, Energy and Labour Department – Maharashtra

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Policy Square | A Primus Partners initiative to understand the more fundamental questions in policy making

Primus Partners on 28th December 2021 launched **Policy Square**, in association with Businessworld.



Policy Square, an initiative by Primus Partners, is a monthly expert interview series wherein key constituents of the public policy ecosystem – senior policy-makers, civil society members, business executives etc. – are interviewed on critical issues and policies of national importance to explore their impact on the country and industry at-large.



With this initiative, we have attempted to cover various experts at various levels within the country's ecosystem. Each expert has brought in a new perspective – all towards enabling India's growth both in absolute and relative terms.

Looking back...

Policies, Budgets, Geopolitics, Technology, Capacity building and Climate change – subjects that are at the core of India's growth story – subjects that will drive India towards becoming a global leader in various fields in the coming decade...
...we have covered it all and have spoken with thought leaders in respective fields.



Latest update...



In the upcoming episode on policy square, we will be joined by Hon'ble Member of Parliament Dr. Sasmit Patra. He is a Member of the Parliament for the second consecutive time from Odisha. He represents the Biju Janata Dal party and is the National Spokesperson for the party. Dr. Patra is also on the panel of Vice Chairmen of the Rajya Sabha.

He also handles the responsibility of the media coordinator of the BJD; Dr. Patra has managed the IT and digital platforms for his party. Recently he has been appointed as a member of the Consultative Committee for the Ministry of Coal and Mines.

[Policy Square with Dr Sasmit Patra](#)

In the conversation on Policy Square, the Hon'ble Parliamentarian dives into the nuances of women empowerment, including the social, economic, and political dimensions of women's roles in the private and public spheres, as well as significant legislative efforts pertaining to women's empowerment.

Strengthening Ease of Doing Business – Always room for improvement

Over the past few years, India has significantly improved its ranking on the World Bank's Ease of Doing Business Index, going from its 142nd place in 2014 to 63rd place today, concluding significant results in the country's business reform journey with the Central Government anchoring the entire process.

In the Ease of Doing Business program, the State Governments have played an integral role in enhancing the overall industrial and regulatory ecosystem in the country to foster a business-friendly climate. The timely reforms, rationalization of compliances and macroeconomic policies undertaken for improving Ease of Doing Business has boosted the entrepreneurial ecosystem in the country, leading it to emerge as the third-largest startup ecosystem in the world.

With the country taking progressive initiatives towards doing business, a recent study by Observer Research Foundation draws attention towards a very important hindrance in this domain. As per the study, out of the 1,536 laws that govern doing business in India, more than half carry imprisonment clauses.

Additionally, of the 69,233 compliances that businesses must follow, 37.8 percent (or almost two out of every five) carry imprisonment clauses. These laws (more than half the clauses require imprisonment of at least one year) prove to be detrimental to the interests of many entrepreneurs, startups, MSMEs.

For instance, out of the total 9574 compliances for small-medium-and large- sized companies, 70 percent of clauses invite imprisonment. This approach proves to be detrimental to the interests of many entrepreneurs in doing business in the country. It is therefore important to define an objective Burden Assessment Framework for assessing redundancy and relevance of criminal laws, investor sentiments, data on conviction and acquittal rate, no. of prosecutions in the worst industrial accidents in the country, degree of impact of laws on investors etc. This will help in screening and reassessing compliances and associated laws for decriminalization by State and Central Governments.

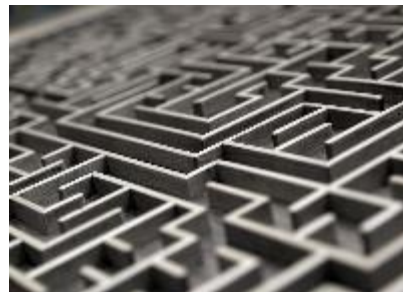
With the Startup ecosystem in the country progressing rapidly, further steps need to be taken to ease compliances, providing smoother fund accessibility and recognition by the Government for it to reach its long-term goals. The public and private entities both need to collaborate in order to navigate the challenges around competence, capability, logistics, supply chain

network, as well as, policies and regulations.

For instance, the Government should come up with integrated programs to recognize and reward outstanding startups for spurring innovation, promoting research, upgrading technology to inject competition for making ease of doing business more effective for entrepreneurs and enhancing economic dynamism in the country.

Further, Districts are one of the most important administrative units of the country and with the recent initiatives from the Government including Atmanirbhar Bharat, Vocal for Local, One District One Product, there has been an increasing push towards development at the grassroot level. Therefore, there is a need to develop a district ranking framework which can track the growth in the districts which can further strengthen the economic credentials of the country.

It is pertinent to note that the real time monitoring done at the top level of districts will not only focus on the strengths of each district but also help in identifying attainable outcomes for immediate improvement, while measuring progress and ranking of districts for realizing the district's genuine potential, fuelling economic growth, job creation, and rural entrepreneurship. This will act as a catalyst for the country in the journey of being ranked among top 50 in the World Bank's Ease of Doing Business Index.



EoDB for the country as a whole should pan across the entire length and breadth of the nation. For example, for a foreign company, the ease of doing business in

India should not be dependent on which city or state it chooses to enter India from.

The experiences may vary depending on the sector, geography and logistics but the policy landscape should have a certain level of uniformity. Only then can India grow in totality. Fragmented growth will also ultimately lead to a strong India but will possibly take additional time and effort.

A broad level commonality in policies across states will enable a more comprehensive growth for industries in India.



Geopolitical polarization

– Self interests of countries will continue to define the geopolitics trajectory

The world has never been a single homogeneous unit. Factions, in varied forms, have existed in the world ever since the presence of humanity. While globalisation paved way for the world to cooperate and collaborate in areas of economics, trade and international development, international politics has never been devoid of polarisation.

However, factions of the 21st century have evolved in their nature and form in line with the evolution of the global order. Today, multiple stakeholders play in the global arena, state actors aren't the only ones involved in setting the agenda of cooperation between countries, the emergence of multiple non-state actors has expanded the scope of diplomacy beyond official negotiations.

Keeping in line with the diversity of opinion that exists, polarisation of the 21st century too isn't restricted to just two power poles anymore. The difference in the polarisation of the 21st century as to that of the cold war era lies in the balance of power.

In the past, two superpowers existed and thus they inevitably became the two poles of any factions that divided the world. In present times, the global power axis has shifted. The West does not solely set the policy agenda for global governance, thus polarisation has also spread far and wide across the global canvas with multiple power centres changing form- from continental divisions to interest-based differences.



Polarisation in the present day is not just restricted to defending Russia or standing up for Ukraine or taking sides between the US-China discomfort. Rather, polarisation today is multi-sectoral.

Difference of opinions between stakeholder nations exist in one area of development but do not obstruct the possibility of collaboration on other fronts.

A case in point is the long-time debate on nailing carbon commitments and fixing accountability between developed and developing nations for sustainable development.

Will democracy be the most popular form of governance in the future? How will the rapid rate of adoption of digital technologies and shifting

demographics impact governance? Where should national policies draw a line between digital adoption or digital inhibition? Is rise of nationalist forces a threat to peaceful co-existence? Will greater globalisation still be the future of development, or should countries turn inward looking? What should be the priorities of international cooperation? These are some of the most popular agendas on which the world has differences of opinion today.

However, what is also an indicator of maturity in thought and traits of being a responsible global leader is the strategic ambiguity that withholds nations from taking clear sides when it comes to direct conflict between two countries. The recent abstention of India from taking sides in the Russia-Ukraine conflict and subsequent withdrawal of any mention of the conflict in the QUAD joint statement also highlights the inability of polarisation in thought off-setting the development agenda. Thus, irrespective of differences in outlook involving other nations, agenda of development is of primary concern.

Inter-dependence of nations on each other to keep supply chains intact also reduces the possibility of extreme bipolar polarisation. In a world still recovering from the after-shocks of the pandemic, external vulnerabilities are being aimed at keeping to a minimum. A case in point here is the food crisis that ensued right after multiple sanctions were imposed on Russia in light of the conflict with Ukraine and the subsequent withdrawal thereafter.

In a modern-day world, which is better informed and better governed, opinions too have become stronger. International cooperation is no longer a closed door agenda but a tool for the masses. The old rules of wielding power have changed and the order of the day calls for persuasion of global interest, legitimacy of thought and collective action in shaping the global governance agenda.



India continues to be very clear in terms of geopolitical relationships – basing it on mutual trust & sensitivity and mutual interests. India has made its own choices and will continue to do so.

It will be important to see how the discussions flow, if and when it is required to take a stand, in a possibly polarized future.



Development in J&K: **- Accelerating growth**

Jammu and Kashmir (J&K) is a Union Territory (UT) of India, located in the country's northern part and a global tourist destination. In addition to traditional recreational tourism, vast scope exists for adventure, pilgrimage, spiritual, and health tourism.

Taking away Article 370 has brought justice, democracy, and economic development to Jammu & Kashmir (J&K). In order to rejuvenate the economy of the Union Territory (UT), the Central Government continuously pumps monetary resources and takes policy initiatives. A total of INR 35,581.44 crore was allocated to J&K by the Central Government as part of its assistance, grants, and loans in the budget for FY 2022-23.



The Union Territory (UT) of Jammu and Kashmir (J&K) has undertaken 1,41,815 new works/projects since 2019. Projects under various schemes include:

Prime Minister Development Package-

- Out of 53 projects being implemented by 15 Ministries at a cost of INR 58,477 crore in various sectors, including roads, power, health, education, tourism, agriculture, and skills development, 25 have been completed/substantially completed.

Jal Jeevan Mission-

- The number of households with tap water has increased from 5.75 lakh (31%), to 10.55 lakh (57%).
- Two districts (Srinagar and Ganderbal) have been designated as Har Ghar Jal Districts. All rural schools, anganwari centers, and health institutions have been connected to tap water.

Bharatmala Pariyojana-

- MoRTH has approved two road projects worth INR 33.97 billion for Jammu and Kashmir.
- A four-lane/six-lane access control expressway has been sanctioned from Kunjwani to Sidhra on NH-

44 and from Domel to Katra district (Phase II-Package XVII). As part of the Beacon project in Jammu & Kashmir, the Srinagar-Baramula-Uri section of NH-01 will be constructed on the basis of engineering, procurement, and construction (EPC) model.

Some of the challenges that the state of Jammu and Kashmir Infrastructure development is facing are mostly due to difficult weather conditions.

The only all-weather road that connects the geostrategic ally-critical Kashmir Valley with the Union of India is called NH44. Though considered Kashmir's lifeline, this 295-kilometre highway remains closed for long periods during winter due to landslides.

To cut the travel time from Srinagar to New Delhi from 10 hours to 4 hours, the Government of India undertook the work to widen it into a four-lane highway in 2011 but the project has missed multiple deadlines.

In spite of the challenges, there has been a growing interest in Jammu & Kashmir by investors, both inside and outside the country. Government of India, has been focusing on targeted interventions in the State as well across sectors. At Expo 2020 Dubai, six agreements were signed with global investors for investments in real estate, infrastructure, tourism, healthcare and employment, and it has the potential to grow substantially.

J&K is fast moving towards progress and prosperity. The present government has not only instituted democracy

and decentralization through Panchayati Raj in the UT of J&K but has also accelerated development besides restoring peace and security. The focus is on building the transport



infrastructure first, as that forms the base for the rest, but education and healthcare sectors are also critical for the overall development and growth of the society and should be equally focused upon.

Accordingly, AIIMS hospitals, medical colleges, nursing colleges in the healthcare segment and an IIT and IIM presence in the education segment are already functional and / or being planned in the region.



Emerging Technologies for Government services

– Potential to generate more returns than the sum of individual parts

“Any sufficiently advanced technology is indistinguishable from magic.”— Arthur C. Clarke

In today’s feverishly fast-paced world, technology has an innate ability of evolving and advancing rapidly. The speed of technological evolutions requires that we catch up and stay abreast with the latest innovations. Emerging Technologies is one such buzzword that has caught the fancy of many, and for good reason. As the name suggests, Emerging Technologies are essentially those with significant potential, whose development or applications are still largely unrealized. Thus, it may only seem natural that Governments around the globe are excited about discovering implementable use-cases that would aid them in delivering citizen services in a more impactful and efficient manner.

Emerging technologies are broadly categorized as – Artificial Intelligence(AI), Machine Learning(ML), Augmented and Virtual reality (AR/VR), Natural language processing (NLP), Blockchain, Internet of Things (IoT), Quantum and Edge computing, Cloud Technologies, Robotic Process Automation (RPA), Unmanned Aerial Vehicles (UAVs) or drones, and Big Data with advanced data analytics. The sustained growth of mobile users, combined with increasingly affordable broadband and wireless internet penetration means that India is well-poised to harness all the benefits that Emerging Technologies have to offer.

India has recently announced several initiatives to enhance its research and policymaking capacity in this domain, including the release of national strategy blueprints on AI and Blockchain. The Indian Government had launched the Aarogya Setu app in 2020 for contact-tracing of COVID-afflicted people. State governments used geo-fencing to ensure quarantine for people suspected with COVID. It helped create a virtual geographic boundary, alerting respective agency officials if a mobile device attempts to leave a restricted area.

State governments of Maharashtra, UP, Delhi, and Punjab have started using AI and ML to monitor and control crime. Many states are also using AI and computer vision to monitor traffic, identify traffic congestion patterns, and issue challans to traffic defaulters. The International Crop Institute for Semi-Arid Tropics (ICRISAT) and Microsoft has developed an AI Sowing App that leverages ML to provide advisories to farmers on optimal dates for sowing, in Telugu and Kannada. This has improved crop yields for farmers by 10-30%. Similarly, AI-powered apps are recommending

the ideal time to spray pesticides for cultivating cotton. IoT sensors are helping with water conservation by leveraging automated drip irrigation. Applications that power assessments of tax liabilities, decisions for audits, as well as investigations, are led by AI and ML technologies. India’s ‘Transparent Taxation Platform’ helps in detecting outliers and doing an analysis of taxpayer network to detect tax evasion and fraud. The ‘Svमित्वा’ scheme launched in April 2021 aims to establish clear ownership of property rights in rural areas by mapping all land parcels using drone technology and providing Record of Rights (ROR) to village household owners, along with issuance of legal ownership cards to all the property owners.

Going forward, the success of emerging technologies in India relies heavily on a supportive startup ecosystem, backed by the strong base that the entry of 5G beckons. The government recently set up Atal Incubation Centres (AIC) and launched the Atal New India Challenge (ANIC) program to directly aid startups with technology-based innovations. Persistent efforts have propelled the number of recognized startups from 471 in 2016 to 72,993 in 2022. Of these, the Department for Promotion of Industry and Internal Trade (DPIIT) has recognized more than 4,500 startups working in emerging technologies. 26 Centers of Excellence (CoEs) have also been established across the country to nurture capabilities in emerging technologies. These CoEs act as essential enablers to promote innovation in emerging technologies. Moreover, the much-anticipated 5G technology provides a platform for validating several hypothesis, products, and solutions in the Emerging technology space. It allows tech companies to integrate newer features and capabilities while driving innovation.

Significant investments and focus on emerging technologies can reap immense social and economic benefits for India and provide a launchpad to its aspirations of being a major world power in the near future. It would, however, need to proactively address current technological capacity as well as legal and regulatory constraints to derive maximum benefit of the growth opportunities offered by these emerging technologies. It is also essential to have an ecosystem that can absorb the technological developments and further nurture it to create value for the country both at the state and the central level. The Government should look to continue incentivizing investments in these areas and encourage companies especially MSMEs and startups to remain invested in the R&D space. It is important to further build on what has been started.



India's global co-operations in defence

- United in vision and interests but require more convergence in execution

Discussions between countries produce tangible as well as far reaching results, beyond the core topic of discussion. When such discussions are sustained over time, they become an avenue for natural and trusted partners seeking to promote and achieve common goals basis similar strategic interests.

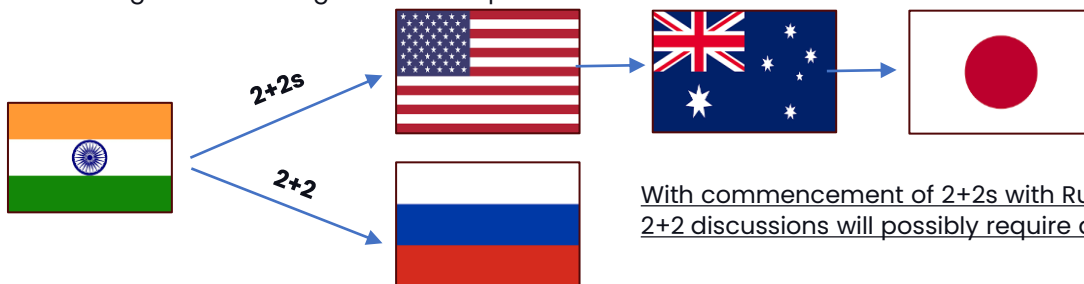
India also has many bilateral dialogues ongoing with many countries which are and will remain key partners. Be it Russia / the US / France / UK / Japan or any other countries in APAC region - India has engaged in consistent conversations many of which have been in the last decade or so. These conversations enable a better understanding of strategic concerns in a fast-changing global ecosystem.

The 2+2 dialogue is one such format wherein foreign and defence ministers of both countries (India and the ally) meet on strategic issues on a regular basis. Currently being pursued with four countries - Russia, the US, Australia and Japan - this format has helped evolve stronger and strategic relationships even in a

rapidly changing geopolitical landscape. The US being the oldest 2+2 partner, Russia in December 2021 became the latest ally to be part of a 2+2 with India.

There are a lot of positive outcomes from such discussions and engagements. There have also been operationalization of various initiatives based on these agreements. One of the more recent ones was the arrival of US Navy Ship Charles Drew at L&T's shipyard in Kattupalli, Chennai for maintenance courtesy the LEMOA between India and the US. LEMOA, for example, gives access to both countries to identified military facilities for maintenance and refueling works.

While the 2+2 dialogues are a prominent bilateral exchange, India has defence cooperation agreements/relations with many neighboring countries in the APAC region as well. With the evolving geopolitical landscape, there are increased levels of engagements between India and Gulf nations as well across many areas including maritime security.



However, it is equally important that the discussions and agreements / MoUs that are penned in the 2+2s or any other bilateral discussions, be executed within timelines. It is critical for follow up actions post the agreements. For eg, DTTI was signed almost a decade ago but there has not been much progress from an implementation perspective. During the 11th DTTI meet in November 2021 saw a deal to jointly develop air launched UAVs - how that progresses on ground will be crucial.

One big lacunae has been that the intent of a comprehensive partnership supported by strategic convergence has not really converted in action. There are various reasons for this including (1) bureaucracy and complex processes possibly on both sides (2) Export control regulations in the US (3) reluctance to share technology by the US and (4) compatibility issues for India given the large presence of Russian equipment.

What initiatives can be taken to move the 2+2 discussions from the table to execution on the ground?

- ✓ Streamlining of processes in both countries targeting more efficient decision making
- ✓ Small but dedicated groups for each global co-operation agreement with each country that will ensure dedicated time and effort
- ✓ India should focus on R&D on a war footing. It is an immediate requirement to increase the overall R&D budget significantly.
- ✓ Regular industry consultations to understand and map capabilities, capacities, challenges and navigate solutions to absorb technology





GIFT City

- An emerging financial and IT hub with global aspirations

Built across 886 acres of land and with a budget allocation of ~ INR 70,000 cr, the Gujarat International Finance Tec-city [GIFT City] is designed to be an emerging global financial and IT hub- to be at par with peers. The project is jointly developed by the Gujarat Urban Development Company [GUDC] & Infrastructure Leasing and Financial Services (IL&FS) and contains a SEZ along with India's first International Financial Services Centre [IFSC]. GIFT city offers a plethora of incentives for Financial and IT/ ITes companies to set up shop.

The tech centre was built in order to attract some of the world's largest financial and technology companies, along with building a bustling infrastructure for the start-up ecosystem in India. GIFT city provides a set of advantages that no other location in India has, such as:

- 10-year tax holiday on 100% of the profit for business units in IFSC
- Minimum Alternate Tax (MAT) will be 9% of profit-booking and exemptions from stamp duty if entity has registered offices in GIFT City for capital market activities
- Zero Commodity Transaction Tax (CTT), Zero

Security Transaction Tax (STT), Zero Dividend Distribution Tax (DDT), Zero Good & Services Tax (GST) on transactions carried out in IFSC exchanges

- Extension of long-term capital gains tax exemption to equities, exchange-traded funds, alternative investments and mutual funds

India's first International Financial Services Commission (IFSC) at GIFT city provides the right advantages to Alternate Investment Funds [AIFs]

The number of registered AIFs in India grew at a CAGR of 27%, from 181 in 2015 to 979 in 2022. AIFs have proved to be sophisticated investment instruments and have brought in major foreign investments into India. GIFT city provides a conducive environment for these AIF to thrive, providing multiple opportunities such as -

- While domestic Category I and II AIFs are not allowed to invest more than 25% in one investee company and Category III AIF more than 10% in one investee company, such conditions are not applicable to AIFs in IFSC
- Possibility to invest outside India without any limits and co-investment through a segregated portfolio.

Both Private & Public financial and tech establishments have set up their offices in GIFT city



India International Bullion Exchange [IIBX] at GIFT city to revolutionize precious metal import/export in India

India accounts for 25% of world's gold demand, second only to China - importing almost 600-900 tonnes of gold annually. With the IIBX in place, gold jewelers will be able to directly import physical gold and settle on a T+0 basis. This will lead to efficient price discovery, aid in proper valuations, standardization and quality assurance. In the long run, it will help gold traders and precious metal traders to improve the transparency in the industry. Currently, qualified jewelers with a net worth of INR 25 crores are allowed to operate from the IIBX at GIFT city.

Initial Challenges

While the initial outlay in 2006 was INR 25,000 cr, the budget jumped three-fold to INR 70,000 cr in the next few years. IL&FS, who was a stakeholder, decided to exit the project in 2020 post its financial scam and sold

50% of its stake to Gujarat Urban Development Company Ltd. [GUDC].

There is also a certain lack of talent for IT and financial companies in the city of Gujrat. Major metropolitans like Mumbai, Delhi & Bangalore end up attracting top talent in the country.

Outlook for GIFT City

While there were initial challenges, the Gujarat government is working towards introducing various measures such as subsidies, grants & funding to attract start-up ecosystem players. The govt. is also planning on introducing a fintech policy catering to the fintech start-up ecosystem in India. All these interventions will help the GIFT city to become the destination of choice for many new companies which need to run on low operating costs and need networking support. The GIFT city has shown major promise since its initiation, and with the correct measures in place it can hope to attract the best talent and investments in the country.

The GIFT City has evolved but still requires a lot of work and support to be able to fulfill the vision



Antimicrobial Resistance

- The Next Pandemic Possibly in the Making

WHO declared Antimicrobial Resistance (AMR) amongst top ten global public health threats in the year 2019 and an urgent health challenge for the next decade in 2020. Antibiotics consist of antibiotics, antivirals, antifungals and antiparasitic drugs to treat various infections in living beings. Hence, Antimicrobial Resistance, particularly Antibiotic Resistance is a rising threat to humans, animals and plants alike.

What is AMR?

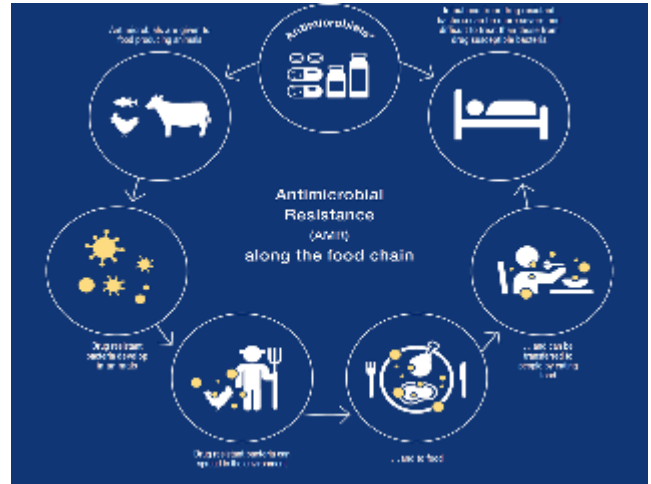
AMR happens when over a long period of time, bacteria, viruses, parasites and fungi stop responding to the medicines, which makes the infection more difficult to treat. As the bacteria starts developing resistance mechanisms against multiple drugs, it develops itself into a "superbug" that is not treatable by existing antimicrobials, causing the spread of this bacteria between humans, plants and animals, ultimately resulting in a global public health crisis. The concept of "Tragedy of Commons" can be used to explain the cause of AMR, wherein misuse or overuse of common goods leads exhaustion of the resource. In this case, misuse and overuse of the antimicrobial drugs will lead to collapse of the health systems across the world.

Some Examples of AMR

Several bacterial infections like urinary tract infection, sexually transmitted infections, and some varieties of diarrhea have been noted in the last few years. Multiple Drug Resistant (MDR) strain of *Mycobacterium tuberculosis* is a threat to the national drive to contain the spread of the disease, which has contributed significantly to the drop in cases of tuberculosis globally. Antifungal resistance, most commonly seen in *Candida auris*, causes highly infectious and invasive fungal infections. Use of steroid in Over The Counter (OTC) fungal medication, which aims to provide quick relief, is also a major contributor to the resistant infections.

Effects of AMR

AMR does not recognize boundaries of types of life or world economies, it affects everyone, however disproportionately. It is noted that the Low- and Middle-Income Countries (LMICs) are more severely affected by the spread of AMR strains of infection due to already underdeveloped production and supply chain of drugs and vaccines. Due to the stubborn nature of the infection, it poses as a challenge to countries with poor health systems as treatment options are limited and expensive, resulting in high mortality rates from common infections.



Source: WHO

AMR is also a huge economic burden on every individual affected family and the country as a whole. The prolonged and debilitating illness reduces productivity of the patients and occupy time of the caretakers. According to a report by World Bank, in a high-impact AMR scenario, the world will lose 3.8 per cent of its annual GDP by 2050.

Since AMR does not just affect humans, effects will also be seen in International Trade and Livestock Production, which can result in a major food crisis and have a climate impact as well.

Plan of Action

An international cooperative and collaborative effort is required to contain the spread of AMR. There is an urgent need for increased surveillance and monitoring, policy and regulations to ensure that AMR does not emerge as a catastrophic event in the coming future.

One Health - One Health is an integrated approach towards health of humans, animals and environment. It is a multisectoral, international program by WHO to bring sustainable solutions towards health of all living beings. The One Health approach aims at designing surveillance and monitoring programs to prevent, detect and address the threat of AMR in the ecosystem.

Equity In Access - In order to prevent collapse of health systems in the LMICs due to AMR, it is important to provide adequate supply of vaccines, drugs and diagnostic tools for early detection and containment of resistant strains or microbes. Identification of high-risk regions, introduction of alternatives to antimicrobials and education on responsible usage of antimicrobials in treatment can significantly reduce the risk of spread and prevent development of multi- or pan-resistant microbes.



Social impact of climate change

- A potential unequal impact requires a pecking order for mitigation policies

Climate change is one of the biggest and the most serious challenges of our time. Over half a million people worldwide have died as a result of climate change and related extreme weather events in the past 20 years, costing more than \$3 trillion in damages. Along with the deaths and temperature increases, this trend has the biggest impact on costs associated with adaptation, which are predicted to reach \$500 billion by 2050, with developing countries bearing the brunt of the burden.

As per World Bank, as the climate continues to change, millions of poor people face greater challenges in terms of extreme events, health effects, food security, livelihood security, migration, water security, cultural identity, and other related risks.

It is universally agreed that Climate Change represents a multi-level threat to nations and its citizens, be it, economic, social, environmental, infrastructure, and also public health implications.

Climate change is affecting the disadvantaged sections the most: Climate change is disrupting many of the social factors that influence people's health, including social support systems, equality, and access to healthcare. Health challenges associated with climate change disproportionately impact the most vulnerable and disadvantaged, including women, children, ethnic minorities, poor communities, migrants or displaced individuals, older populations, and those with underlying health conditions.

Causing water scarcity: The fifth assessment report of the Intergovernmental Panel on Climate Change states that climate change will deplete renewable surface water and groundwater supplies, increasing competition for water across all sectors and impacting water, energy, and food security.

Affecting Physical and Mental Health: Health is already being impacted by climate change in a number of ways, including an increase in the number of fatalities and illnesses caused by increasingly frequent extreme weather events like heatwaves, storms, and floods, as well as food system disruptions, diseases, and problems with mental health. Food insecurity, air pollution, access to clean water, population mobility, and vector-borne disease transmission patterns have all been made worse by extreme weather events. Increased respiratory, cardiovascular, and viral illness, injuries, heat stress, and mental health issues are a few possible health implications of these disturbances.

Risking Food Security : The impact of climate change on food security has multiple dimensions and it makes

it imperative to take early steps for ensuring minimum damage to human lives and livelihoods. Climate change will not only impact food security of the world but will also inversely affect livelihood of billions of people engaged in the food production system. Change in agricultural patterns due to climate change will negatively impact food security and may lead to higher malnutrition rates. Global food supply would also be less secure as extreme weather events and habitat degradation disrupt supply chains.



*Risk Index 2018. Who Suffers Most from Extreme Weather Events? (germanwatch.org)

Racing towards meeting their targets agreed as per Paris climate agreement, *countries are investing large sums of money in climate mitigation strategies. While climate mitigation is an important aspect, it cannot be prioritized over climate adaptation interventions. To fully address the climate crisis, more funding must be dedicated to helping people adapt to climate change. This will require significant commitment not just from governments, but also from the private sector and other non-government enterprises. There is an urgent need to unlock climate financing for adaptation initiatives through non-traditional routes as well. Particularly for a country like ours, building climate resilience on PPP model will come in very handy at this stage and will help us unlock more funds. This also calls for effective implementation of State Climate Adaptation Plans.*

As has been highlighted earlier, the risks of climate change are not evenly distributed. Climate Change will though affect all countries and communities, but the impact will not be similar for all. *There is, therefore, need to collectively protect the most vulnerable first and also ensure that our mitigation policies do not further create inequalities between 'haves' and have-nots'.*

The more vulnerable sections of the society need to be addressed first

Competition between states is testimony to the growth in India



Mr. Baldev Harpal Singh, IAS (1989 batch) is the former Additional Chief Secretary (Industries), Industry, Energy and Labour Department. Prior to this, among other roles, he has also served in various capacities as a Chief Electoral Officer of Maharashtra as well as the Development Commissioner of the Santa Cruz Exclusive Processing Zone, SEZ Mumbai under the Department of Commerce and the Principal Secretary, Labour Department of the Government of Maharashtra.

The Economic Survey of Maharashtra 2021-22 suggests Maharashtra has highest number of recognized start-ups in the country. From a state perspective, what are the initiatives been taken to handhold and enable growth of these entities.

Maharashtra has always been one of the leading states in India to encourage start-ups. The state currently has more than 17,000 start-ups with 17 incubators supporting the ecosystem.

This is courtesy the Maharashtra State Innovation Start-up Policy, which was based on the LEAPFROG principle. The principle largely indicates towards a relaxed regulatory compliance, enhanced infrastructure, partnerships with industry, robust governance mechanism and realization of human potential.

The start up policy of the state is envisioned to transform Maharashtra by catalysing the growth of an innovation driven entrepreneurial ecosystem and socio-economic development.

Tax holidays, easier norms for procurement, multi facility start up park with plug and play facility and funding avenues for eligible start ups are few other avenues which are being leveraged to further enhance the entire ecosystem.

Start up Yatra is another mechanism started by us where we provide innovators, students and start ups a platform to pitch their ideas by participating in the nearest bootcamp and compete for a cash reward – more as a token of appreciation than any serious funding at this event.

The Maharashtra State Innovation Society continues to work with all stakeholders to ensure no strata of society is left unheard and all innovators and disruptive thinkers are given an opportunity to make themselves heard.

Home to the financial capital of India, Maharashtra is required to have the best possible infrastructure for industries and the common population alike. What are the three key steps being taken currently to further enhance the quality of infrastructure for industries

With the highest contribution to India's GDP by a state GSDP, amounting to ~\$370bn in 2020-21, Maharashtra also had the highest FDI inflow between 2000 and 2020 while during the 2019-2021 period also got a quarter of the total FDI inflow in the country. This is indicative of Maharashtra being a pro-reforms state with a dynamic governance that allows liberal and investor friendly policies.

With this consideration I would want to highlight that road and bridge constructions account for almost 5% of the state's annual budget. There have been significant investments to ensure improved and strong connectivity. For e.g., recently almost INR 26000cr was approved for the 170 km Pune Ring Road.

The Maharashtra Industrial Development Corporation is arguably one of South Asia's top investment bodies with over 289 industrial parks built over 2.25 lakh acres of land across the state. There is work being done on smart industrial cities and plug and play infrastructure with mechanisms to reduce turnaround time in government approvals.

During the COVID pandemic, Magnetic Maharashtra 2.0 program enabled mobilization of investments up to INR 1.89 lakh cr potentially generating more than 3 lakh jobs.

MIDC also has the largest industrial land bank in the country along with the largest supply network of industrial water – two critical requirements for setting up an industry and development in allied areas.

An electronics and engineering smart city in Talegaon and a 15000 acres hi-tech city in Dighi Mangaon along with other engineering hubs and dedicated data centre parks are expected to ensure a significant growth in industry presence.



A plug and play model is arguably the best set up that can be provided to any industry. What are your thoughts on the same and how has this evolved in the state of Maharashtra

Drafted sometime 2-3 years back, Maharashtra had worked out a plug and play model to attract investments from US, Japan, Germany and South Korea among other countries.

Drafted by MIDC, the target was to identify 2500 companies from across countries with investment potential of almost INR 3 lakh cr across sectors where investors were provided land and ready to occupy sheds to install machines and start production in three months.

The new National Logistics Policy will also enable a further development of this kind of a model as industries look to curtail transport and logistic costs. Today as part of the Magnetic Maharashtra 2.0, MIDC hand holds investors / entrepreneurs end to end of an investment lifecycle.

MIDC with its plug and play infrastructure has gone digital thereby reducing turnaround time as well as ensuring there are minimal regulatory challenges.

Nashik will be the first destination of MIDC's plug and play industrial estate model coming up at a cost of around INR 70cr, exclusively for tribal entrepreneurs. Almost 31.5 hectares of proposed industrial estate has been allocated and the state government has also provisioned for INR 25cr in the budget in current FY.

Industry associations have further stated that MIDC should set up such facilities at other places including for eg the Talegaon-Akrule industrial estate in Dindori and the Ajang-Ravalgaon in Malegaon taluka so that production can start immediately.

Maharashtra has been one of the top FDI destination states in India. However, there remains existing and also stiff upcoming competition from other states like Karnataka, Tamil Nadu and Telangana. What are some of the policy incentives being planned to ensure more domestic and foreign investment flows in the state.

It is good to have competition. It is testimony of the growing competence of India as a nation and its states, as the pillars supporting the country in various ways. Maharashtra for its part has pledged to achieve sustainable development for a trillion dollar economy.

The Magnetic Maharashtra 2.0 was launched to attract investments in the state and in the 9 editions till date, Maharashtra has attracted INR 1.89 lakh cr in new investments in addition to an FDI of more than INR 2 lakh crore – the highest in India.

The state's progressive policies include (1) fiscal support where there are tax abatements and duty exemptions (2) non fiscal support where there are investor facilitation cells as well as, and more importantly, investor after-care cells and (3) special incentives like (a) basis investment amount incentives up to 100% of fixed capital investment and / or (b) 10% additional incentive if any project creates double employment that required for eligibility.

There is a huge impetus on ease of doing business – be it property registration, land and labor reforms, single window clearances, construction permits or even getting approval for electricity in facilities and offices. With MIDC as the nodal agency for all investors, there is a strong network of local authorities and a link between government and industry.

The fact that out of the 800 French companies in India, 30% are set up in Maharashtra and that 10 of the 100 India's smart cities are in Maharashtra are a couple of facts highlighting Maharashtra's place as a favored FDI destination in India. With the existing infrastructure base and the planned projects including the Navi Mumbai airport, metro projects in Mumbai, Pune and Nagpur as well as the Mumbai Trans Harbor – the connectivity will be at its best and should be a good driver to attract more investments.

About Primus Partners

Primus Partners has been set up to partner with clients in 'navigating' India, by experts with decades of experience in doing so for large global firms. Set up on the principle of 'Idea Realization', it brings to bear 'experience in action'. 'Idea Realization'— a unique approach to examine futuristic ideas required for the growth of an organization or a sector or geography, from the perspective of assured on ground implementability.

Our core strength comes from our founding partners, who are goal-oriented, with extensive hands-on experience and subject-matter expertise, which is well recognized in the industry. Our core founders form a diverse cohort of leaders from both genders with experience across industries (Public Sector, Healthcare, Transport, Education, etc.), and with varied specialization (engineers, lawyers, tax professionals, management, etc.).



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for providing solutions to help clients achieve their goals

RESPECT

For all and alternate viewpoints

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