# FUTURE OF METRO CITIES IN INDIA

SCENARIO 2035 | A PEEK INTO THE FUTURE

TURIAN
LABS

"Take hold of the future or the future will take hold of you."

Patrick Dickson, Futurist

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# Scenario thinking & critical uncertainties

As we enter a new decade, we are accelerating our pace of change. The pandemic reshuffled expectations and political situations within countries. The World Bank envisions a 5.2 percent contraction in global GDP in 2020, the deepest recession in decades. Advanced economies are projected to shrink 7 percent. Apart from the pandemic, reckless consumption over the past few decades has brought the world to the edge of climate catastrophe. Resources are depleting at an alarming level. Sea levels are rising every year. More than 40% of the human population (around 2.4 billion people) live alongside the coastal areas. The effect of such changes on the population remains unanswered. How will the relationship between countries evolve in the new paradigm? **What is the future of large cities and how will it affect the productivity of the population?**
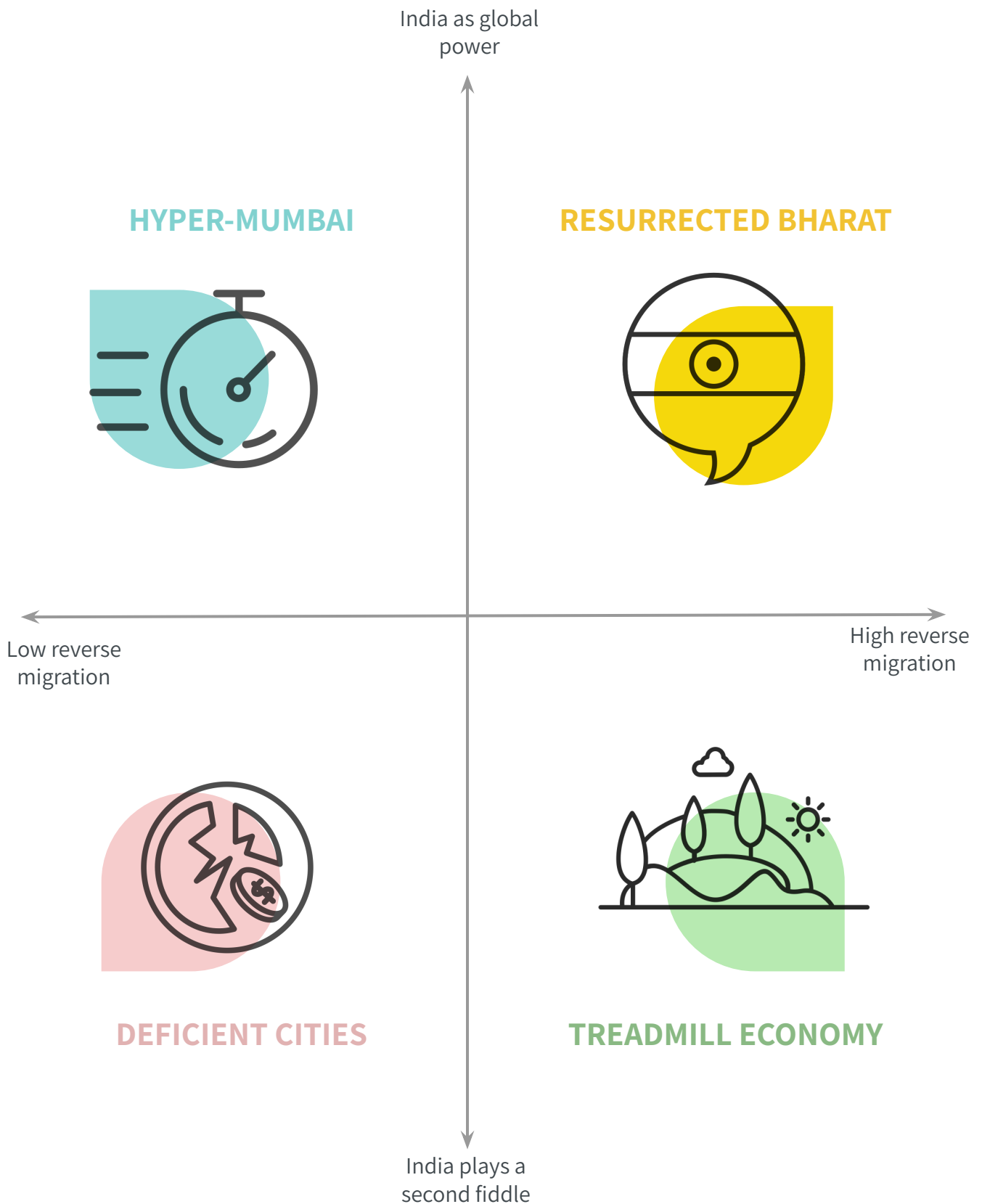
With the amount of turbulence and unpredictable macro shifts happening around us, the future remains a puzzle to unfold. Identifying the emerging trends and uncertainties would help in understanding the long term challenges. Scenario mapping can be used to create goals resilient to external macro drivers. It is an effective method to map the plausible futures and back track strategies for organisations.

To map the emerging scenarios on the future of metro cities in India, the team at Turian Labs conducted a day long co-creation workshop, backed by our understanding of global megatrends since 2006. Key driving forces were bucketed using the STEEP framework (Social, Technological, Environmental, Economic and Political). Some of the driving forces were the rise of 5G/6G, resource stress in cities, etc. The team then identified critical uncertainties by evaluating each factor based on the impact and certainty. The two forces **with the highest impact on the future of cities** were 'reverse migration' and 'rise of India as global power.'

**Reverse migration:** While rural to urban migration is a reality, the counter trend is setting in as well. Rising levels of pollution in the cities, possibilities of decentralised work, remote digital factories and the idea of returning to the roots is bringing people back from cities into rural/smaller towns. The churn in interest towards rural areas would in turn impact the metro cities on a large scale.

**India as a global power:** On the other hand, India is emerging as an important player in the global balance of power. New frontiers of defence and infrastructure like water, space and cyber will be in focus for the next ten years. Global trade situation between China and the USA will spawn new economic opportunities for India. With such advancements, metro cities in India would have a new role to play.
The combination of both critical uncertainties (reverse migration and India as a global power) resulted in four plausible but mutually exclusive visions of the future. These four distinct scenarios are illustrated in the following pages.

# Scenario matrix to map the 'future of metro cities'

India as global power

**HYPER-MUMBAI**



**RESURRECTED BHARAT**



Low reverse migration

High reverse migration

**DEFICIENT CITIES**



**TREADMILL ECONOMY**



India plays a second fiddle

# HYPER-MUMBAI

## LOW REVERSE MIGRATION | INDIA AS A GLOBAL POWER

India has seen a non-linear growth in select industrial sectors which has led to India becoming a global leader in pharma, ed-tech, satellite technology, and naval defense supplies. India has surpassed China in population growth (~1.7 bn) and has seen a drastic growth in GDP for the last 5 years totaling to USD 20 tn. The startup revolution has shifted from silicon valley to three centers in India (Bangalore, Munnar, and Hyderabad) with pro-innovation and pro-business policies of the Indian government and the negative sentiment present in ASEAN countries due to Chinese indirect vigilantism. Migration to cities has doubled in its 2020 rate from 30 persons per minute to almost 70 persons per minute. This has led to cities bursting at the seams with a high density of population. Mumbai and Delhi have already crossed 25mn population size. To make the most of available land-space, builders are making taller stories (at times reaching 150 stories) with high-efficiency lifts, vertical gardens, vertical markets and self-sustained hybrid complexes. Hybrid work culture has made people comfortable living at the edge of the city  and traveling to city centers, a few times a month for work or shopping. Apart from just space constraints, overpopulated cities are now facing resource constraints. Waste management, water recycling and resource preservation practices have hugely improved in the past 5 years. Cities are highly developed and the city councils are now equal power centers as the state. Cities set the agenda on sustainability,

## Megacity councils are now equal power centers as the state.

## Increasing population density and loneliness has led to low quality yet long life for urban Indians

rehabilitation, wellness, and child care. Ayush ministry is now playing a central role as mixed medicines are now a norm.

Apart from just traditional healthcare, agricultural efficiency has improved several times due to organised agriculture, the use of IoT in crop cycles, and the use of genetically modified seeds. Native Indian ingredients have gained mainstream due to popular demand. Villages are now well connected to the cities and have become low-cost resource centers for these megacities. International business expansion, eCommerce market growth and tripling of income per capita for the middle class in the cities, has led to increasing wealth disparity between the rural and the urban areas. As metro cities become the center of production, a lot of city infrastructure is now being managed remotely through robots and digital tools with human intervention only happening by exception. Low-skill labour is deployed in the upkeep of the machinery and equipment. High productivity cycles and crushing demands of the work have started to take a toll on health. Non-communicable disease load per capita has gone three-fold in the past decade. Although Indian cities are brimming with high productivity, increasing loneliness in the city life in combination with longer life spans has led to low quality and long life scenario for urban Indians.

# BHARAT RESURRECTION

## HIGH REVERSE MIGRATION | INDIA AS A GLOBAL POWER

With non-linear advancements deployed in defense, satellite technology and healthcare, India has now emerged as one of the leading global leaders. International trade and manufacturing hubs have boomed since the China arbitrage. Well established countries like the US, Australia have joined forces with India to create a united defense front. India's GDP has increased three-folds due to the business friendly policies.

Alongside a flourishing economy, Indian traditions and ancient practices have gained global recognition. Ayurveda, homeopathy have gone mainstream, with large medical institutions adopting new methods of healthcare. Native Indian ingredients are now on demand. The advancements in agriculture due to 5G technology have fuelled agri-based start-ups in the rural areas. Smart infrastructure and clean resources have turned villages into sustainable eco-habitats. The government has introduced policies to boost rural lifestyle due to the declining resources in cities.

Coastal cities like Mumbai, Chennai have begun to submerge. Resource contamination has led to poor air and water quality in cities. Large metro cities have now turned into tech factories, with over 70% of the real estate allotted for manufacturing facilities. Urban population is diminishing over time as the citizens are choosing to work remotely from villages. The government now closely monitors the citizens' habitat. They assign a home and a village to the
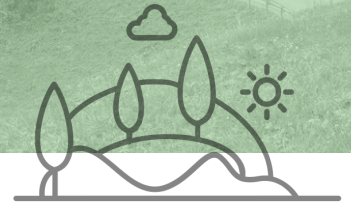
## Cities have turned into warehouses and tech factories

## '15-minute villages' are now a common phenomenon to build self sustaining communities

citizens to control cross migration to other cities. Each city has a subset of villages under its governance. The villages are well connected to the cities through hyper-loops. '15-minute villages' are a common phenomenon to ensure self sustainability. All the consumables and services are now produced within each city province. The city then supplies to the set of villages under its governance. Advancements in the 5G technology and satellite internet connectivity have enabled highly decentralised work modules.

Healthcare and education are highly democratised. Schooling is no longer for specific age-groups. High productivity and constant technology upgrades have given rise to universal schooling. Children, the middle-aged population and the senior citizens now attend skill based learning modules to upskill themselves to fit into a job role. Although, the living conditions and life expectancy have improved drastically, the challenge of over-productivity remains. Non-communicable diseases have declined over the decade. Most of the population now works till the age of 80. There is no scope of early retirement. The city has now mandated mental health insurances. Mental health institutes and therapy centres are brimming with patients as more and more workers are pressured to upskill and perform constantly .

# TREADMILL ECONOMY

## HIGH REVERSE MIGRATION | INDIA PLAYS A SECOND FIDDLE

Over the years, low innovation and lack of efficient manufacturing processes has led to India playing a minor role in the global economy growth. China on the other hand has joined forces with smaller ASEAN countries to create a united front. Large multinational companies have shifted away from India due to unfavourable conditions and policies. India is no longer a major exporter of goods.

As the decline in global trade took place, the population within the country increased. A lot of students could not afford higher education abroad. The government mandated the return of Indian citizens to enable a better economy within the nation. To increase productivity and ROI, the government has tagged each citizen in the country and assigned them a job role.

The government has evacuated more than 50% of citizens from cities due to over-population and climate crisis. Coastal cities like Mumbai, Chennai have begun to submerge. Over population led to resource contamination, making most of the metro cities uninhabitable for humans.

Absence of large-scale manufacturing power has led to the emergence of microeconomics. Each city province along with its set of villages takes care of the resource needs of its citizens. Increasing layoffs due to lack of large scale manufacturing has also led to early retirement. The citizens are expected to serve the country from ages 18-45 years. Some of them can even retire by 40 depending on the status of their mental health.

## Increased layoffs has led to early retirement among citizens

## Absence of large scale manufacturing power has led to the rise of micro-economies within the villages

Most of the population now prioritises their personal health over job status. Each organization is given a health score to help employees understand the quality of working conditions. The decline in global trade and exchange has led to India pushing for self reliance. Each state is divided into city provinces for better governance. The power is no longer with the central administration. Smaller rural communities have now risen to power to form their own administration. They have partnered with existing organizations to provide resources and services to their kinship. Citizens have now migrated from the cities to follow a community based living model. They work to keep their community afloat. With increased support from communities to improve the villages, disparities between urban and rural areas have drastically reduced. Quality healthcare and education for citizens remains a challenge. The past decade faced more than three pandemics that in turn deconstructed the healthcare facilities. With feeble public support on health education, organizations and home brands have stepped up to support the communities and create a purposeful business. Brands are now sponsoring schools, partnering with communities and educating consumers. A few interest groups have risen to a status of power and are now controlling the infrastructure decisions.

# DEFICIENT CITIES

## HIGH REVERSE MIGRATION | INDIA PLAYS A SECOND FIDDLE

India's growth has remained flat across industrial sectors. Apart from trying to build a strong relationship by supporting its neighbouring allies for food production, its presence across has been sidelined. State governments have introverted themselves as the centre struggles to structure and harbour a strong Innovation culture and business policies. Interstate differences, regular public outcries and fragile foreign policies have built up a sentiment of India as a hibernating cash cow.

The population of India has surpassed that of China and is currently standing at 1.5bn. The gender divide and unbalanced situation of literacy and blue collar working population of India continues to remain strong. Majority of the rural population is migrating to the cities in the hope of employment. The disparity between rural and urban areas have increased due to high migration rates.

Centre's inability to tap the resources has led to the rise of Indian chaebols. A few families have now taken control of the major industries in India. Resources like water, oil, electricity are now distributed through them. Lack of democratised facilities for healthcare, education has created a strong divide between the rich and poor. The society is divided based on the spending power of the population.

Cities have now expanded in size due to urbanization. The population density has increased five folds. Most of the migrants stay on the outskirts of the city due to high expenditure.

## Nuclear resources and singular lifestyle is the new norm.

## Centre's inability to provide resources has led to the rise of Indian chaebols.

City centres are meant for trades and uber-rich homes. Polarised communities and the struggle to define an individual's relevance is being seen as a big challenge. Moreover, the happiness index hit the lowest for India as these megacities struggled to manage basic amenities. Identity crisis has led to couples and families in the middle class communities to dither into a single living phenomenon. Nuclear resources and singular lifestyle is the new norm.

All this is increasingly deepening the resource stress wound. Crimes have increased within societies leading them to become self-sufficient and secluded from each other. Over surveillance has stripped citizens away from their privacy as monopolies try to gather behavioural data. Every activity is monitored by the large organisations owned by the chaebols. Privacy is now a premium currency.  Even though there has been no significant growth to the GDP and any sort of innovation, the citizens of India have realised the value of smaller, highly protected communities. Ethnic groups have risen to strongly protect each other. This has also led to community specific engagement models by large organisations.

This future of India seems to be a deficient one and lacks lustre, but shows interesting interdependencies and that the emerging need for a country in this state would be to realise the micro-community potential.

# Conclusion & steps forward

Looking at the final set of scenarios, the implications are highly dependent on the migration rates and the business growth in India. These narratives would have a macro impact on city infrastructures, emerging businesses and governance policies. These scenarios would lead to the growth of new education models and healthcare facilities. While the four scenarios have distinct narratives, each of them have a set of opportunities for business and governance.

In the **Hyper-Mumbai scenario**, cities are overpopulated, yet developed to the brim with infrastructure. Organisations would have to prioritise mental wellness as increased productivity would lead to unhappy employees. Modern living spaces would be modular and vertical with fresh opportunities. All the offerings would have to be resource saving, with a prime focus on reusing and recycling . The city infrastructure is set to grow along with fast, connected shared mobility options. Healthcare and education would be democratised for all.

In the **Bharat resurrection scenario,** Indian ways empathic living would gain popularity. Brands that Indianize their offerings through a traditional blend would stand out. Rise of 15 minute villages imply the need for localising services and further decentralisation of business activities. Organisations would have to consider rural expansion and investments into rural infrastructure.

In the **treadmill economy scenario,** happiness and sound mental health remain the prime focus. As organisations expand into rural geographies, purpose driven innovation is a must have. The society would prioritise purpose and values over productivity through early retirement modules. Various brands would have to partner with local communities to boost their marketing models.

In the **deficient economy scenario,** cities are struggling with resource allocation and population control. Large organisations would have to segment their offerings based on the spending power of the population. Resource saving alternatives would be valued as efficient solutions. There would be a need for low cost healthcare and education facilities. Villages would emerge as the warehouses for food production. The governance would shift policies in favour of small scale businesses to boost growth.

Backcasting these scenarios with close monitoring on the emerging signals would help map the most probable outcome.

# About Turian Labs

Turian Labs is a global research and innovation strategy consulting company. We use the Renaissance Mind framework - a blend of futures Thinking, Design Thinking and Business Thinking - to catalyse robust innovation.

We embedded ourselves in Megatrends intelligence early on, to identify future-facing business insights for Indian and international contexts. These insights empower brands and organisations to reassess what they know today, meet the stakeholder needs, and forecast the contexts of tomorrow. Our agile and interdisciplinary practice impacts the creation of compelling products, services and capabilities, reimagining business models in the face of rapidly changing realities. We work with major global brands and high-growth startups across industries and geographies, enabled by a strong global network of associates. We also help organisations create a culture of innovation through cross-functional training programs, design sprints and Megatrend-led business innovation workshops.

Turian Labs uses different methodologies to discern the future and map the emerging landscape, including scenario planning, megatrend studies, and other techniques under our umbrella of Kedging methods. Scenarios, another favourite for futures thinking, are plausible narratives of potential futures, helping and guiding leaders plan for the future. Scenarios are usually used to project the future beyond 5-10 years. Megatrends and trends are used for shorter timelines of up to 10 years.

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