BRICS
INDIA 2026

BUILDING FOR RESILIENCE, INNOVATION, COOPERATION, AND SUSTAINABILITY

BRICS Friendship Cities Conclave 2026

Date: **11-12th August 2026** | **Venue:** **Four Seasons Hotel, Mumbai**

Organized by

MUMBAI first
To make the city a better place to live, work and invest in

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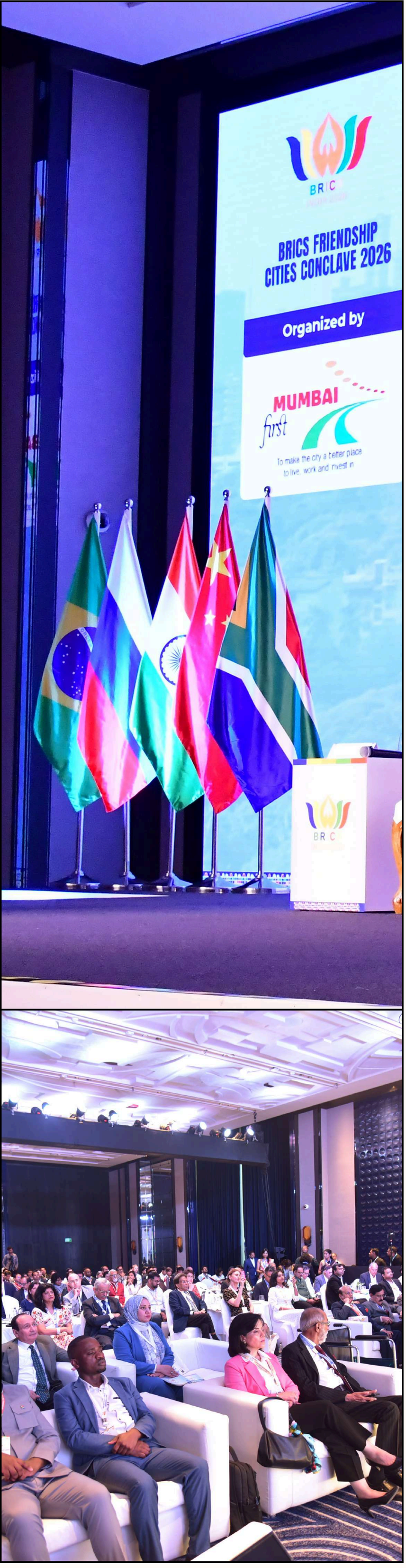
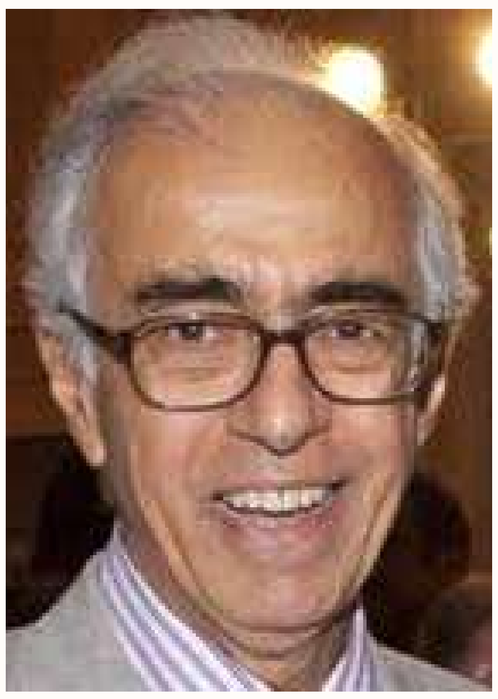


TABLE OF CONTENTS

CHAIRMAN'S FOREWORD	01
CEO'S NOTE	02
MESSAGES AND SPECIAL REMARKS FROM GOVERNMENT DIGNITARIES	03
BRICS FRIENDSHIP CITIES CONCLAVE – DAY 1	04
BRICS FRIENDSHIP CITIES CONCLAVE – DAY 2 AND KNOWLEDGE SESSION	05
EXPO: A SHOWCASE OF INNOVATIVE SOLUTIONS	06
NOTES FROM CONSULATES AND PARTNERS	07
EVENT SUSTAINABILITY REPORT	08
PARTNERS AND SUPPORTERS	09

CHAIRMAN'S FOREWORD



It gives me great pleasure to present the report of the BRICS Friendship Cities Conclave 2026, organized by **Mumbai First** in collaboration with the **Government of India** and the **Government of Maharashtra**, in **Mumbai** on **11–12 August 2026**, under the theme **"Building for Resilience, Innovation, Cooperation and Sustainability."**

Ten years ago, in **2016**, Mumbai First had the privilege of convening the first BRICS Friendship Cities Conclave in Mumbai. That gathering was founded on a simple but enduring belief: **no city has all the answers, but every city has something to teach and something to learn**. The 2026 Conclave builds upon that foundation at a time when the challenges confronting cities have become more interconnected, urgent and global. The future of the world will, to a large extent, be shaped in its cities. Cities are where the consequences of climate change are increasingly felt, where millions seek opportunity and a better quality of life, and where innovation must translate into solutions that are practical, inclusive and sustainable.

The **two-day Conclave** brought together policymakers, city leaders, experts, institutions and practitioners from across the BRICS countries to deliberate on the critical urban challenges of our time - climate and environmental resilience, coastal risks, extreme heat, mobility, circular economy, housing, air pollution, and AI-enabled urban governance. The discussions reaffirmed an important principle: urban challenges may be local in their impact, but the knowledge required to address them need not remain local. The experience of one city can provide a valuable pathway for another. What works in Mumbai may offer insights to another city, just as Mumbai can learn from the innovations and experiences of cities across Brazil, Russia, India, China, South Africa and the wider BRICS countries.

For **Mumbai First,** therefore, the Conclave was not intended to be simply another international conference. It was conceived as **a platform for building relationships that can endure beyond the conference hall - from dialogue to knowledge exchange, from knowledge exchange to collaboration, and from collaboration to tangible action.**

The true measure of such a gathering lies not in the number of discussions held, but in what those discussions make possible afterwards. We hope that the connections established during the Conclave will lead to **continued city-to-city exchanges, comparative research, joint initiatives, pilot projects and the sharing of solutions that can contribute to better urban outcomes.** In this context, I am particularly encouraged by the opportunity to deepen Mumbai's engagement with cities and institutions across the BRICS countries. Friendship between cities is ultimately friendship between people, institutions and ideas, and such relationships can become powerful instruments of cooperation.

I would like to place on record our sincere gratitude to **the Government of Maharashtra, the Government of India, the Ministry of External Affairs, the diplomatic missions and consulates of the BRICS countries**, and all our speakers, moderators, knowledge partners and institutional partners for their invaluable support and participation. My appreciation also goes to the Mumbai First team and everyone who worked tirelessly behind the scenes to bring this Conclave together. Their dedication has helped create a platform that we hope will continue to grow in the years ahead.

As we look to the future, our aspiration is clear: **to make Mumbai not only a city that learns from the world, but also a city that shares its experience with the world.** The 2026 Conclave is therefore both a milestone and a beginning. May the conversations initiated here evolve into partnerships, the partnerships into action, and that action into lasting impact for the cities and citizens we serve.

Narinder Nayar
Chairman
Mumbai First

ADDRESS BY THE CEO



The BRICS Friendship Cities Conclave 2026, held in Mumbai on 11-12 August 2026, brought together city leaders, policymakers, experts and institutions from across the BRICS community under the theme “Building for Resilience, Innovation, Cooperation and Sustainability.”

At Mumbai First, we believe that the future of our cities will depend increasingly on how well we learn from one another, share experiences and work together. Cities may differ in their geography, scale and circumstances, but many of the challenges they face are shared - climate change, extreme heat, air pollution, mobility, housing, coastal risks, resource management and the rapid transformation brought about by technology and artificial intelligence.

The Conclave provided an opportunity to look at these challenges through different perspectives and, more importantly, to explore what cities can learn from each other.

For us, however, the Conclave is not an end in itself. The real value of a gathering like this lies in what follows. We hope to build sustained city-to-city engagement through knowledge exchange, comparative research, expert interactions, and opportunities for joint initiatives and pilots.

Mumbai has much to learn from other cities, but it also has experiences and solutions worth sharing. Our ambition is to create a platform where this exchange is continuous, practical, and outcome-focused.

I see Mumbai First playing an important role in building this bridge - connecting cities, institutions, ideas, and people, and helping transform international conversations into opportunities for local action.

I would like to thank the Government of Maharashtra, the Ministry of External Affairs, the Government of India, the Embassies and Consulates of the BRICS countries, our speakers, moderators, partners, and everyone who contributed to making the Conclave possible.

My sincere appreciation also goes to the Mumbai First team for their unwavering dedication, commitment, and hard work. The best partnerships are those that continue long after a conference ends. We hope that the friendships and conversations begun here will grow into lasting cooperation and tangible outcomes for our cities and their people.

Satish Kumar
Chief Executive Officer
Mumbai First

MESSAGE FROM THE GOVERNOR

जिष्णु देव वर्मा
Jishnu Dev Varma

सत्यमेव जयते

लोक भवन,
मलबार हिल, मुंबई ४०० ०३५
LOK BHAVAN,
Malabar Hill, Mumbai 400 035

राज्यपाल, महाराष्ट्र
GOVERNOR OF MAHARASHTRA

15 September 2026

MESSAGE

I am pleased to extend my greetings to Mumbai First and all those associated with the BRICS Friendship Cities Conclave 2026 held in Mumbai.

The strength of international cooperation lies not only in relations between nations, but also in the enduring bonds between cities and their people. Friendship Cities can serve as a meaningful platform for dialogue, mutual learning and practical cooperation. Cities today face common challenges such as climate change, extreme heat, pollution, mobility, housing and sustainable development. Addressing these challenges requires cities across borders to share experiences, innovations and solutions.

Mumbai has a unique opportunity to serve as a bridge between the cities of BRICS nations. I encourage Mumbai First and its partners to take this initiative forward through sustained city-to-city exchanges, knowledge sharing, collaborative research and practical projects.

I congratulate Mumbai First for advancing this important vision and hope that the BRICS Friendship Cities Conclave 2026 marks the beginning of a sustained journey towards cities that are more inclusive, sustainable and future-ready.

(Jishnu Dev Varma)

Shri Narinder Nair
Chairman
Mumbai First

MESSAGE FROM THE DEPUTY CHIEF MINISTER

सत्यमेव जयते

Eknath Sambhaji Shinde
Deputy Chief Minister
Maharashtra

16 SEP 2026

Mantralaya, Mumbai 400 032

MESSAGE

It gives me great pleasure to extend my warm greetings to Mumbai First on the successful convening of the BRICS Friendship Cities Conclave 2026 in Mumbai. I also had the opportunity to share my thoughts from your esteemed platform on the development of Maharashtra & Mumbai.

At a time when cities across the world are undergoing rapid and unprecedented transformation, urban development can no longer be viewed merely through the lens of infrastructure. It must be guided by a broader vision of creating cities that are efficient, resilient, inclusive, sustainable and responsive to the aspirations of their citizens. Maharashtra has consistently recognised the importance of this approach, and Mumbai, as India's global gateway and one of the world's leading metropolitan centres, remains at the heart of this vision.

The BRICS Friendship Cities Conclave provides a valuable platform for cities to learn from one another, exchange experiences and explore practical solutions to common urban challenges. It offers Mumbai and Maharashtra an opportunity not only to engage with fellow BRICS cities, but also to share our own experience of urban development, infrastructure creation and transformation.

Our vision for Mumbai is clear — to build a globally competitive, sustainable, resilient and future-ready city. The true success of this Conclave, however, will be measured by what follows after the discussions conclude.

I commend Mumbai First for creating this important platform and for bringing a meaningful international urban dialogue to Mumbai.

I wish Mumbai First and all its partners every success in taking forward the vision, ideas and partnerships emerging from this Conclave.

(Eknath Sambhaji Shinde)

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SPECIAL REMARKS FOR BRICS FRIENDSHIP CITIES CONCLAVE 2026



Shri Eknath Sambhaji Shinde

Hon'ble Deputy Chief Minister of Maharashtra and the Minister of Urban Development, Government of Maharashtra

"The organization of the BRICS Friendship Cities Conclave 2026 in Mumbai is a proud moment for both Mumbai and Maharashtra. The conclave has brought together policymakers, experts and technologists from across the world to exchange policies, technologies and experiences in addressing critical urban challenges such as pollution, environmental sustainability and affordable housing. Such collaboration will benefit all participating cities and contribute to shared progress. Guided by the vision of Hon'ble Prime Minister Shri Narendra Modi for inclusive development, Mumbai First has created an important platform for collective learning and cooperation. I congratulate the entire Mumbai First team for organising this significant conclave."

"The two-day BRICS Friendship Cities Conclave 2026, organised by Mumbai First at the Four Seasons Hotel in Mumbai, brought together representatives from nine BRICS countries. The conclave enabled valuable discussions on common urban-development challenges, including air quality, roads, waste and water management, sewage-treatment infrastructure and affordable housing. The knowledge and experiences shared will benefit all participating countries. Such forums should be organised across cities and countries to promote continued collaboration and learning. I congratulate the entire Mumbai First team on this successful initiative."



Shri Sanjay Ghadi

Hon'ble Deputy Mayor, Brihanmumbai Municipal Corporation



Smt. Ashwini Bhide

Municipal Commissioner, Brihanmumbai Municipal Corporation

"I think this was a very well-organized and very well-curated onference. If you look at the main theme and the six different themes around which the discussions hovered, I think that very well gels with Mumbai's own challenges. Mumbai has been trying to deal with these challenges in its own way, but in this conference, we could see multiple other countries and partners, and hear their stories on how they are dealing with these challenges, what success they have achieved, where there were failures, and what are the learning lessons. This was a very good forum where we could get nine other countries and understand how they are dealing with the challenges of urbanization. Mumbai Metropolitan Region (MMR) is already very highly urbanized. The state of Maharashtra is also more than 50% urbanized. Going forward, we are going to have more and more cities and more and more population in cities, so we need to be prepared and future-ready. And I think this conference was a very formidable step in that direction."

ABOUT MUMBAI FIRST

"Mumbai … symbolizes the hopes of new India," said former **Prime Minister Manmohan Singh,** adding**, *"we will build Mumbai into a truly global city."*** In more recent years, **Prime Minister Narendra Modi has spoken about making Mumbai "future-ready,"** with modern infrastructure, better connectivity, and new economic opportunities. These statements highlight Mumbai's strategic significance and set the stage for the work of Mumbai First.

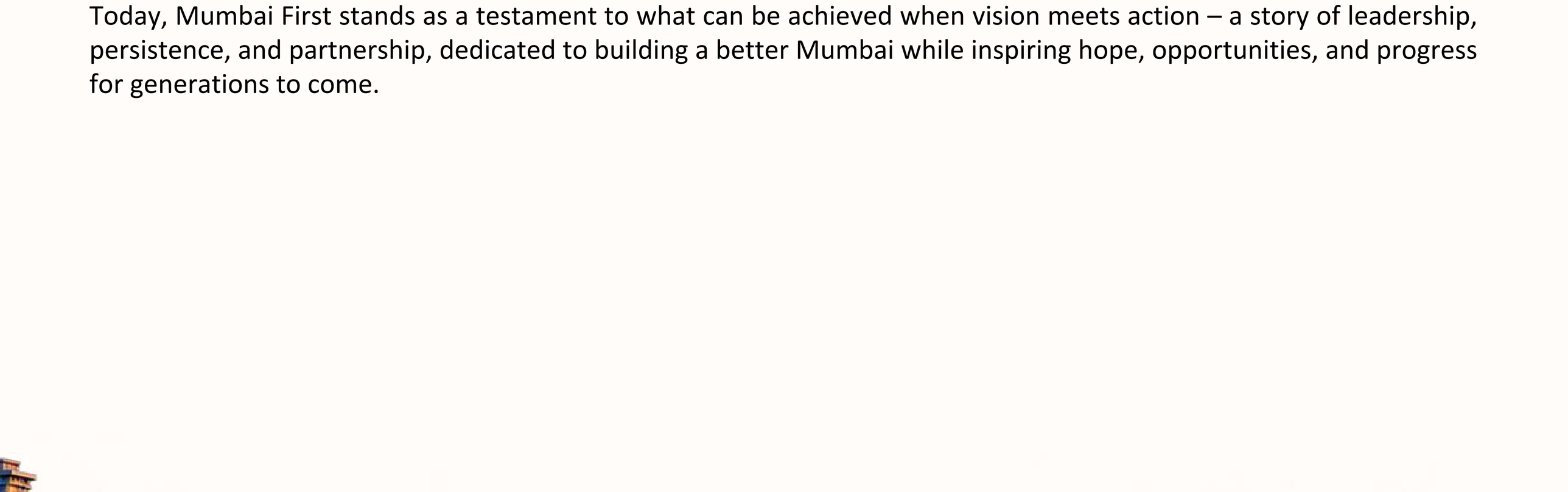
Mumbai First was born out of a bold vision – that Mumbai, India's commercial heartbeat, could be transformed into a world-class city through collaboration, innovation, and action. At the turn of the century, leading corporates – Tatas, Mahindras, Godrej, Reliance, ICICI, Asian Paints, HDFC, and others – partnered with global experts to study the city's potential. Their goal: to create a roadmap for Mumbai to thrive economically, socially, and environmentally.

The resulting **"Vision Mumbai"** document became a blueprint for change embraced by the Government of Maharashtra, marking the beginning of a unique public-private partnership. With the support of national and international stakeholders, Mumbai First became a catalyst for action across multiple sectors.

Over the years, Mumbai First has driven initiatives that have left a lasting impact. From **establishing institutional frameworks for urban transformation** to forming **Citizens' Action Groups** and an **Empowered Committee under the Chief Secretary**, the organization has consistently combined vision with implementation. It advocated for a **War Room to monitor infrastructure projects** and **organized landmark conferences** such as the BRICS Conference (2016), Metamorphosis (2009), and Climate Crisis: Action for Tropical Coastal Cities (2020).

At its core, **Mumbai First believes that lasting change is possible when diverse stakeholders come together with shared commitment.** Its public-private model has addressed complex urban challenges while fostering collaboration between civil society, professionals, and industry leaders. For three decades, Mumbai First has championed initiatives that improve education, healthcare, sustainability governance, and the overall quality of life in Mumbai.

Today, Mumbai First stands as a testament to what can be achieved when vision meets action – a story of leadership, persistence, and partnership, dedicated to building a better Mumbai while inspiring hope, opportunities, and progress for generations to come.



BACKGROUND

Cities are increasingly at the center of global economic, social and environmental transformation. Rapid urbanization, climate change, technological disruption, growing infrastructure requirements and widening inequalities are creating challenges that are complex, interconnected and increasingly difficult for individual cities to address in isolation. At the same time, cities are emerging as laboratories for innovation, demonstrating practical approaches to resilience, sustainability, inclusive growth and technology-enabled governance.

The BRICS platform offers an important opportunity to strengthen city-to-city cooperation and facilitate the exchange of knowledge, experiences and solutions to shared urban challenges. BRICS countries collectively account for a substantial share of **~49% of the world's population** and **~39% of global GDP**[1], while their cities face common challenges related to climate resilience, sustainable mobility, housing, environmental sustainability and digital transformation. This creates significant scope for city-to-city cooperation, peer learning, knowledge exchange and development of partnerships. The importance of engagement within BRICS was emphasized by **Hon'ble Prime Minister Shri Narendra Modi** at the BRICS Summit in Brazil in 2014, where he stressed the importance of **engagement between States, Cities, Local bodies and "People to People"**; subsequently, at the BRICS Summit in Ufa in 2015, he proposed **"a forum of State/Local Governments among the BRICS nations"** and **"co-operation among cities in urbanization"** as part of the ten-point program for future BRICS cooperation.

The year 2026 holds particular significance for India as it marks **India's fourth BRICS Chairship** and coincides with the **20th anniversary of BRICS**. The **BRICS Friendship Cities Conclave 2026** was conceived within this broader context as a platform to strengthen urban cooperation among the BRICS cities and translate shared urban priorities into meaningful collaboration.

Mumbai First played a central role in organizing the Conclave, bringing together key stakeholders and facilitating dialogue and collaboration among participating cities. This marked the second time Mumbai First organized a BRICS Friendship Cities Conclave, following its earlier hosting of the Conclave in 2016.

The Conclave was held on **11-12th August 2026** in **Mumbai,** and it brought together city leaders, government representatives, urban practitioners, development organizations, technical experts and other stakeholders from BRICS and partner countries to deliberate on pressing urban challenges and explore solutions that could be adapted across cities.

The conclave was structured around **six thematic sessions** covering interconnected dimensions of urban development:

Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion and Flood Risks	**Cooling Cities:** Urban Heat Mitigation through Nature-Based Solutions and Climate-Responsive Design	**Building Integrated and Low-Carbon Transport Infrastructure**
Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities	**Housing for All:** Inclusive Housing and Community-Led Urban Regeneration	**AI-Enabled Urban Governance:** Transforming Public Service Delivery and Decision-Making

Together, these themes reflected the **core dimensions of resilient, inclusive, sustainable and future-ready urban development.** The Conclave positioned city-to-city cooperation as an important mechanism for converting knowledge into action. The closing discussions reinforced that the value of the Conclave would ultimately depend not only on the quality of the dialogue, but on the **partnerships, joint initiatives, and sustained knowledge exchange** that emerge from it. The discussions highlighted the importance of continuous cooperation, shared data, joint projects and financing mechanisms to sustain collaboration beyond the conclave.

[1]Website of Banco Central Do Brasil

PARTICIPATION

The BRICS Friendship Cities Conclave 2026 brought together a diverse cross-section of policymakers, government officials, urban practitioners, academics, researchers, and private-sector experts to deliberate on shared urban challenges and identify opportunities for city-to-city cooperation.

The international character of the Conclave was reflected in **participation from 8 BRICS Member countries and 1 partner country (Malaysia)**:



The participation represented a wide range of institutional and professional perspectives, including:

- **National and sub-national government representatives** contributing policy and governance perspectives;
- **City leaders and urban practitioners** sharing practical experiences in planning, infrastructure and service delivery;
- **Academia and research institutions** bringing evidence-based approaches and emerging urban solutions;
- **Development and knowledge partners** highlighting opportunities for technical cooperation, capacity building and knowledge exchange; and
- **Private-sector and industry stakeholders** bringing perspectives on innovation, technology, investment and scalable urban solutions.

The varied institutional, geographical and professional perspectives enriched the discussions and enabled comparative learning across different urban contexts. The participation of cities and institutions from across the BRICS countries also provided an opportunity to identify common challenges and explore approaches that can be adapted to local contexts.

Beyond knowledge sharing, the Conclave helped strengthen networks among cities and urban institutions, with discussions focused on translating international experiences into locally relevant solutions, collaborative initiatives and potential city-to-city partnerships. The diversity of participation therefore served as an important foundation for building sustained cooperation on inclusive, resilient, sustainable and future-ready urban development.

PROCEEDINGS OF DAY 1

Inaugural Session | Session I: Protecting Coastal Cities | Session II: Cooling Cities | Session III: Integrated & Low-Carbon Transport Infrastructure

Inaugural Session

The inaugural session of the BRICS Friendship Cities Conclave 2026 in Mumbai brought together a shared vision for the future of cities.

Mr. Narinder Nayar (Chairman, Mumbai First), in his Welcome Address, highlighted the unprecedented and interconnected challenges confronting cities today, including climate change, urban heat, coastal vulnerability, air pollution, widening inequality, technological disruption and evolving global supply chains. Emphasizing that ***"our challenges are global, but our solutions are local,"*** he stressed that cities must leverage their local experiences and strengthen city-to-city collaboration to develop effective and sustainable responses to shared challenges. He underscored the importance of dialogue, knowledge exchange and collective action, positioning the BRICS Cities partnership as a platform for sharing experiences, fostering innovation, strengthening institutional and professional networks, and supporting inclusive economic growth and urban development.



Drawing upon the Indian philosophy of ***"Vasudhaiva Kutumbakam"*** – the world as one family, Mr. Nayar encouraged delegates to forge meaningful partnerships grounded in trust, respect and mutual understanding. He emphasised the need to translate dialogue into purposeful collaboration, with BRICS cities serving as bridges of friendship, cooperation and shared prosperity.



Shri Eknath Sambhaji Shinde (Hon'ble Deputy Chief Minister of Maharashtra and the Minister of Urban Development, Government of Maharashtra), highlighted the shared goal of building ***"smart, resilient, and inclusive cities that leave no one behind".*** He emphasised the transformative potential of urbanisation in advancing economic growth, resonating with Hon'ble Prime Minister Shri Narendra Modi's perspective that **"we should not treat urbanisation as a problem but as a big opportunity"** and that **"our cities are not just structures of brick and concrete, they are a real growth engine for our nation's economic progress".** Highlighting challenges such as climate change, flooding, heat waves, pollution, water management and affordable housing, he encouraged collaborative, future-oriented solutions rooted in global knowledge exchange.

Referring to Mumbai's coastal vulnerabilities, he highlighted Maharashtra's focus on climate-resilient infrastructure, sustainable mobility, digital governance and technology-driven planning. He further highlighted the potential of BRICS cooperation to leverage AI, digital twins, digital public infrastructure and joint research to strengthen urban governance and create safer, more sustainable and citizen-centric cities, concluding with a call to collective action.

Shri Jishnu Dev Varma (Hon'ble Governor of Maharashtra), in his inaugural address, highlighted the pivotal role of cities in shaping the future of societies and economies, observing that ***"our cities are engines of innovation and creativity, but they also face concentrated vulnerabilities."*** He emphasized that the question before cities is ***"not how to build bigger cities, but how to build cities worthy of their people"*** – *cities that are "**prosperous yet equitable, advanced yet human, efficient yet sustainable"**, and **"resilient yet transformative"***. Highlighting the importance of the BRICS partnership, he emphasised the value of knowledge-sharing and exchange of experiences and solutions across public transport, climate resilience, digital governance, affordable housing and urban infrastructure. Drawing upon India's ethos of ***"Vasudhaiva Kutumbakam" –*** *the world is one family,* and the vision of Viksit Bharat 2047, he advocated solutions rooted in local realities while strengthened through global collaboration. Referring to Mumbai's demonstrated capacity to adapt and recover, he stressed the need for systemic approaches that integrate land use, housing, technology, energy and public health. He urged cities and stakeholders to move beyond individual successes***, "from isolated innovation to collective resilience",*** and from dialogue to action through partnerships, innovation and sustainable financing.





Mr. Ashank Desai (Vice-Chairman, Mumbai First), in his concluding remarks, expressed his appreciation to the Hon'ble Governor of Maharashtra for articulating a compelling vision of building not merely smart cities, but ***"wise cities"*** that are resilient, inclusive and centered on the aspirations of their people. Referring to the ***"dream"*** articulated by Shri Eknath Sambhaji Shinde, Mr. Desai reaffirmed Mumbai First's commitment to working alongside the Government to ***"make Mumbai city a great city for investment, for life of people."***

He concluded by emphasising the role of the BRICS Friendship Cities Conclave 2026 in fostering mutual learning, translating shared knowledge into collective action and strengthening Mumbai's journey towards becoming a more liveable, resilient and globally competitive city.













Session I – Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion, And Flood Risks

Photo by BackyardProduction from Getty Images

Session I – Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion, And Flood Risks



Moderator

Shri Sanjay Ubale (IAS, Retd.), *Governing Board Member, Mumbai First, India*

He is a distinguished retired IAS Officer with over 31 years of experience, with expertise in governance, infrastructure, urban & rural development, and community-based development. He has served as Secretary to Government for Mumbai's Development, Secretary to the Chief Minister, Joint Secretary for Administrative Reforms, and as MD & CEO of Tata Realty and Infrastructure Limited.

The session brought together experiences from BRICS coastal cities on **addressing sea-level rise, coastal erosion and flood risks.** It examined how cities can move beyond standalone infrastructure projects towards integrated, long-term resilience, combining resilient infrastructure, nature-based solutions, ecosystem restoration, climate-resilient planning and community-led adaptation. The discussion highlighted the need for **stronger institutional coordination, knowledge exchange, innovative financing and collaborative action** to protect vulnerable communities, livelihoods and critical infrastructure. The session also explored **opportunities for BRICS cities to adapt and scale proven approaches**, develop shared metrics and outcomes, and build a collective agenda for climate-resilient coastal urbanization.

Speakers

Ms. Nurina Widagdo

Executive Director, KEMITRAAN Partnership for Governance Reform

Indonesia



Ms. Nurina Widagdo is Executive Director of KEMITRAAN Partnership for Governance Reform, with over 30 years of international development experience across Asia, the Pacific, and the United States. She has worked with Oxfam, UNDP, GIZ, SPC, World Bank and ADB, specializing in governance reform, climate finance, democracy, health governance, environmental sustainability, and South-South and Triangular Cooperation.

Mr. Sheng Xuefeng

President of Shanghai Smart City Development Institute

China



Mr. Sheng Xuefeng is President of the Shanghai Smart City Development Institute and serves on the Shanghai Information Standardization Technical Committee, Shanghai Data Merchant Association, and Shanghai Digital Trade Association. He specializes in government strategy, policy research, and planning for smart cities, emerging industries, and digital transformation, and has authored several books.

Dr. Alaaeldin Sayed Ewase

Risk Management Director – Central Administration for Climate Change, Ministry of Local Development & Environment

Egypt



Dr. Alaaeldin Sayed Ewase is Risk Management Director at Egypt's Central Administration for Climate Change, Ministry of Local Development & Environment. He serves as Vulnerability Manager and National Focal Point for the Adaptation Fund (AF), and as official focal point of the Egyptian Ministry of Environment for climate change cooperation with the Ministry of Health and Population.

Session I – Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion, And Flood Risks



Ms. Nurina Widagdo (Executive Director of KEMITRAAN Partnership for Governance), highlighted Indonesia's approach to coastal climate risks through **collaborative governance, community participation and integrated adaptation**, drawing on **Pekalongan, Central Java**, as a key example. She emphasised that **coastal resilience requires coordinated action** across government, communities, scientists, the private sector and climate-finance institutions.

Key insights from Indonesia's experience include:

Coastal climate risk is a governance challenge: With around 17,000 islands and 63.2% of Indonesia's population living in coastal areas, the country faces significant exposure to sea-level rise, flooding and land subsidence. Adaptation must therefore address people and livelihoods alongside physical protection.

Compounding risks along Java's northern coast: Java is Indonesia's economic and industrial hub, with 18 of 29 cities and regencies located along its northern coast. In Pekalongan, around 1 cm annual sea-level rise and 3-10 cm annual land subsidence pose a growing threat to settlements, livelihoods and economic activity.

Infrastructure alone is not enough: The proposed 500-km Giant Sea Wall, estimated to cost USD 80-100 billion, reflects the scale of investment required, but such infrastructure alone cannot address the full range of coastal risks.

Significant socioeconomic impacts in Pekalongan: Persistent flooding affects over 300,000 people, with around 75% of agriculture lost, 70% of the area submerged year-round, and estimated annual losses of USD 87 million.

Leveraging international climate finance: KEMITRAAN works with the Adaptation Fund and Green Climate Fund to channel climate finance towards local adaptation solutions. Its portfolio includes integrated coastal governance, source-to-sea adaptation, nature-positive urban infrastructure and climate-smart fisheries.

Integrated coastal protection & nature-based solutions: In Pekalongan, breakwaters are combined with mangrove development and other measures, with fisher communities, scientists and local government involved in planning and implementation.

Strengthening alternative livelihoods: To address agricultural and livelihood losses, KEMITRAAN supports batik production using natural dyes, improved production techniques and marketing, along with home gardening to supplement household incomes.

Communities as partners: The approach shifts communities from beneficiaries to active partners, involving them in identifying and implementing solutions alongside government, scientists and the private sector.

From projects to integrated action: Ms. Widagdo emphasized moving beyond individual projects towards collaborative governance, trust and collective action, creating longer-term resilience and local ownership.

Session I – Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion, And Flood Risks



Mr. Sheng Xuefeng (President, Shanghai Smart City Development Institute), presented Shanghai's use of digital and intelligent technologies to strengthen coastal and urban resilience.

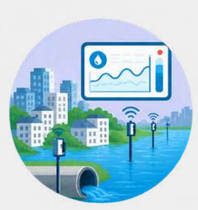
Key insights from Shanghai's experience include:



Shanghai's coastal risks are interconnected: Shanghai uses drones and ground-penetrating radar to detect hidden cracks, seepage and soil weaknesses along a 14-km seawall exposed to tidal and typhoon erosion, enabling targeted repairs.



Automated monitoring standards are strengthening seawall safety: Shanghai's local standard integrates seven monitoring areas, including tide levels, deformation, seepage, soil pressure and stress, smart surveillance and automated patrols, enabling safer and smarter seawall maintenance.



Real-time monitoring is critical for a low-lying city: With most built-up areas less than 4 meters above sea level and annual rainfall of 1,100-1,400 mm, Shanghai faces persistent flood risk. Distributed IoT sensors monitor water levels, drainage and soil moisture across flood-prone areas, underground spaces and riverbanks.



AI is strengthening early warning and emergency response: Shanghai combines sensor data, big-data analytics and AI to predict flood trends and water accumulation, with minute-level warnings delivered through SMS, apps and emergency broadcasts – enabling coordinated emergency.



Sponge-city planning is being tailored to local conditions: Shanghai has adopted three zones: low-impact development, ecological restoration and ecological protection – covering new and redeveloped areas, green belts, ecological corridors, reserves and water-source protection areas.



Digital platforms are enabling integrated urban governance: Shanghai is using AI-powered weather forecasting, city-scale digital twins and the OneNet4All platform to strengthen monitoring, forecasting and city management.



Photo: Turenscape/Courtesy The Cultural Landscape Foundation

Session I – Protecting Coastal Cities: Managing Sea-Level Rise, Coastal Erosion, And Flood Risks



Dr. Alaaeldin Sayed Ewase (Risk Management Director at the Central Administration for Climate Change, Ministry of Local Development and Environment, Egypt), presented Egypt's experience in managing sea-level rise and coastal risks through an integrated approach combining policy and institutional frameworks, continuous monitoring, nature-based solutions and engineered protection.

Alexandria was highlighted as a key case of combining these approaches, with following insights:



Integrated coastal management underpins long-term resilience: Egypt's ICZM approach has evolved since 1994, with the Environment Law, National Committee for ICZM, EIA guidelines and subsequent policy updates establishing a coordinated framework for managing coastal risks.



Egypt is planning for coastal risks over the long term: Its 2025–2100 strategy covers the 1,200-km Mediterranean coastline, focusing on decentralized coastal defense and use of scientific climate-risk data for investment decisions.



Continuous monitoring is strengthening evidence-based coastal management: An integrated monitoring system covers the Mediterranean coast, with 7 sea-level stations, 3 wave-monitoring stations and 4 meteorological stations providing real-time and 24/7 observations to support risk assessment.



Coastal interventions are tailored to local conditions: The 1,200-km coastline is divided into 6 main units and 16 sub-units, with each assessed across economic, social and environmental factors to guide targeted interventions.



Prioritization of Nature-based solutions: Around 80% of the project measures use nature-based approaches such as beach nourishment, sand-trapping barriers, sand dunes and vegetative measures.



Alexandria is combining hard and nature-based protection to safeguard vulnerable assets: With an average elevation of ~5 meters & ~40% of its population concentrated along the coast, the city uses groins, jetties, seawalls, breakwaters and beach nourishment to protect key assets such as the ancient seawall & Montazah Bridge.



Stronger coordination, data and capacity: Three priorities were emphasized – better risk understanding, stronger stakeholder coordination, and improved access to finance, technology & capacity building – for sustained resilience

Conclusion

Drawing on the experiences shared by Indonesia, Shanghai and Egypt, the session highlighted that **coastal resilience requires a shift from reactive infrastructure protection towards integrated, data-driven and adaptive coastal management.** While Indonesia demonstrated integrated coastal protection and community-oriented adaptation, Shanghai showcased the value of digital technologies, real-time monitoring and sponge-city planning, and Egypt presented a long-term Integrated Coastal Zone Management (ICZM) approach combining institutional frameworks, coastal monitoring, nature-based solutions and engineered protection.





Recommendations

- **Mainstream climate risk into urban planning:** Integrate sea-level rise, flooding, erosion and land subsidence into land-use, infrastructure and investment decisions through long-term, adaptive planning.
- **Strengthen real-time risk monitoring**: Scale sensor networks, AI-enabled forecasting and digital risk platforms to enable continuous monitoring, early warning and faster, targeted government response.
- **Prioritize nature-based and hybrid protection**: Restore natural coastal buffers and ecosystems, complemented by engineered measures where necessary, based on local risk and asset vulnerability.
- **Adopt coordinated, multi-level coastal governance**: Strengthen institutional coordination across agencies and jurisdictions through integrated coastal management frameworks, while accounting for upstream, downstream and neighboring impacts.
- **Put communities and critical assets at the center**: Combine technical interventions with community awareness and participation, while prioritizing the resilience of ports, transport, utilities, settlements and other economically critical infrastructure.
- **Turn BRICS knowledge exchange into joint action**: Develop shared resilience metrics, collaborative pilots, research partnerships and digital platforms, supported by innovative financing, to adapt and scale successful approaches across BRICS cities.

Potential Areas of Collaboration

- **AI-enabled coastal monitoring with Shanghai:** Collaboration on IoT, AI forecasting and digital platforms for real-time risk monitoring and early warning.
- **Integrated coastal planning with Indonesia:** Collaboration on coordinated approaches to sea-level rise, land subsidence and flooding.
- **Nature-based and hybrid solutions with Egypt:** Collaboration on combining nature-based measures with engineered protection tailored to local risks.

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design

Photo by Calvin Seng from Pexels

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Moderator

Dr. Vishwas Chitale, *Chair, GHHIN South Asia Heat Health Hub, Fellow & Lead – Climate Resilience, CEEW, India*

He leads CEEW's Climate Resilience team, with over 17 years' experience in climate change adaptation across South Asia. He specializes in vulnerability and risk assessments and adaptation strategies. He supports the National Heat Resilience Program supporting 300 cities and chairs the WMO-WHO South Asia Heat Health Hub.

The session explored how **BRICS cities can address rising urban heat through integrated, climate-responsive planning**. Discussions highlighted that extreme heat is increasingly a public health, economic and social resilience challenge, driven by climate change, rapid urbanization, changing urban form and rising cooling demand. The session emphasized **embedding heat resilience within urban planning, infrastructure investment and governance, while combining nature-based solutions with smart urban systems and heat-health preparedness.** It also underscored the need for stronger data, innovation, financing and BRICS-wide collaboration to scale context-specific cooling solutions.

Speakers

Shri Banchhanidhi Pani, IAS

Municipal Commissioner, Ahmedabad Municipal Corporation

India



Shri Banchhanidhi Pani, IAS, is Municipal Commissioner of Ahmedabad with over 20 years of leadership experience in urban governance, infrastructure, education, and sustainability. He has served as Municipal Commissioner of Rajkot, Surat and Vadodara, earning national and global recognition, including UNESCO Netexplo Award 2020. He has also led reforms in technical education and advances Ahmedabad's sporting and resilient urban development.

Dr. Noha Mohamed Farag

Senior Environmental Researcher - Central Administration for Climate Change

Egypt



Dr. Noha Mohamed Farag is a climate change expert in Egypt's Ministry of Environment, focusing on natural resource protection, climate resilience, and sustainable development. With 18 years of experience, she specializes in participatory water management, water resource planning, sustainable agriculture, and Environmental Impact Assessments. She holds a Ph.D. in Environmental Sciences from Ain Shams University.

Dr. Oommen John

Lead Health Systems Design, Data & Insights, Gates Foundation

India



Dr. Oommen John is a physician and health systems expert specializing in health informatics and implementation science. He leads Health Systems Design portfolio at the Gates Foundation India Country Office and supports health financing strategy for primary healthcare in Southeast Asia. He is an elected Fellow of the International Academy of Health Science Informatics and an associate editor of Oxford Open Digital Health.

Speakers

Shri Abhinav Goyal, IAS

Municipal Commissioner, Kalyan-Dombivli Municipal Corporation

India



Shri Abhinav Goyal, IAS, is Municipal Commissioner of KDMC, leading initiatives in climate resilience, green infrastructure, waste management, transport infrastructure, healthcare, education, and technology-enabled urban governance. He led UNEP-partnered BE COOL and Mission Harit, while advancing Metro, ring road, flyover and EV bus projects. An IIT Kanpur graduate, he received the Prime Minister's Award for Excellence in Public Administration.

Dr. Hendricus Andy Simarmata

Founder, HAS Contemporary Planning

Indonesia



Dr. Hendricus Andy Simarmata has over 25 years of urban planning experience across government, private sector, and international organizations. Co-Founder of Nusantara Urban Advisory and Founder of HAS Office, he focuses on master planning, land development strategies, and infrastructure management. He is President of the Indonesian Association of Urban and Regional Planners and Senior Lecturer at University of Indonesia.



Photo: Pavel Dudek/Alamy | Courtesy The Guardian

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Shri Banchhanidhi Pani, IAS (Municipal Commissioner, Ahmedabad Municipal Corporation, India), presented Ahmedabad's experience of moving from a Heat Action Plan and early-warning system towards an integrated, city-wide cooling strategy. He highlighted data-driven heat-risk mapping, nature-based solutions, and targeted interventions for vulnerable communities, demonstrating how heat resilience can be embedded across urban planning and municipal service delivery.

Key insights from Ahmedabad's experience include:



Ahmedabad's Heat Action Plan offers a replicable city-wide model: Introduced in 2013 as India's first city-level Heat Action Plan, it is estimated to have prevented ~2,380 deaths and reduced all-cause mortality, informing the 2019 NDMA guidelines and similar plans across Indian cities.



Data-driven identification of heat vulnerability: AMC combines Land Surface Temperature and Heat Index analysis, incorporating both air temperature and humidity, to identify heat hotspots and prioritize interventions. He highlighted that 71.5% of Ahmedabad's area (345.22 sq. km) and 70.9% of its population (5.1 million) were exposed to extreme heat; vulnerability was particularly high among slum populations and street vendors.



Urban greening integrated into planning: Ahmedabad has institutionalized urban greening beyond conventional parks and gardens, targeting roadsides, public spaces, traffic junctions, metro corridors, and heat hotspots. Through Mission Million Trees and Ek Ped Maa Ke Naam, green cover increased from 10% in 2021 to 12.5, while also pursuing urban forests and Miyawaki plantations.



Blue-green infrastructure for cooling and resilience: He emphasized that greening needs to be complemented by functioning blue infrastructure. Ahmedabad has rejuvenated 200 urban lakes, with 41 lakes interlinked. The city is also developing sponge parks and expanding rainwater harvesting and groundwater-recharge infrastructure, linking heat resilience with broader water and flood resilience.



Cooling measures targeted at vulnerable groups: Ahmedabad has focused interventions on those most exposed to heat, especially informal workers and low-income communities through shaded Kadiya Nakas with drinking water and basic amenities, reflective roof coatings in slums, mist machines at construction sites and bus stations, and shaded traffic junctions.



Heat preparedness linked to public health and mobility: Ahmedabad uses temperature-based alerts and targeted preparedness measures, including 84 specialized beds for heat-stroke cases, active heat-illness surveillance, and awareness campaigns. It is also expanding AC electric public transport, with over 200 e-buses operational and 3,000 more proposed, recognizing the increasing heat exposure for public-transport users.



From individual interventions to a people-centric cooling mission: Ahmedabad aims to scale community-led and nature-based cooling, monitor performance, and promote climate-resilient buildings through cool roofs, reflective materials and passive design, in collaboration with NGOs, developers, builders and industry partners.

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Dr. Noha Mohamed Farag (Senior Environmental Researcher – Central Administration for Climate Change, Ministry of Local Development & Environment, Egypt), presented Egypt's approach to urban heat mitigation by drawing on the heat challenges facing Cairo, Alexandria and rapidly developing cities

Key insights from Egypt's experience include:



Urban heat driven by rapid urbanization and built form: Cairo and Alexandria face rising heat due to high urban density, vegetation loss, traffic and industrial emissions, and heat-absorbing surfaces. The urban heat-island effect limits night-time cooling and increases risks for vulnerable population.



Nature-based solutions as a core cooling strategy: Egypt promotes street trees, urban cooling parks, and green corridors to provide evaporative cooling, highlighting that green roofs can reduce surface temperatures by ~15°C during peak summer hours.



Blue infrastructure and waterfront interventions: The approach extends beyond greening to fountains, artificial lakes and canals, using evaporative cooling and improved airflow. He highlighted the Nile waterfront renewal as an opportunity to restore and green riverfront areas and create natural breeze corridors into urban areas.



Climate-responsive buildings to reduce cooling demand: Egypt promotes passive cooling through building orientation, natural ventilation and solar shading, alongside high-albedo coatings that can reflect up to 80% of solar radiation. Traditional features such as Mashrabiya, Malqaf and courtyards were presented as local approaches.



Cairo and New Administrative Capital demonstrate large-scale greening: Cairo's 30-hectare Al-Azhar Park was transformed from a former waste site into an urban cooling space, while the Green River Axis serves as a major green corridor in the New Administrative Capital.



Alexandria and new desert cities are incorporating climate-responsive planning: Alexandria combines coastal protection with shaded urban promenades, while new desert cities use wind-aligned street corridors and satellite-based thermal mapping to guide urban expansion.



Heat resilience embedded in national policy and building regulations: Egypt's policy frameworks advance heat-resilient buildings and green spaces, while targeting a 37% cut in electricity-sector emissions by 2030.

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Dr. Oommen John (Lead Health Systems Design, Data & Insights, Gates Foundation, India) highlighted the underreported health burden of extreme heat and advocated data-driven, digitally coordinated and emergency-responsive health systems to strengthen risk detection, response and continuity of care.

Key insights include:



Heat mortality is significantly under-reported: India records ~800 deaths annually, against modelled estimates of 3,400–30,000 excess deaths per heat event, with similar gaps across BRICS countries.



Heat impacts extend beyond heat stroke: Heat stress can trigger cardiac, respiratory and kidney emergencies that go unrecognised as heat-related, alongside impacts on mental health, communities and women, requiring a broader health-resilience response.



Comprehensive heat vulnerability mapping is essential: Cities need granular data on heat-related conditions, such as strokes and acute coronary events, to identify vulnerable populations and assess intervention outcomes.



Real-time health information systems are critical: Dr. John highlighted the need to move from fragmented reporting towards real-time health-system governance, enabling cities to track heat-related admissions, treatment and outcomes and measure the effectiveness of interventions.



ABDM can enable integrated emergency care: He proposed ABDM-enabled Care Coordination (AECC) can connect citizens, providers and administrators through heat-informed call-centre triage, facility-level service inventories and ambulance linkages, directing patients to appropriately equipped facilities.



Digital records can improve continuity and identify heat-related cases: Ambient listening and electronic health records can structure patient data, track heat-related cases and enable follow-up for people facing continued risks after conditions such as acute kidney injury.



Health systems need trained, emergency-ready workforces: Competency-based certification, protocol monitoring, and professional development, particularly in high-risk areas, can strengthen proactive heat preparedness.

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Shri Abhinav Goyal, IAS (Municipal Commissioner, Kalyan-Dombivli Municipal Corporation, Mumbai, India), highlighted KDMC's approach to managing the challenges of rapid urbanization, traffic congestion, urban heat and municipal service delivery. The interventions focused on expanding public transport, improving waste management, and piloting passive cooling solutions in public buildings to develop replicable models for wider adoption.

Key insights include:



Strengthening sustainable urban mobility: KDMC plans two metro lines, ring-road links, flyovers and 300 new EV buses, augmenting its existing fleet of around 80 buses, to improve connectivity and ease congestion from urban expansion.



Expanding nature-based and blue-green interventions: KDMC is undertaking Mission Harith for tree plantation and protection of mature/heritage trees, alongside a lake rejuvenation program covering ~40 lakes – positioning urban greening and blue infrastructure as complementary tools for cooling and broader urban resilience.



Demonstrating passive cooling in public buildings: Through the Be-Cool initiative, KDMC is working with architects, real-estate developers and UNEP to address the limited adoption of green buildings and passive cooling. An upcoming affordable housing project and cancer hospital have been identified as demonstration sites.



Embedding climate-responsive design: The demonstration buildings will incorporate building orientation, permanent shading, appropriate window areas, roof insulation and reflective/cool-roof technologies to reduce heat ingress and dependence on air-conditioning.



Linking pilots to city-wide implementation: KDMC's approach is structured around diagnostics → demonstration → scaling, with UNEP, developers, real-estate stakeholders, builders and architects involved in the process. The intent is to generate evidence from pilot interventions and integrate successful solutions into wider urban development and disaster-management planning.



Photo: Zoshua Colah|Travel and leisure Asia

Session II – Cooling Cities: Urban Heat Mitigation Through Nature-Based Solutions And Climate-Responsive Design



Dr. Hendricus Andy Simarmata (Founder, HAS Contemporary Planning, Indonesia), presented an ***"urban thermal economy"*** approach, framing heat as an environmental, spatial-planning and economic challenge. Drawing on Jakarta and Bogor, he advocated integrating thermal performance into urban form, infrastructure, zoning and development decisions.

Key insights include:



Treating heat as a development challenge: In urbanizing Jakarta, heat is intertwined with the city's thermal, hydrological and energy systems. He stressed that urban form, buildings, mobility and infrastructure need to be considered together at early planning stages to avoid heat and energy pressures.



Linking cooling with economic productivity: Urban cooling should be assessed through productivity loss and rising costs, not only environmental indicators. Cities need to balance productivity with energy consumption and identify interventions that generate stronger economic and social returns.



Using connected green infrastructure in Jakarta: His metropolitan analysis of vegetation density, land-surface temperature and urban heat-island patterns identified disconnected green areas. Cooling depends not only on green-space coverage but also on green network connectivity, which supports airflow and extends cooling effects.



Integrating cooling into urban-scale design in Bogor: He highlighted that a 16.8-hectare proposal around Bogor Central Station combines ~3 km of pedestrian canopy, ~2 km of forested and surface interventions, and high-rise greening to translate thermal considerations into urban-design guidelines.



Embedding nature-based solutions in spatial planning: A self-assessment across major Indonesian cities found limited NBS integration, scoring around 54%-70%. Stronger regulations are needed to embed green infrastructure and tree cover into spatial development rather than treat them as standalone interventions.



Moving towards "thermal productivity zoning": He proposed climate-responsive zoning using real-time, localised data to measure thermal performance, develop spatial typologies, and inform planning standards and KPIs.



Making thermal performance part of development governance: Thermal performance should be integrated into permits and assessments, with developer accountability, performance-based incentives & monitoring of outcomes.

Conclusion

Drawing on the experiences shared by Ahmedabad, Egypt, Kalyan-Dombivli and Indonesia, the session highlighted that **urban heat resilience requires a shift from isolated cooling measures towards integrated, climate-responsive urban planning and design.** While Ahmedabad demonstrated a city-scale approach combining heat-health preparedness, urban greening and community-based interventions, Egypt showcased nature-based solutions and passive design measures, Kalyan-Dombivli highlighted emerging efforts on sustainable mobility and demonstration of passive cooling, and Indonesia emphasized linking thermal performance with urban form, productivity and economic development.





Recommendations

- **Mainstream heat resilience into urban planning:** Integrate heat-risk assessments, urban form, land-use patterns, infrastructure and development controls into planning and investment decisions to ensure future growth does not exacerbate heat exposure.
- **Scale nature-based and blue-green infrastructure:** Institutionalize urban greening beyond parks by integrating trees, connected green corridors, lakes, urban forests and other blue-green systems into roads, neighborhoods and public spaces, with measurable targets and continuous monitoring.
- **Promote climate-responsive and passive building design:** Embed building orientation, shading, roof insulation, cool roofs, appropriate glazing and other passive-cooling measures into public and private development to reduce heat ingress and dependence on energy-intensive air conditioning.
- **Strengthen data-driven heat-risk management:** Develop localized heat-risk mapping, continuous monitoring and early-warning systems to identify vulnerable areas and populations, prioritize interventions and support timely heat-health responses.
- **Treat cooling as an economic and productivity priority:** Move beyond viewing heat solely as an environmental challenge by measuring its impacts on productivity, energy use and economic costs, and incorporate thermal performance into urban planning and development decision-making.
- **Use pilots to demonstrate and scale solutions:** Implement targeted demonstration projects for urban cooling interventions and use successful models for wider replication across public and private developments.
- **Build BRICS collaboration around scalable solutions:** Strengthen knowledge exchange, joint pilots, data and monitoring approaches, technical partnerships and financing mechanisms to adapt and scale effective heat-resilience solutions across rapidly urbanizing BRICS cities.

Potential Areas of Collaboration

- **Urban heat action planning with Ahmedabad, India:** Collaboration on heat-risk mapping, early warnings, health preparedness, urban greening and community cooling, drawing on Ahmedabad's experience.
- **Climate-responsive design with Egypt:** Collaboration on passive cooling, green-blue infrastructure, cool roofs, shading and climate-responsive buildings, drawing on Egypt's integrated approach.
- **Demonstration-led cooling with Kalyan-Dombivli, India:** Joint pilots on passive cooling in affordable housing and public buildings, including building orientation, shading, roof insulation and cool-roof technologies, with subsequent replication at scale.
- **Thermal productivity and spatial planning with Indonesia:** Collaboration on integrating thermal performance, urban form, and economic costs into spatial planning, development regulations and urban design standards.
- **Nature-based urban cooling with Ahmedabad and Egypt:** Joint initiatives on urban forests, blue-green infrastructure and nature-based solutions.



Photo: iStock | Courtesy Down to Earth

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Photo: Tuul & Bruno Morandi |Architectural Digest

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Moderator

Mr. Gopal R. Patil, Ph.D., *Professor, Department of Civil Engineering, Indian Institute of Technology Bombay, India*

He has over 20 years of academic, research, and professional experience in transportation systems engineering, sustainable transportation planning, network optimization, freight transportation, traffic operations, travel demand modelling, and traffic emissions.

The session brought together perspectives from China, Brazil, Russia and India on integrated, low-carbon mobility. Discussions highlighted public transport integration, electrification, intelligent traffic management, multimodal connectivity and sustainable financing, emphasizing technology, institutional coordination, efficient asset use and inclusive mobility as key enablers of transport transitions.

Speakers

Ms. Bie Bihua

Vice President, Shanghai Smart City Development Institute

China



Ms. Bie Bihua is Vice President of the Shanghai Smart City Development Institute, with 13 years of experience in smart city development and urban digital transformation. It contributes to policy consultation, metaverse industrial research, and innovation ecosystem development, and has supported multiple authoritative industry publications. It has chaired & organized the International AI City Forum for eight consecutive years.

Ms. Mariana Batista

Senior Manager, Public Transport, C40 Cities

Brazil



Ms. Mariana Batista is Senior Manager for Public Transport at C40 Cities, leading the theme globally. She specializes in sustainable mobility and urban development, having supported electric-bus deployment across Latin America through TUMI E-Bus Mission and ZEBRA program. Previously worked with the UK Government in Brazil, she holds MSc from the University of Oxford in Sustainable Urban Development.

Mr. Arseniy Karyakin

Head of the International Relations Department of Kazan City Council, Secretary General of the BRICS and Association of Cities and Municipalities

Russia



Mr. Arseniy Karyakin heads Kazan City Council's International Relations Department, leading global partnerships in urban development, culture, and education. Previously its First Deputy Head, he coordinated international forums and city networks. He served on the Executive Directorate of the XXVII Summer Universiade and 2018 FIFA World Cup Local Organizing Committee, and is Secretary General of BRICS+ Association of Cities & Municipalities.

Shri Praveen Pardeshi, IAS

Chief Executive Officer, Maharashtra Institution for Transformation

India



Mr. Praveen Pardeshi is a retired IAS officer and CEO of Maharashtra Institution for Transformation. He has held senior roles including Additional Secretary to the Chief Minister of Maharashtra, Principal Secretary of Revenue and Forest Department, Maharashtra, and Municipal Commissioner of Greater Mumbai. He has also served on India's Capacity Building Commission, overseeing Mission Karmayogi.

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Ms. Bie Bihua (Vice President, Shanghai Smart City Development Institute, Shanghai, China), presented Shanghai's integration of planning, multifunctional infrastructure and digital platforms to build a greener, smarter and more efficient low-carbon mobility system

Key insights from China's experience include:



Addressing fragmented transport systems: Shanghai identified three key gaps in conventional transport planning – fragmented planning, facilities and data. Transport, energy and urban planning often operate independently; charging, parking and solar infrastructure are developed separately; and incompatible data standards create silos between vehicles, platforms and government departments, resulting in duplicated investment, higher pollution and slower decision-making.



Adopting an integrated planning model: Shanghai's response is a three-part integration framework covering planning, facilities and data. Its 15th Five-Year Plan (2026-2030) identifies integrated transport as a core direction, bringing transport, energy and urban development into coordinated planning.



Transforming transport infrastructure into energy assets: Shanghai is converting roads, stations and other transport spaces into *"energy hubs"* by integrating solar generation, storage, charging and grid interaction. PV projects have been implemented across nine transport-related areas and eight application scenarios, including metro, roads, buses, airports and ports; V2G systems also enable electric vehicles to interact with the power grid.



Scaling clean and intelligent mobility: By the end of 2025, almost all city buses and ride-hailing taxis in Shanghai had shifted to electricity. The city had also opened more than 5,000 km of autonomous-driving test roads, while deploying solar carports and solar-road applications across transport infrastructure.



Demonstrating zero-carbon port logistics: Shanghai is deploying cab-free, autonomous battery-electric heavy-duty trucks for ports and logistics parks. The L4 vehicles use multi-sensor perception and cloud-based scheduling, while battery swapping takes around five minutes, enabling continuous operations. She highlighted that each truck can achieve around 50 tones of annual carbon reduction when operated with green electricity.



Building an integrated smart-mobility testbed in Lingang: The Lingang Special Area has developed 86 km of intelligent vehicle-road coordination infrastructure across a core area of approximately 25 km², covering more than 100 signal-controlled intersections. A unified vehicle-road-cloud-energy platform enables real-time monitoring, traffic-flow regulation and congestion forecasting, with nearly 400 intelligent vehicles deployed across Robotaxi, smart-bus and unmanned-sanitation applications.



Strengthening policy, financing and institutional coordination: Shanghai is supporting the transition through energy-efficiency subsidies, incentives for new-energy heavy trucks and early replacement of high-polluting diesel vehicles, alongside cleaner marine fuels. She emphasised four priorities: cross-departmental coordination, deeper vehicle-road-cloud data sharing, and market-driven models for sustainable operations

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Ms. Mariana Batista (Senior Manager, Public Transport, C40 Cities, Brazil), presented C40's approach to low-carbon mobility, combining mode shift and electrification. She highlighted how public transport, active mobility, electric vehicles, clean-air measures and innovative financing can enable integrated and inclusive transport systems.

Key insights from Brazil's experience include:



Combining mode shift with electrification: Electrification alone is insufficient; cities must also shift travel from private vehicles to public transport, walking and cycling. C40's three transport priorities are to increase sustainable modes, reduce motorised vehicles and accelerate electrification of high-mileage vehicles.



Scaling city-level climate action: C40 brings together ~100 cities representing ~600 million residents, positioning cities as key actors in reducing transport emissions and air pollution while improving access to economic opportunities.



Curitiba – reforming the e-bus transition: Curitiba targets 33% zero-emission buses by 2030 and 100% by 2050. C40 supported trials of bi-articulated e-buses, while the city restructured private operator contracts by separating vehicle ownership from operations, established a public guarantee fund and developed decentralized charging.



Salvador – integrated and inclusive mobility: Salvador is expanding BRT and bus–metro integration across municipal and state governance, while establishing public charging infrastructure. Its Mulheres no Volante initiative also increased the number of female drivers by 130%, integrating workforce inclusion into the mobility transition.



São Paulo – regulation and innovative financing: São Paulo banned new diesel-bus purchases and deployed 1,700+ e-buses. An upfront subsidy covers the diesel-electric price gap, offset over time by lower operating costs.



Electric freight – India-Brazil experience: Under Land Shift, 20 electric heavy-duty vehicles in India completed 600+ commercial trips covering 200,000+ km, while Brazil plans a demonstration along ~402-km São Paulo–Rio corridor.



Clean Air Zones – integrated city solutions: Bengaluru's 5-km² pilot combines restrictions on polluting vehicles with zero-emission mobility, walking, cycling, metro connectivity and bus-priority lanes.

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Mr. Arseniy Karyakin (Head of the International Relations Department of Kazan City Council, Secretary General of the BRICS and Association of Cities and Municipalities, Russia), presented Kazan's experience in transforming urban mobility from a road-expansion approach towards real-time, intelligent management of existing transport infrastructure

Key insights from Russia's experience include:



Responding to rapid motorization: Registered vehicles in Kazan increased by ~250% between 2003 and 2026, amid an agglomeration of ~1.8 million people, making continued road expansion an unsustainable response to congestion.



Integrated public transport reform: Kazan replaced outdated vehicles and unified four transport modes and the transport port through common schedules and fares. By 2026, the fleet's average age has fallen to six years, supported by a single transport card.



Expanding priority for public transport: The city has developed 47 streets with dedicated bus lanes, enabling operational bus speeds of around 21 km/h on dedicated lanes versus 18 km/h in mixed traffic. Public transport is also given priority within the automated traffic-management system to improve reliability and attractiveness.



Scaling ASUDD for real-time traffic management: Launched in 2013 across 95 intersections with a USD 31 million budget, ASUDD covered over half of Kazan's intersections by 2026, supported by 983 detectors, 356 cameras and 499 traffic lights, including 257 adaptive and 130 remotely controlled signals.



Adaptive, data-driven signal control: Real-time detectors monitor vehicle flows, queues and speeds, with algorithms dynamically adjusting green times; the system's data-to-signal cycle is under 5 seconds. Public transport can trigger signal adjustments to extend green time or shorten red phases, improving schedule adherence.



Measurable mobility and environmental gains: Pilot areas recorded an 18% increase in average speeds and 15-40% reductions in transport delays. Karyakin also reported an estimated 20-25% reduction in harmful emissions, attributed to reduced idling, smoother traffic flow and improved fuel efficiency.



Towards integrated and inclusive mobility management: Kazan plans to connect remaining traffic signals and establish a Unified Dispatch Centre integrating transport, parking and traffic-light management. It also plans 42 voice-enabled pedestrian crossings to improve accessibility and road safety.

Session III – Building Integrated And Low-Carbon Transport Infrastructure



Mr. Arseniy Karyakin (Head of the International Relations Department of Kazan City Council, Secretary General of the BRICS and Association of Cities and Municipalities, Russia), presented Kazan's experience in transforming urban mobility from a road-expansion approach towards real-time, intelligent management of existing transport infrastructure

Key insights include:

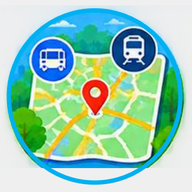


Rapid bus electrification: Mumbai is pursuing rapid electrification of BEST buses, with charging infrastructure being developed within bus depots. He noted that the transition requires substantial capital and suggested exploring a bus-leasing model, supported by ring-fenced revenues to meet lease payments

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Choosing the right mass-transit mode: Drawing on experience from Pune, he observed that BRT works best with continuous right-of-way but may be less effective on dense Indian roads with frequent access points, where metro or elevated metro may better suit high-density corridors.



Metro-bus integration for last-mile connectivity: While Mumbai's metro expansion strengthens mass transit, metro alone cannot provide last-mile connectivity; bus capacity must triple or quadruple to enable effective feeder services.



Moving beyond road expansion: He acknowledged that Mumbai faces a limit to further road expansion, citing his comparison of ~30% road share in central Manhattan versus less than 8-12% in Mumbai. He advocated balancing further road investment with stronger public-transport investment while recognizing roads' wider role in carrying utility infrastructure and functioning as public space.



Ring-fenced financing for electrification: To address the capital requirement for expanding the bus fleet, he proposed congestion charges whose revenues could be ring-fenced specifically for bus electrification. He also noted that government policy already provides subsidies for electric vehicles and charging infrastructure.



Diversifying BEST revenues: He highlighted the limited contribution of non-ticketing revenue, at ~2%, and advocated for stronger monetization of BEST's assets. Multi-level commercial development over large bus depots could potentially generate 10-15% of BEST's losses, with another 10-15% potentially coming from parking fees.



Equitable and sustainable funding: He emphasized that meeting the need for 13,000-15,000 buses and INR 2,000-3,000 crore will require combining parking revenues, asset monetisation and user charges with other funding sources.

Conclusion

Drawing on experiences from Kazan, Shanghai, Brazil and Mumbai, the session highlighted that **low-carbon mobility** requires a shift from isolated transport interventions towards **integrated, technology-enabled and financially sustainable urban transport systems.** While Shanghai demonstrated the integration of transport, energy and data, Brazil showcased the combined role of electrification and modal shift, Kazan highlighted real-time traffic management to optimize existing infrastructure and reduce emissions, and Mumbai emphasized the need to strengthen bus-based last-mile connectivity alongside metro expansion and develop sustainable financing mechanisms.





Recommendations

- **Adopt integrated transport planning:** Move beyond siloed transport systems by integrating mass transit, road infrastructure, energy systems, intelligent mobility and land-use planning to create connected and efficient low-carbon mobility networks.
- **Prioritize intelligent management of existing infrastructure:** Use real-time traffic data, adaptive signals and intelligent transport systems to optimize existing road capacity before pursuing continuous road expansion, as demonstrated by Kazan's ASUDD system.
- **Accelerate public transport electrification:** Scale electric buses and other clean mobility solutions alongside supporting charging infrastructure, while using appropriate financing and procurement models to manage higher upfront costs.
- **Integrate public transport and active mobility:** Ensure metro, bus, BRT, walking and cycling networks function as complementary systems, with reliable first- and last-mile connectivity and priority infrastructure for public transport.
- **Strengthen data-driven and interoperable mobility systems:** Develop shared data platforms, common standards and real-time information exchange across vehicles, infrastructure and transport agencies to enable coordinated decision-making and responsive traffic management. Kazan's ASUDD demonstrates the potential of this approach, with data-to-signal response in under 5 seconds.
- **Link mobility investments with measurable environmental outcomes:** Embed emissions reduction, energy efficiency and modal-shift targets into transport planning and monitor outcomes. Kazan's experience indicates potential for 20-25% reductions in harmful emissions, alongside lower delays and higher speeds.
- **Strengthen city-to-city collaboration and knowledge exchange:** Use platforms such as the BRICS to facilitate peer learning, technical partnerships, pilot projects and replication of proven solutions in intelligent transport, electrification, integrated mobility and sustainable infrastructure.

Potential Areas of Collaboration

- **Intelligent traffic management with Kazan, Russia:** Collaboration on adaptive traffic signals, real-time traffic monitoring, public transport prioritization and integrated traffic-management platforms to optimize existing road infrastructure and reduce congestion and emissions.
- **Integrated transport-energy-data systems with Shanghai, China:** Collaboration on integrating transport planning, clean energy infrastructure and vehicle-road-cloud data platforms, including smart mobility, EV infrastructure and real-time traffic management.
- **Public transport electrification with Brazilian cities:** Collaboration on electric bus deployment, innovative procurement and financing models, charging infrastructure and bus-metro integration, drawing on experiences from Curitiba, Salvador and São Paulo.
- **Electric freight mobility with Brazil and India:** Collaboration on scaling electric heavy-duty freight through pilot corridors, operational testing and partnerships between governments, private operators and technology providers, building on the LandShift experience.
- **Integrated last-mile mobility with Mumbai, India:** Collaboration on strengthening bus-metro integration, public transport priority and sustainable mobility systems to complement large-scale metro expansion and improve first- and last-mile connectivity.



Photo: Arvind Yadav | Hindustan Times | India Forbes

PROCEEDINGS OF DAY 2

Knowledge Session: Cities' Urban Challenges

Session IV: Breathing Better Cities

Session V: Housing for All

Session VI: AI-Enabled Urban Governance

Closing Session

Knowledge Session on the Cities' Urban Challenges

The Knowledge Session on Innovative Urban Development Solutions for BRICS Cities, held on 12 August 2026, brought together senior representatives from government, city administrations, international institutions and industry for a closed-door focused exchange on practical and scalable approaches to urban development in the BRICS ecosystem.

Mr. Rakesh Lunia from Tata Consultancy Services spoke about the need to rethink the way smart cities are conceived and developed, with a strong emphasis on community-centric urban development. His intervention highlighted the importance of building smart cities around communities and their needs, rather than creating systems that remain excessively dependent on government. The approach emphasized greater community participation and ownership in shaping urban solutions.

Ms. Railssa Peluti Alencar, Deputy Consul General of Brazil, presented "Urban Transportation: The experience of URBS (Urbanização de Curitiba S.A.) and IPPUC (Instituto de Pesquisa e Planejamento Urbano de Curitiba) in sustainable urban mobility and city planning." Her intervention brought an international city-planning perspective from Brazil, focusing on the experience of Curitiba and the relationship between sustainable mobility and long-term urban planning.

Mr. Danny Salvia presented GeoAI and 3D City Twins as a **"spatial operating system"** for cities, shifting urban governance from static GIS documentation to dynamic prediction. Using Dharavi's mapping, he demonstrated how LiDAR, mobile scanners and panoramic cameras can generate precise 3D data for property records, infrastructure planning, emergency routing and redevelopment while recognising existing community and economic networks. He also proposed a Mumbai City Twin to support infrastructure, public health, climate resilience, traffic, energy and water management. This would enable a shift from **"Smart Cities" to "Wiser Cities,"** using digital twins and AI to anticipate challenges, test interventions and improve decision-making.

Dr. Karimi from Iran presented "Tehran Housing and Regeneration Change: Housing as the Axis of Urban Development." His presentation examined housing as a central component of urban welfare and development in Tehran, covering housing cooperatives and collective welfare, long-term demographic growth, demographic transition and changing residential preferences, internal migration and housing affordability, residential patterns and spatial inequality, commuting and urban expansion, and comparisons with other Iranian megacities. He concluded by drawing attention to the policy implications of these interconnected housing and urban-development trends.





Session IV – Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities



Photo: Thomas Peters / REUTERS

Session IV – Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities



Moderator

Dr. Nitin Goyal, *Principal Scientist and Head CSIR-NEERI, Mumbai , India*

He is an Environmental Scientist with a Ph.D. from IIT Bombay and over 25 years of experience, including 15 years in academia and research. He specialises in air quality management, atmospheric aerosols, and environmental monitoring. His work spans Southeast Asia, encompassing environmental and social impact assessments, sustainable development, source apportionment studies, and government advisory.

The session explored pathways towards healthier, sustainable cities through integrated, data-driven and coordinated air-quality management. Discussions emphasised understanding pollution sources and adopting targeted interventions backed by monitoring and evidence. Delhi demonstrated focused, multi-sectoral action supported by coordinated governance and data systems; Beijing highlighted sustained clean-energy, transport and industrial measures; while Durban showcased community participation, local monitoring, enforcement, cleaner transport, energy transitions and green infrastructure. The session emphasized the need for cross-jurisdictional coordination, institutional capacity, community engagement and knowledge exchange

Speakers

Mr. Mohit Beotra

Chief Executive Officer, A-PAG

India



Mr. Mohit Beotra co-founded the Air Pollution Action Group (A-PAG) in 2019, a not-for-profit organization supporting government efforts to reduce air pollution. With 28 years of experience in advertising and marketing, he most recently served as Chief Brand Officer at Airtel. An IIM Calcutta alumnus, he now focuses on creating make an impact in a way that can genuinely improve the lives of millions of people.

Mr. Zhuang Ziwei

Deputy Director, Atmospheric Environment Division, Beijing Municipal Ecology and Environment Bureau

China



Mr. Zhuang Ziwei is Deputy Director of the Atmospheric Environment Division, Beijing Municipal Ecology and Environment Bureau, leading air quality management. His work focuses on strategies to reduce air pollution with a focus on lowering PM2.5 concentrations, controlling vehicle emissions, and regulating industrial discharge. He advances inter-regional collaboration with Hebei and Tianjin and promotes data-driven environmental governance.

Mr. Phathutshedzo Kenneth Raphalalani

Senior Manager, Air Quality Management, Ethekwini Metropolitan Municipality

South Africa



Mr. Phathutshedzo Raphalalani is Senior Manager for Pollution Control with over 13 years of experience in air quality management and environmental compliance. He is a strategic leader experienced in technical team management, policy development, business strategy, corporate governance, risk and project management. He holds a Master's degree in Nature Conservation.

Session IV – Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities



Mr. Mohit Beotra (Chief Executive Officer, A-PAG, Delhi, India), presented Delhi's data-driven approach to air pollution management, highlighting the importance of addressing multiple pollution sources through targeted, time-bound interventions. He emphasized that air pollution requires an airshed-level response, supported by robust data, coordinated governance and practical programmed that can be replicated across cities.

Key insights include:



Focus on multiple pollution sources: Delhi's analysis identifies dust, transport, industry, biomass burning, and household pollution as the key sources, with vehicles, dust, and industry together accounting for ~85% of PM2.5. He stressed that interventions must therefore extend beyond the seasonal focus on stubble burning, which he noted contributes less than 5% annually.



Adopt an airshed-level approach: Only ~35% of Delhi's pollution originates within the city, with another 35% originating from the wider NCR and the remainder from beyond the NCR. He highlighted that effective action therefore requires coordinated interventions across Delhi and the wider NCR.



Implement a focused Delhi NCR action plan: Delhi is pursuing a three-year plan targeting a 30% reduction in PM2.5, structured around eight specific programs with defined targets, budgets and timelines. These include upgrading older trucks and buses, establishing a low-emission zone, strengthening industrial emission controls, continuous emissions monitoring and road remediation across NCR cities.



Strengthen inter-governmental coordination: The plan brings together four Central ministries and five State Governments, with responsibilities distributed across transport, environment, urban development and agriculture. He highlighted this institutional coordination and central-level oversight as critical to translating the identified interventions into implementation across the NCR.



Scale the Dispersed Sources Program: As an immediate intervention, he highlighted the Dispersed Sources Program, which addresses localized sources such as road dust, garbage, construction debris and other remediation issues through an app-based three-step process – identification, assignment to officials and digital verification of resolution. He cited an IIT Delhi study indicating potential for 15%+ reduction in hyperlocal PM2.5.



Use technology for accountability and monitoring: The program uses spatial mapping and a performance dashboard to track issues across agencies and monitor their resolution. By 29 July 2026, the Delhi dashboard recorded 362,925 issues, with ~11.5% pending, demonstrating how digital monitoring can create greater visibility of implementation gaps and institutional performance.



Replicate proven interventions while building better data: The Dispersed Sources Program had expanded to around 20-21 cities across six states. For Mumbai, he recommended adopting such interventions in the interim, while building the robust source-level data required for a focused, comprehensive air-quality plan.

Session IV – Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities



Mr. Zhuang Ziwei (Deputy Director, Atmospheric Environment Division, Beijing Municipal Ecology and Environment Bureau, Beijing, China), presented Beijing's long-term, multi-sector approach to air pollution control, highlighting how structural reforms, stringent regulation, technology-enabled monitoring and regional coordination have improved air quality

Key insights from China's experience include:

Sustained, target-driven pollution control: Beijing has progressively strengthened air-quality measures since 2013. By 2025, average PM2.5 fell 69.8% to 27 µg/m³, while PM10, NO_2 and SO_2 declined by 55.6%, 60.7% and 84.9%, respectively.

Shift away from coal-based energy: Beijing renovated 28,000 MW of coal-fired boilers and converted 1.7 million households to gas or electricity, substantially reducing coal use and supporting sustained air-quality improvement.

Cleaner and more sustainable mobility: Beijing retired 2.3 million old vehicles, expanded new-energy vehicles, and increased National V-and-above vehicles to 80%. By 2025, green travel share reached 76.5% in central Beijing, supported by tighter vehicle and fuel-emission standards.

Industrial restructuring and cleaner production: Beijing tightened industrial controls, eliminating 3,000+ polluting enterprises and upgrading 23,800 MW of gas-fired boilers, reducing NOx emissions by 50%. Green enterprises now account for over 40%.

Integrated monitoring and enforcement: A "Sky-Space-Ground-Mobile-AI" monitoring network combines multiple data sources with cross-departmental coordination – monitoring identifies problems, while enforcement teams act and close the loop.

Regional coordination and future action: Beijing coordinates unified emergency response, legislation and enforcement across the Beijing-Tianjin-Hebei region, where PM2.5 levels fell over 60% between 2013 and 2025. It will further advance the Green Beijing Development Strategy and integrate pollution and carbon reduction.

Session IV – Breathing Better Cities: Tackling Urban Air Pollution for Healthier Communities



Mr. Phathutshedzo Kenneth Raphalalani (Senior Manager, Air Quality Management, Ethekwini Metropolitan Municipality, Durban, South Africa), presented eThekwini's experience in tackling urban air pollution through a combination of real-time monitoring, community participation, regulatory enforcement and cleaner urban systems.

Key insights from Durban's experience include:



Industrial-residential exposure: Intensive industry near communities in the South Durban Basin creates persistent exposure to SO_2, benzene, PM10 and PM2.5, prompting stronger regulation, compliance and enforcement.



Community-led monitoring: Five monitoring stations in South Durban Basin and community capacity-building enabled NGOs and residents to participate in air-quality monitoring, contributing to a reported 60% reduction in SO_2 exceedances since 2015.



Open and accessible air-quality data: eThekwini operates 16 ambient monitoring stations citywide, with 12 currently reporting online through the South African Air Quality Information System. Low-cost, movable sensors are being used in locations where permanent stations are not feasible, with data made freely available.



Multi-stakeholder governance and research: eThekwini's Air Quality Forum brings together government, industry, communities and NGOs to review emission-reduction plans and address concerns. Research partnerships with the University of KwaZulu-Natal also inform policy and regulatory changes.



Cleaner transport and household energy: Thekwini is transitioning diesel buses, including Go!Durban BRT services, to electric, while promoting solar panels, insulation and cleaner household fuels. Over 50,000 households have shifted from coal/paraffin to electricity and LPG; however, load-shedding can push households back towards wood, highlighting an ongoing challenge.



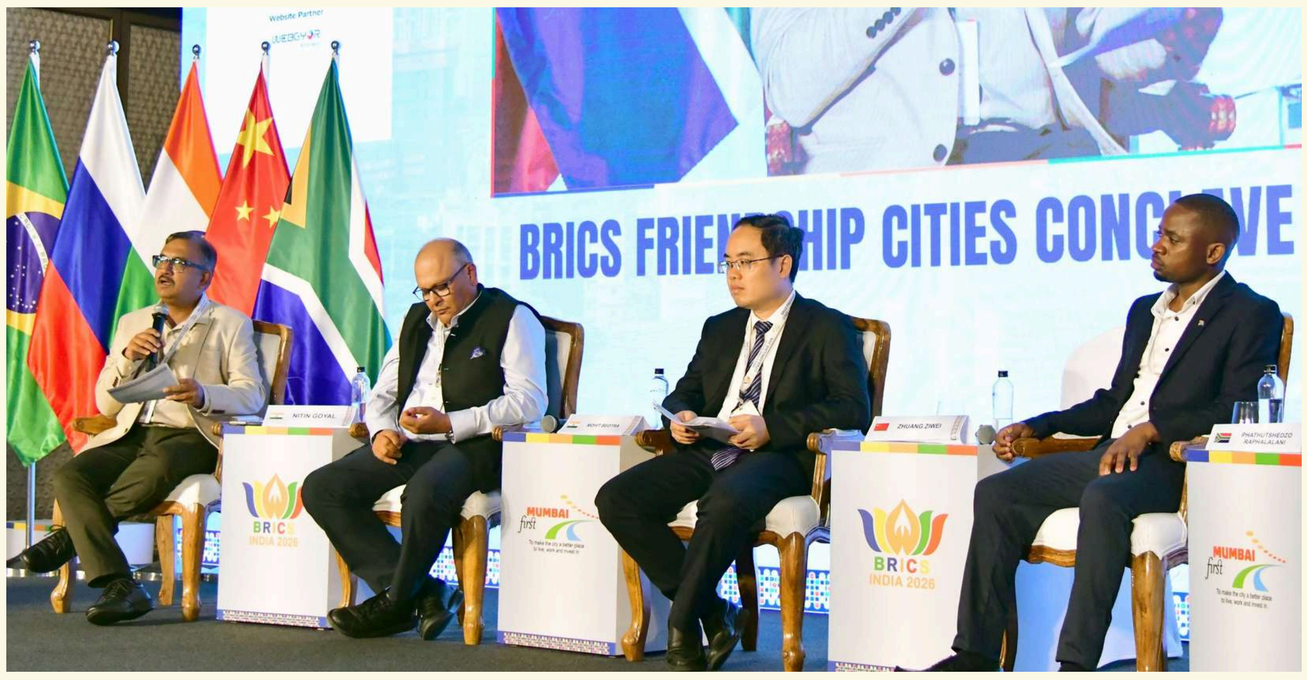
Green infrastructure and buffers: eThekwini is expanding tree planting, including a green buffer between industry and communities in the South Durban Basin, with ~400,000 trees in the Basin and 2 million citywide.



From local action to BRICS collaboration: He proposed a "BRICS Urban Air Quality Network for Friendship Cities" to enable continuous city-to-city learning on air-quality challenges. By 2030, eThekwini aims to reduce PM2.5 by 30%, monitor communities within 1 km of industry and provide mobile access to air-quality data.

Conclusion

Drawing on the experiences shared by Delhi, Beijing and Durban, the session highlighted that improving urban air quality requires a shift from fragmented, city-level interventions towards data-driven, multi-sectoral and airshed-based approaches. While Delhi emphasized targeted interventions supported by robust source data and coordinated governance across jurisdictions, Beijing demonstrated the impact of sustained source control, strict enforcement, integrated monitoring and regional coordination, and Durban showcased the value of real-time monitoring, community participation and industrial regulation. Collectively, the experiences highlighted the importance of strong institutional coordination, accessible air-quality data, community engagement and sustained city-to-city knowledge exchange to achieve healthier and more resilient cities.





Recommendations

- **Strengthen source-level air-quality monitoring:** Build reliable, granular emissions inventories and monitoring networks to identify major pollution sources and enable targeted interventions, while using low-cost sensors to extend coverage to underserved areas.
- **Adopt targeted, data-driven interventions:** Prioritize a limited number of high-impact, well-funded measures based on source-level evidence rather than pursuing numerous fragmented interventions.
- **Scale real-time monitoring and public disclosure:** Combine fixed stations, mobile and low-cost sensors, AI-enabled monitoring and digital dashboards to support rapid response and enable residents to access air-quality information.
- **Strengthen multi-level and airshed governance:** Coordinate action across neighboring cities, urban local bodies and government departments, supported by unified response mechanisms, legislation and enforcement for pollution that crosses administrative boundaries.
- **Combine regulation with community participation**: Strengthen enforcement and compliance while involving communities, NGOs, industry and research institutions in monitoring, planning and implementation to build trust and improve effectiveness.
- **Prioritize immediate action alongside long-term planning:** Cities with limited source data should implement immediate measures – particularly for construction and road dust – while progressively building the evidence base for comprehensive airshed-level action.
- **Turn BRICS city exchange into continuous collaboration:** Establish sustained knowledge-sharing between BRICS cities through the proposed BRICS Urban Air Quality Network, to exchange data, solutions, technical practices and replicable approaches.

Potential Areas of Collaboration

- **Source-level air-quality management with Delhi, India:** Collaboration on emissions inventories, source apportionment, targeted interventions and data-driven programs for dust, transport and industrial emissions.
- **Integrated monitoring and enforcement with Beijing, China:** Collaboration on AI-enabled monitoring, real-time dust tracking, air-quality standards, enforcement systems and data-driven decision-making.
- **Airshed-level governance with Beijing, China:** Joint learning on coordinated air-pollution management across neighboring jurisdictions, including unified emergency response, legislation, regional action and enforcement.
- **Community-based monitoring with Durban, South Africa:** Collaboration on low-cost sensors, open air-quality data, community participation and partnerships with universities to strengthen local monitoring and evidence-based policy.
- **Clean mobility and household energy transition with Durban, South Africa:** Exchange on electric public transport and cleaner household-energy solutions as complementary measures for reducing urban emissions



Photo: Representative image of air quality monitoring | United Nations Development Programme

Session V – Housing For All: Inclusive Housing And Community-Led Urban Regeneration

Photo: United Nations

Session V – Housing For All: Inclusive Housing And Community-Led Urban Regeneration



Moderator

Mr. Praween Jha, *Director, KPMG in India*

He has over 19 years of experience in delivering large-scale urban reform and infrastructure programs specializes in strategy, governance, digital transformation, and technology-led development, with a focus on improving service delivery and strengthening institutional capacity.

The session explored housing as a foundation for dignity, economic opportunity and social inclusion, focusing on affordability and integration with infrastructure, livelihoods, mobility and climate resilience. Experiences from Maharashtra, Perlis and Tehran highlighted diverse approaches, including cluster redevelopment, inclusive regulations, subsidies, rental and ownership schemes, private participation, housing guarantees and community-led delivery.

Speakers

Shri Anil Wankhede

Deputy CEO, Maharashtra Housing and Area Development Authority (MHADA)

India



Mr. Anil Wankhede serves as the Deputy Chief Executive Officer of the MHADA. He is responsible for statewide housing implementation, redevelopment initiatives, estate management, and regional board supervision. Since assuming charge on September 15, 2023, he has played a central role in coordinating large-scale housing and infrastructure projects, including the redevelopment of BDD Chawls, Patra Chawl, and multiple MHADA colonies under key urban housing regulations.

Mr. Affendi Rajini Kanth

President, Perlis State Municipal Council

Malaysia



Mr. Affendi Rajini Kanth is President of the Perlis State Municipal Council, overseeing local governance, urban planning, public infrastructure, and civic enforcement across Perlis. He champions affordable public housing through RPA, PAKR, and PPR programs for lower- and middle-income residents, while advancing cleaner, greener urban development through strengthened anti-littering regulations and municipal enforcement.

Dr. Ali Salehkarimi

Legal Expert, National Water and Wastewater Engineering Company (NWWEC)

Iran



Dr. Ali Saleharimi is a Legal Expert and Advisor at Iran's National Water & Wastewater Engineering Company, providing guidance to provincial legal offices nationwide. He has extensive legal and judicial experience across governmental and non-governmental sectors, including the Ministry of Industry, Department of Environment, and Tehran Municipality. He holds a Ph.D. in Environmental Law and Management from Islamic Azad University, Tehran.

Session V – Housing For All: Inclusive Housing And Community-Led Urban Regeneration



Shri Anil Wankhede (Deputy CEO, Maharashtra Housing and Area Development Authority (MHADA), India), presented Maharashtra's approach to expanding affordable housing through compact urban growth, cluster redevelopment, inclusive housing and rental access. He emphasized that, for a land-constrained Mumbai, housing growth must increasingly come through regeneration of existing urban areas rather than peripheral expansion, supported by stronger institutional and private-sector participation.

Key insights from Mumbai's experience include:



Shift towards compact, city-scale regeneration: MHADA is promoting redevelopment within the existing urban footprint, particularly through cluster redevelopment, to rebuild ageing stock, increase housing capacity, and upgrade roads, utilities and amenities rather than relying on plot-by-plot redevelopment

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Large-scale cluster redevelopment: 15 cluster projects covering 910 acres are planned, with 64,732 rehabilitation homes, 26,278 MHADA-share units and 2,15,215 total project homes, generating approximately INR 13,761 crore in premiums. The cluster approach enables viable density, infrastructure re-planning and cross-subsidization of rehabilitation.



Addressing Mumbai's ageing housing stock: Of ~19,500 cessed buildings, more than 12,000 remain to be redeveloped. The redevelopment framework seeks to combine rehabilitation, MHADA housing and free-sale components, with the potential to generate 6,02,496 housing units across 12,552 buildings.



Leveraging private development for affordable housing: Under the 20% Inclusive Housing provision, residential plots/schemes of 4,000 sq m or more in applicable million-plus cities must provide 20% of basic FSI for EWS/LIG housing. Developers receive development-rights incentives, while the resulting housing is made available at regulated affordable prices rather than market rates.



Expanding housing supply at scale: MHADA's MMR pipeline targets 7.14 lakh housing units by 2030. Cluster redevelopment accounts for 59% of the INR 6.30 lakh crore investment master plan, highlighting regeneration as the principal delivery mechanism.



Moving beyond ownership toward rental access: Recognizing affordability and mobility constraints, MHADA is advancing rental housing zones, rental near employment centers, managed/institutional rental, and digital tenancy systems. The proposed rental housing portal would provide verified listings, digital applications, e-KYC, online agreements, payments, grievance redressal, and real-time vacancy/occupancy information.



Strengthening implementation through institutional and financial mechanisms: The broader policy architecture combines public/private land mobilization, cluster and brownfield redevelopment, rental housing, viability-gap support, PPPs, institutional capital, digital TDR, land banks, and single-window approvals. The approach positions the State as facilitator, catalyst, builder, and regulator while using private capital to scale delivery.

Session V – Housing For All: Inclusive Housing And Community-Led Urban Regeneration



Mr. Affendi Rajini Kanth (President, Perlis State Municipal Council, Perlis, Malaysia), presented Perlis' state-led approach to affordable housing, centered on ensuring safe and affordable shelter for low- and middle-income households.

Key insights from Perlis experience include:



State-led affordable housing delivery: Perlis combines state and federal government support to provide housing assistance, with programs targeted primarily at B40 and M40 households. The approach includes homeownership, subsidized rental and financial assistance based on household income and land ownership.



Subsidized rental and ownership through PPR: Under the Program Perumahan Rakyat (PPR), heavily subsidized rental housing is offered at RM 124–126/month, while PPR ownership units are priced at RM 35,000–42,000, providing low-cost pathways to both rental and ownership.



Housing designed around community needs: PPR units offer ~700 sq. ft., three bedrooms, and shared facilities such as playgrounds, halls, and prayer spaces, with projects underway in Kangar and around Padang Besar, and expansion to other districts envisaged.



Supporting landowners with limited finances: Rumah Mesra Rakyat provides eligible households with a RM20,000 construction subsidy for homes costing ~RM75,000, with repayments of around RM300 per month, enabling households to convert existing land into secure housing

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Expanding finance for informal workers: The Housing Credit Guarantee Scheme supports gig workers, freelancers and self-employed applicants lacking formal income documents through government-backed home loans of up to RM500,000.



Tailoring support to household circumstances: Housing assistance varies by land ownership and financing capacity. The lowest-cost PPR tier prioritises eligible Malaysian households earning up to RM3,000 per month, without existing property, particularly those living or working in Perlis.

Session V – Housing For All: Inclusive Housing And Community-Led Urban Regeneration



Dr. Ali Salehkarimi (Legal Expert, National Water and Wastewater Engineering Company (NWWEC), Iran), presented Tehran's housing and regeneration challenges in the context of demographic growth, economic conditions and housing affordability, highlighting housing as an axis of urban development and welfare.

Key insights from Tehran's experience include:



Rapid demographic growth and housing pressure: Tehran's population has grown by ~30 times over the past five decades, transforming the city and generating sustained demand for housing, particularly among younger and lower-income groups.



Migration intensifying affordability pressures: Tehran receives an estimated 1,000–1,400 migrants daily; migrants with comparatively greater purchasing capacity can further increase competition for housing and contribute to spatial inequality.



Economic instability constraining housing supply: Housing affordability and construction activity are closely linked to Iran's broader economic conditions. He noted that construction in Tehran declined over the past decade despite continued demand, while economic uncertainty has also encouraged some capital to move outside the country.



Government-supported building societies: Iran's legal framework enables building societies and cooperatives to facilitate housing finance for lower- and middle-income groups, particularly with government support.



Private sector remains critical to housing delivery: Private investment historically drove much of Iran's housing construction; creating conditions for renewed private investment is essential to increase supply alongside government support.



Housing inequality and spatial change: Rising costs, income disparities and migration have increasingly restricted access to homeownership for certain socio-economic groups, while contributing to changing residential patterns and the displacement of parts of Tehran's native population. Similar housing and centralization pressures were noted in Isfahan, Shiraz and Mashhad**.**



Strengthen local and community-based institutions: Greater trust in communities, NGO participation and community-rooted building societies can complement government capacity in delivering affordable housing.

Conclusion

Drawing on the experiences shared by Mumbai, Perlis and Tehran, the session highlighted that addressing housing challenges requires a shift from conventional housing delivery towards inclusive, affordable and context-responsive urban development. While Mumbai demonstrated large-scale redevelopment, private-sector participation and rental housing strategies to expand supply within a land-constrained city, Perlis showcased government-led subsidies, affordable ownership and rental programs, including financing support for informal workers. Tehran highlighted the challenges arising from rapid population growth, migration, economic instability and affordability pressures, emphasizing the role of building societies, local communities and NGOs in complementing government capacity. Collectively, the experiences emphasized the importance of diversified housing models, innovative financing, community participation and stronger public–private–institutional partnerships to deliver affordable and inclusive housing.





Recommendations

- **Diversify affordable housing delivery models:** Combine ownership, subsidized rental, redevelopment and community-based housing models to address diverse income groups, tenure needs and local market conditions.
- **Unlock housing through urban regeneration:** Prioritize cluster and brownfield redevelopment in land-constrained cities to regenerate ageing housing stock, improve supporting infrastructure and increase affordable housing supply within land-constrained cities.
- **Leverage private-sector participation for scale:** Mobilize private capital and expertise through PPPs, development incentives and cross-subsidization mechanisms, while retaining strong public oversight to ensure affordability and inclusion.
- **Expand access to housing finance:** Use subsidies, credit guarantees and alternative financing mechanisms to enable low-income households, informal workers, freelancers and other groups to access formal housing.
- **Strengthen rental housing as an affordable alternative:** Develop subsidized and institutional rental housing, particularly near employment centers, supported by transparent and digitally enabled tenancy systems.
- **Empower community-based housing institutions:** Strengthen housing cooperatives/building societies, NGOs and local community organizations as trusted partners that can complement government capacity and improve affordable housing delivery.
- **Integrate housing with broader urban development:** Plan affordable housing alongside employment, mobility, infrastructure and community facilities, ensuring that housing programs create well-connected and inclusive neighborhoods rather than merely increasing unit supply.

Potential Areas of Collaboration

- **Urban regeneration and affordable housing with Mumbai, India**: Collaboration on cluster redevelopment, inclusive housing, rental housing and public-private mechanisms for expanding affordable housing in land-constrained cities.
- **Subsidized housing and innovative financing with Perlis, Malaysia:** Insights on affordable rental and ownership programs, government subsidies and credit-guarantee mechanisms for informal and self-employed workers.
- **Community-led housing delivery with Tehran, Iran:** Collaboration on strengthening building societies, housing cooperatives, NGOs and community-based institutions as complementary mechanisms for affordable housing delivery.



Photo: Akash Patil / The Indian Express

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making

Photo: United Nations

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making



Moderator

Mr. Emani Kumar, *Deputy Secretary-General of ICLEI and Executive Director, ICLEI South Asia*

He has over three decades of experience in urban governance, climate action, and sustainable development. He works with governments, multilateral agencies and development partners to advance climate resilience, low-carbon development, circular economy, biodiversity conservation, and resource-efficient urban planning – strengthening inclusive, future-ready cities.

The session explored how AI can enhance urban governance, public services and evidence-based decision-making. Experiences from Moscow and India highlighted applications in citizen services, urban monitoring, predictive planning and digital twins. It emphasized interoperable digital ecosystems, institutional capacity, responsible AI governance, data security, privacy and human oversight, alongside BRICS collaboration on knowledge sharing, capacity building and AI pilots.

Speakers

Shri Aseem Gupta, IAS

Additional Chief Secretary – Urban Development Department, Government of Maharashtra
India



Shri Aseem Gupta, IAS, is Additional Chief Secretary to the Government of Maharashtra, with over three decades of experience in public administration, governance, and policy development. He has held key positions spanning finance, urban development, infrastructure, industry, and institutional reforms, providing strategic leadership in policy formulation, inter-departmental coordination, and implementation of key government initiatives.

Mr. Dmitry Ontoev

Advisor to the Head of the Department, Information Technologies of Moscow, The Government of Moscow
Russia



Mr. Dmitry Ontoev is Advisor to the Head of Moscow's Department of Information Technologies, overseeing national and international digital policies, regional and industry collaboration, and digital transformation initiatives. He supports Presidential Decrees and the national "Data Economics and Digital Transformation of the State" project, while advancing Moscow's smart-city and digital economy rankings, and international partnerships.

Mr. Abhishek Verma

Partner and Lead, Digital Government Advisory, KPMG in India
India



Mr. Abhishek Verma leads Digital Government Advisory at KPMG in India, bringing over two decades of consulting experience and a distinguished background in the Indian Armed Forces. His expertise spans digital government, emerging technologies, aerospace, defense, and homeland security. He also advances strategic discourse on sovereign AI, national security, and digital sovereignty.

Mr. Sameer Sharma

Former Chief Secretary of Andhra Pradesh (2021-22)
India



Dr. Sameer Sharma is a former Chief Secretary of Andhra Pradesh with over 17 years' experience in urban policy and planning. He has served as Municipal Commissioner of Vijayawada, Visakhapatnam and Hyderabad, Principal Secretary for Municipal Administration and Urban Development in Andhra Pradesh, and Additional Secretary, Ministry of Housing and Urban Affairs, Government of India.

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making



Shri Aseem Gupta, IAS (Additional Chief Secretary – Urban Development Department, Government of Maharashtra, India), Shri Aseem Gupta highlighted Maharashtra's transition from digitized governance towards AI-enabled governance, noting that the state already has a strong digital foundation on which AI applications can be built. He shared practical examples from citizen services, agriculture and building permissions, while highlighting the challenges around accountability, data security, sovereignty and the appropriate extent of AI-led decision-making

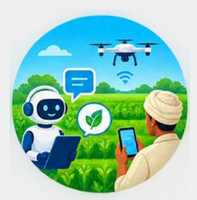
Key insights from Mumbai's experience include:



Building AI readiness across government: Maharashtra has adopted an AI Mission and policies, while training government personnel and gradually transitioning from experimentation to AI-enabled services.



Leveraging an established digital backbone: Around 400+ government services are already online, alongside online payments and DBT. A "golden record" consolidates citizen's interactions across departments, providing a necessary data foundation for AI-enabled governance.



Scaling citizen-facing AI applications: Maharashtra is increasingly using AI through chatbots and voice-enabled services, with agriculture emerging as a flagship application. Around 1.2 crore farmers are active on the platform and interact with the AI system regularly, demonstrating the potential for AI to deliver services at population scale.



Moving from computerization to intelligent governance: He noted that 80-90% of government work is already IT-based, including SCADA and project-management systems. The next challenge is determining which decisions should be transferred to AI, rather than simply digitizing existing processes.



Piloting AI-enabled building permissions: BMC is experimenting with AI-based building approvals, where architects can submit plans to an AI system, receive an indication of likely sanction and modify proposals before formal submission. This illustrates how AI could reduce processing requirements while retaining human decision-making.



Addressing accountability, data and sovereignty risks: A key concern is determining who remains accountable when AI-supported decisions go wrong, alongside risks of data leakage and dependence on external technology providers. He advocated continued adoption rather than delaying the AI transition, however, stressed the need for strong guardrails and collective responsibility among government, technology providers, consultants and developers, with clear boundaries around AI-led decision-making.

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making



Mr. Dmitry Ontoev (Advisor to the Head of the Department, Information Technologies of Moscow, The Government of Moscow, Russia), showcased Moscow's use of AI and digital technologies to manage urban complexity, improve citizen services and support evidence-based development across healthcare, education, urban management and spatial planning.

Key insights from Russia's experience include:



City-wide AI adoption: Moscow is implementing digital technologies across urban sectors, with 300+ digital projects annually and 130+ AI projects spanning healthcare, infrastructure, security, the economy and social support.



Integrated digital citizen services: The *mos.ru* portal provides single-window access to services such as medical appointments, permits, licences and document submissions, while an AI assistant enables conversational access to services.



AI-enabled healthcare at scale: Moscow maintains digital medical records for over 20 million people. AI analyses X-rays, MRIs and CT scans across 45 medical areas within 5-10 minutes, achieving over 95% matching accuracy.



AI for education and citizen support: Moscow's electronic school platform uses AI to identify learning gaps and recommend targeted exercises. With over 10 million users across Moscow and around 20 other regions, it demonstrates the scalability of city-developed solutions.



AI-enabled urban operations: A unified AI system connects over 300,000 CCTV cameras to support security and detect graffiti, dirty road signs and road defects, reducing inspection workloads and improving urban management.



Digital twin for planning and decision-making: Moscow's citywide 3D digital twin, updated twice yearly with over 9,000 data layers, supports approvals, development modelling, traffic planning and event security. It also tests development scenarios and estimates future needs for housing, parking, schools and hospitals.



Scaling AI through city partnerships: Moscow promotes cooperation, particularly with India, to exchange expertise on AI governance, interoperable infrastructure, responsible AI and institutional capacity.

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making



Mr. Abhishek Verma (Partner and Lead, Digital Government Advisory, KPMG in India), Mr. Abhishek Verma highlighted how AI is moving from experimentation to practical urban applications, with cities using it to improve mobility, public safety, citizen services and urban planning

Key insights include:



AI as a new urban governance layer: With ~USD 580 billion in AI investment, he noted that cities are becoming a key arena for AI-driven citizen impact as urbanization and service demands increase. The transition is from reactive, siloed governance towards predictive, proactive and data-driven decision-making.



Intelligent mobility management: Traffic management is emerging as a major early use case across cities, with AI analyzing data from traffic signals, vehicles and connected systems to reduce congestion and optimize signal operations.



AI-enabled policing and public safety: AI is being used to support police operations, including real-time transliteration of citizen complaints/FIRs, suggesting relevant legal provisions to investigating officers, with a human remaining in the loop, along with AI-based hotspot identification for effective resource deployment.



Citizen engagement and grievance management: AI chatbots are being deployed on government portals to provide conversational assistance, guide citizens to relevant services and automatically route grievances to the appropriate department, citing deployment on platforms such as Billion Mantris, Pragati and Nayi Setu.



Digital twins for integrated urban planning: Cities are increasingly using digital twins to bring together water, electricity, roads and other urban systems for urban development. AI can help cities model different development scenarios and coordinate infrastructure planning more systematically.



Data quality as the foundation: He stressed that “there is no good AI without good data.” Urban data often remains fragmented; cities need to digitize data using common standards and enable different systems to communicate before AI can generate reliable insights.



Manage the 3S risks – Security, Sovereignty and Sustainability: Scaling AI requires safeguards and human oversight, local models to reduce external dependence, and management of the energy, water and environmental footprint of AI infrastructure.

Session VI – AI-Enabled Urban Governance: Transforming Public Service Delivery and Decision-Making



Mr. Sameer Sharma (Former Chief Secretary of Andhra Pradesh (2021-22), India), presented a practical, layered approach to AI-enabled urban governance, emphasizing that cities should first strengthen municipal techniques and procedures, then digitize them and finally apply AI at key decision points

Key insights from Mumbai's experience include:



AI-enabled *"Smart Solutions"*: He defined a smart solution as *"Techniques + Digitalization of municipal techniques + AI",* with the objective of delivering municipal services at lower cost, improving accountability and transparency.



Build on proven municipal techniques : He emphasised that AI should not be imposed on existing systems. Municipalities should first establish simple operating procedures based on successful field practices, noting that a repertoire of 20-25 municipal techniques can be systematically replicated across cities.



Real-time monitoring through 3P + OSRT: The Pinpoint Program (3P) assigns staff to specific locations, times and activities, creating a results-based monitoring system, while Off-Site Real-Time (OSRT) mechanism uses geo-tagged mobile evidence to remotely monitor sanitation activities and attendance.



Kashi/Banaras – technology-enabled sanitation: He described assigning workers and supervisors to specific streets and using "pinpoint" daily programs for sweeping and waste management, while post-lunch "gang work" addressed accumulated waste, drain cleaning and road-side clearance, with OSRT reporting.



Low-cost sensors for targeted environmental action: Affordable sensors, costing around INR 4,000 each, can provide real-time ward-level data on air, water, heat and humidity, enabling source identification and targeted action when thresholds are crossed.



AI to strengthen – not replace – decision-making: He highlighted the potential for AI to support administrative decision-making by generating initial notes and a comprehensive range of options. Given that government workflows can involve 4-8 levels of sign-offs, AI can reduce processing time and uncertainty while retaining political and senior-level judgement with human decision-makers.



From automation to citizen accountability: Real-time service data can strengthen accountability among citizens and municipal staff. He cited a QR-based reverse-logistics platform linking households, collectors and processors across 16 waste categories, demonstrating more responsive, citizen-oriented service delivery.

Conclusion

Drawing on the experiences shared by Moscow and India, the session highlighted that AI-enabled urban governance requires a shift from reactive and fragmented systems towards predictive, data-driven and citizen-centric governance. While Moscow demonstrated the use of AI, digital twins and integrated digital platforms for urban services and decision-making, India showcased the rapid expansion of digital public infrastructure and experimentation with AI across citizen services, agriculture and building permissions. The discussion also emphasized that successful adoption depends not only on technology, but on high-quality interoperable data, institutional readiness and responsible governance, with security, sovereignty and sustainability emerging as critical considerations for cities scaling AI.





Recommendations

- **Build AI on strong digital foundations:** Ensure city data is digitized, structured and interoperable before deploying AI, with clear standards and end-to-end data pipelines across departments.
- **Shift from reactive to predictive governance:** Use AI for real-time monitoring, predictive analytics and decision support to anticipate service gaps, optimize resources and enable faster government response.
- **Institutionalize human oversight:** Use AI to generate insights and options while retaining human judgement and accountability for consequential decisions; avoid layering AI onto inefficient or unclear administrative processes.
- **Strengthen responsible AI governance:** Establish safeguards for security, privacy, transparency and accountability, including appropriate controls over sensitive government and citizen data.
- **Promote AI sovereignty and local capability:** Develop local AI models, applications, and capacity, where feasible, to reduce excessive dependence on external technology providers and strengthen control over critical digital infrastructure.
- **Turn BRICS knowledge exchange into practical collaboration:** Facilitate city-to-city knowledge sharing, capacity building and collaborative pilots around AI-enabled public services, digital twins, data governance and responsible AI frameworks.

Potential Areas of Collaboration

- **AI-enabled urban services with Moscow, Russia:** Exchange solutions for AI-enabled citizen services, urban monitoring, healthcare, public safety and digital-twin applications to strengthen data-driven city management.
- **AI-enabled governance with Maharashtra, India:** Collaboration on scaling AI across citizen services, agriculture, building permissions and government decision-making, while sharing approaches to institutional capacity and responsible adoption.
- **Digital twins and integrated urban planning with Moscow, Russia:** Jointly explore digital-twin applications for spatial planning, infrastructure coordination, scenario modelling and evidence-based development decisions.
- **Responsible AI and data governance with Maharashtra, India:** Share approaches to privacy, data protection, human oversight and the use of local AI models for sensitive government applications.
- **AI-enabled municipal operations with BRICS cities:** Develop joint pilots around predictive infrastructure management, intelligent mobility, grievance redressal and citizen-responsive services.
- **BRICS Urban AI Cooperation Platform:** Establish a sustained city-to-city mechanism for sharing AI use cases, data standards, implementation lessons, capacity-building resources and responsible-AI practices across BRICS cities.

Valedictory Session



Photo: chuttersnap/Freepik | Courtesy World Economic Forum

Closing Session

Opening Remarks

Late Mr. Gul Kripalani (Governing Board Member, Mumbai First), described the conclave as an important platform bringing together city leaders, policymakers, experts, practitioners and institutions to address interconnected urban challenges. Emphasising Mumbai First's commitment to convening government, industry, academia, civil society and international partners, he noted that ***"complex urban challenges require collaborative solutions."*** Discussions on coastal resilience, urban heat, sustainable mobility, air quality management, inclusive housing, and digital governance demonstrated that cities face common risks. He concluded that ***"the future of international cooperation will increasingly be written through cities,"*** where climate impacts are first experienced, innovation emerges and global commitments translate into local action.



Drawing on the distinction between smart and wise cities, Mr. Kripalani emphasised that ***"a smart city uses technology, a wise city uses technology in the service of the people".*** He stressed that emerging technologies must be guided by wisdom, ethics, inclusion and good governance to build resilient, sustainable, equitable and humane cities. Noting that ***"no city has all the answers. Every city has some of the answers,"*** he called for a sustained BRICS cities partnership focused on knowledge exchange, joint demonstrations, best-practice sharing, finance mobilization, capacity building and measurable progress. He concluded that ***"the future belongs not to cities that compete alone, but to cities that learn together, innovate together and build together,"*** towards a more resilient, sustainable and equitable future.

Conclave Overview



Dr. Kilaparti Ramakrishna (Senior Advisor to the President and Director on Ocean and Climate Policy, Woods Hole Oceanographic Institution), in his concluding reflections, synthesized the key learnings emerging across the six sessions and highlighted the common threads emerging across diverse city experiences, particularly the importance of real-time monitoring and adaptive action, green cover and nature-based solutions, and greater integration across planning, data and urban infrastructure. He noted that cities had been candid in sharing both what had worked and what had not, reinforcing that ***"one size doesn't fit all,"*** while the underlying principles could be adapted to the local city context. He emphasized the need to connect sustainable urban development with BRICS frameworks on finance, trade and investment, recognizing the importance of these instruments in enabling urban transformation.

Looking ahead, Dr. Ramakrishna stressed that the value of the conclave must extend beyond discussion and be translated into transformative and continuous city-to-city cooperation. He emphasized that ***"continuity is important,"*** noting that city-to-city engagement should become a sustained engagement involving BRICS and partner countries. He concluded by expressing Mumbai First's commitment to taking the deliberations and learnings forward into an actionable agenda and called for ***"a strong and dynamic mutually beneficial collaboration amongst BRICS cities"*** to carry forward collective efforts.

Address



Shri. Shambhu Hakki (Sous-Sherpa, Joint Secretary (MER & G20), Ministry of External Affairs, Government of India), in his valedictory address, reflected on the significance of the BRICS Friendship Cities Conclave within India's BRICS Chairship and highlighted the importance of cities as engines of economic growth, centers of innovation and increasingly the frontline of responses to climate change and other emerging challenges. Drawing on the six sessions, he noted the common challenges faced by cities, including sea-level rise, coastal erosion and flooding; rising temperatures and their impacts on health and livelihoods; the need for cleaner, more efficient and accessible mobility; affordable housing; air pollution; and the opportunities and responsibilities associated with AI-enabled urban governance.

Looking ahead, he emphasized that the discussions should be taken beyond the conclave and translated into practical cooperation, noting that ***"no city has all the answers"*** and that cities can benefit from exploring how others have overcome similar challenges. He proposed technical exchanges, study visits, sharing of best practices, joint research and, where feasible, collaborative pilot projects as mechanisms to convert the knowledge shared into actionable outcomes. He further observed that as BRICS continues to evolve, ***"the city-city cooperation can add an important people-centered dimension of our partnership,"*** strengthening the relationship between cities across the grouping.

He concluded by expressing the Government of India and BRICS team's willingness to work with the Government of Maharashtra and Mumbai First to carry this spirit of cooperation forward, with the aspiration that the friendships established among participating cities would ***"grow into enduring partnership".***

Special Address



Shri Sanjay Ghadi (Hon'ble Deputy Mayor, Brihanmumbai Municipal Corporation), in his address, appreciated the Conclave for bringing together representatives from different countries to exchange experiences and perspectives. He emphasised that while every city has unique challenges, many urban issues are shared globally, making city-to-city dialogue important for collaboration. As he noted, ***"Every city has its own unique challenges and issues. At the same time, there are many common challenges that cities across the world face".*** He further highlighted that each city brings experiences, technical knowledge and innovative solutions, helping participating cities understand how similar challenges are addressed elsewhere and identify approaches adaptable to local contexts. He concluded by thanking the organisers and participants for creating a platform to ***"interact, learn, and share our experiences".***





Valedictory Address



Smt. Ashwini Bhide (Municipal Commissioner, Municipal Corporation of Greater Mumbai), in her valedictory address, reflected on the key outcomes of the BRICS Friendship Cities Conclave 2026, highlighting the conclave's six themes and emphasizing that ***"the future of humanity will be determined by the future of cities".*** She noted that cities are not merely administrative units but engines of economic growth and centers of innovation, while simultaneously facing the impacts of climate change, migration and growing infrastructure demands. Against this backdrop, she positioned Mumbai as an ***"active laboratory for scalable solutions"***, highlighting its experience with climate action planning, coastal resilience, integrated stormwater management and flood preparedness, low-carbon public transport and electric mobility, as well as slum and cluster redevelopment aimed at reducing urban inequalities.

She emphasized that the value of the conclave would depend on translating dialogue into concrete, long-term mechanisms for city-to-city cooperation. She proposed joint technical exchanges and direct working partnerships between city departments, alongside knowledge and innovation networks that could enable cities to share climate-adaptation approaches, AI tools, urban-planning models and municipal governance practices. She highlighted that while ***"our challenges are unique but we share the same challenges"***, cities can accelerate their learning by exploring how others have addressed comparable problems and adapting those approaches to their own contexts. She further called for a sustained platform, supported by Mumbai First and the Ministry of External Affairs, to institutionalize the exchange of knowledge and experience across BRICS cities, concluding with the message that ***"when cities collaborate, humanity progresses."***

Concluding Remarks

Vice-Admiral Girish Luthra (Retd.) (Governing Board Member, Mumbai First), in his concluding remarks, highlighted that challenges such as rising sea levels, heat waves, air pollution, flooding, water scarcity and climate-induced migration transcend national boundaries, making cities increasingly important actors in international cooperation. He observed that ***"the future of international cooperation will increasingly be written through cities"***, noting that while global agreements establish common aspirations, their success depends on implementation at the city and community level. He further stressed that technology – including AI, digital twins, smart infrastructure and advanced analytics – must be accompanied by wisdom, ethics, inclusion and good governance, reinforcing the distinction between merely building smart cities and creating ***"wise cities"*** that use technology in the service of people.



He emphasized that the conclave should lead to a sustained BRICS cities partnership focused on knowledge exchange, joint demonstration projects, data and best-practice sharing, finance mobilization, capacity building and measurable progress. He stated, ***"History will not remember us for the number of conferences we organized. It will remember whether our collaboration made our cities safer, healthier, more prosperous and more resilient",*** urging cities to learn, innovate and build together.

EXPO: A SHOWCASE OF INNOVATIVE SOLUTIONS

The BRICS Friendship Cities Expo brought together organisations from the technology, government, academia and civil society sectors, creating a platform to showcase innovative solutions, initiatives and approaches to urban development. The Expo featured organisations like TCS, MHADA, HUL, Genesys, SDA Bocconi, Dasra, and the Consulates of China, Egypt, South Africa, and Russia.

The Expo also served as a networking and engagement space, allowing delegates to interact with organisations and learn more about their work, technologies and initiatives. It reflected the Conclave's emphasis on connecting city governments, industry and civil society to explore practical urban solutions.



The showcase further strengthened the international character of the Conclave by creating a common platform for knowledge exchange, collaboration and visibility among participating organisations and delegates.

Russian Federation



Russian Federation promoted contemporary digital and media platforms, including MAX - Russian Messenger, along with publications such as Russia Digest. The publication covers areas including trade, business, BRICS, defence, culture, education, sports and travel.

People's Republic of China



People's Republic of China showcased books and publications on Chinese history and culture, including China–India Dialogue, cultural bookmarks and other reading material. These resources highlighted China's cultural heritage and its engagement with India.

Republic of South Africa



Republic of South Africa showcased a magazines and publications, like South Africa at a Glance, providing participants with insights into the country's cultural diversity, business opportunities, lifestyle, and social landscape, while highlighting its unique identity and economic prospects.

Arab Republic of Egypt



Arab Republic of Egypt showcased publications highlighting its economic development, rich historical legacy and cultural heritage, providing insights into Egypt's business landscape and diverse cultural identity highlighting the role of culture in fostering cross-cultural understanding.





Tata Consultancy Services (TCS)

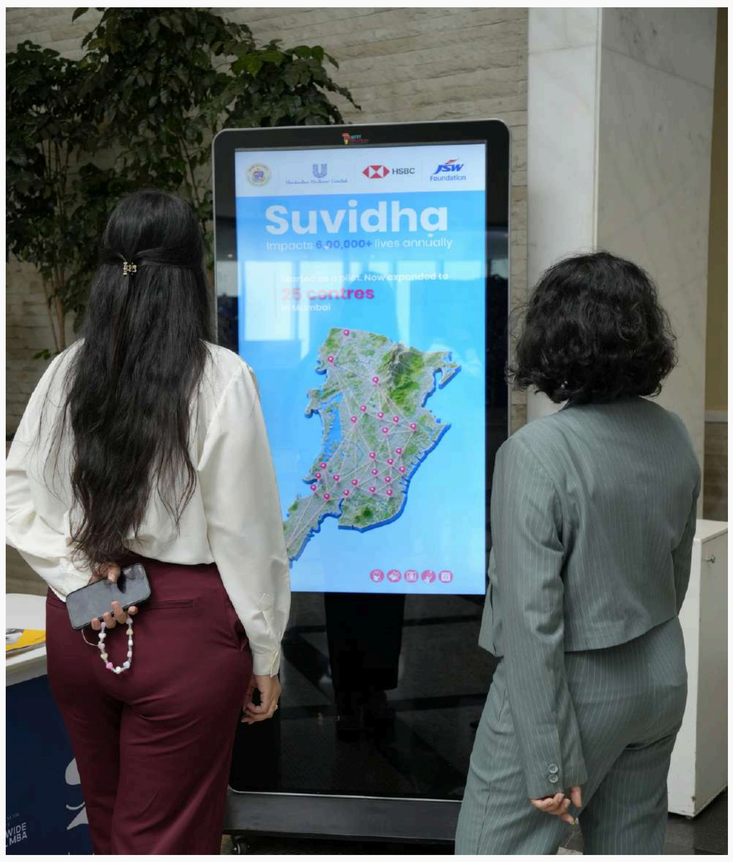
TCS showcased concepts on energy and emission management solution , driven solutions, Geospatial Intellegence and AI data centers model, demonstrating how digital technologies can support better urban planning and decision-making. Its wider smart-city solutions use data, analytics and connected systems across areas such as transport, water, energy and public services.





Maharashtra Housing and Area Development Authority (MHADA)

MHADA highlighted its urban renewal initiatives and redevelopment vision, emphasizing affordable housing, sustainable urban redevelopment, and the expansion of housing capacity while preserving access to employment hubs and essential services. Its strategy also focuses on brownfield redevelopment and the revitalization of existing urban areas to unlock additional housing potential and support more connected, inclusive, and accessible urban communities.



Hindustan Unilever limited (HUL) – Suvidha

HUL highlighted its Suvidha model, an urban community hygiene and sanitation initiative that provides facilities such as toilets, drinking water, showers and laundromat services to communities in Mumbai. The initiative combines sanitation access with water-saving and community-focused approaches.

GENESYS INTERNATION CORPORATION

Genesys showcased a Digital Twin model based on 3D geospatial data, highlighting how cities can use location intelligence to better understand infrastructure and urban systems. The company presented these technologies as tools for moving towards more predictive and data-driven urban planning.



SANITATION SANDBOX



Dasra presented its Sanitation Sandbox, highlighting innovation and practical approaches to addressing sanitation challenges. The showcase reflected Dasra's broader work in bringing together organisations, communities and other stakeholders to develop and scale solutions in the social sector.

SDA BOCCONI



SDA Bocconi School of Management showcased its higher education programmes, with a focus on executive education and customized executive programmes. These offerings aim to strengthen leadership and managerial skills while addressing the needs of professionals and organizations.

Way Forward

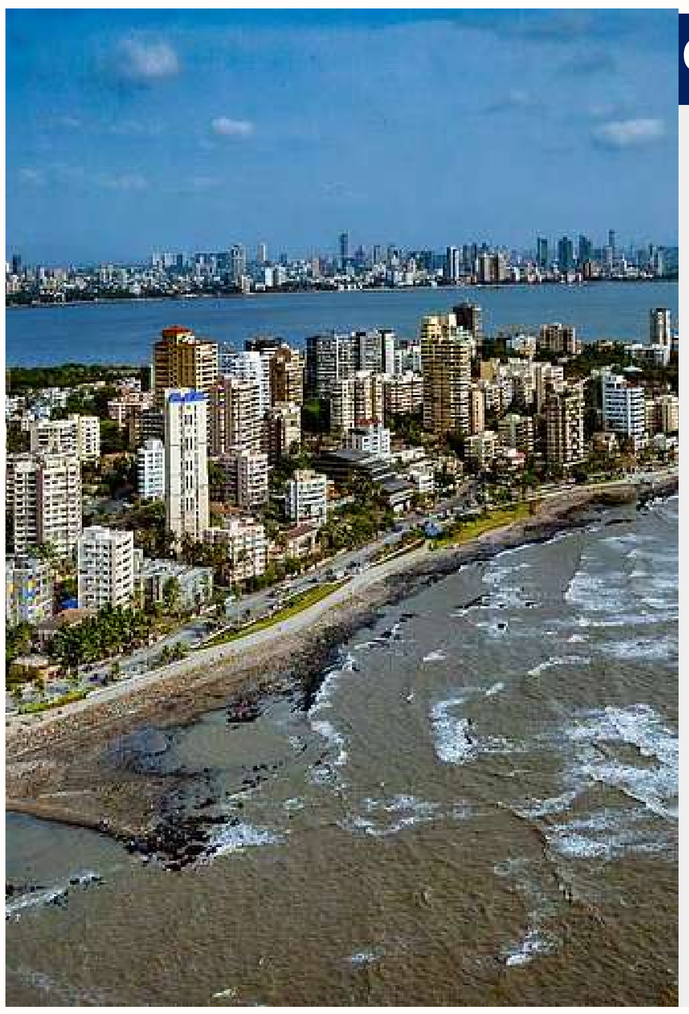
Photo: CHUTTERSNAP/Unsplash | Courtesy International Institute for Sustainable Development

FROM DIALOGUE TO ACTION : WAY FORWARD

The BRICS Friendship Cities Conclave 2026 served as a platform to engage with cities, institutions and urban practitioners across the BRICS countries on shared urban challenges relating to – coastal resilience, urban cooling, low-carbon mobility, urban air quality, affordable housing and digital urban governance, while demonstrating the importance of adapting international practices to local contexts.

For Mumbai, the Conclave presents an opportunity to build on these exchanges through sustained city-to-city cooperation, knowledge sharing and technical collaboration. As a major coastal metropolitan city with significant experience in public transport, urban redevelopment, digital governance and climate resilience, Mumbai is well positioned to both learn from relevant international experiences and contribute its own knowledge to the wider BRICS urban network.

The Conclave highlighted several areas where Mumbai could pursue structured knowledge exchange and city-to-city cooperation. The experiences shared by participating cities offer valuable lessons that can be tailored to Mumbai's context.



Coastal Resilience and Climate Adaptation

Mumbai could collaborate with coastal cities such as Shanghai and Jakarta to strengthen coastal resilience through a combination of engineering interventions, nature-based solutions, risk monitoring and early-warning systems. This could involve examining and adapting approaches such as:

- **Shanghai's use of AI-enabled weather forecasting, IoT sensors, drones and digital systems** for real-time flood-risk monitoring and early detection of saltwater intrusion, alongside its Sponge City framework;
- **Jakarta's experience in addressing sea-level rise and land subsidence** through integrated coastal protection, supported by climate finance, community participation and mangrove restoration; and
- **Egypt's Integrated Coastal Zone Management approach,** combining continuous coastal monitoring and nature-based measures such as beach nourishment, sand dunes and vegetation-based barriers with engineering interventions including seawalls, and breakwaters.



Urban Cooling and Heat Resilience

Mumbai can strengthen collaboration on heat-risk assessment, early warning, green-blue infrastructure and climate-responsive urban design, drawing on experiences such as:

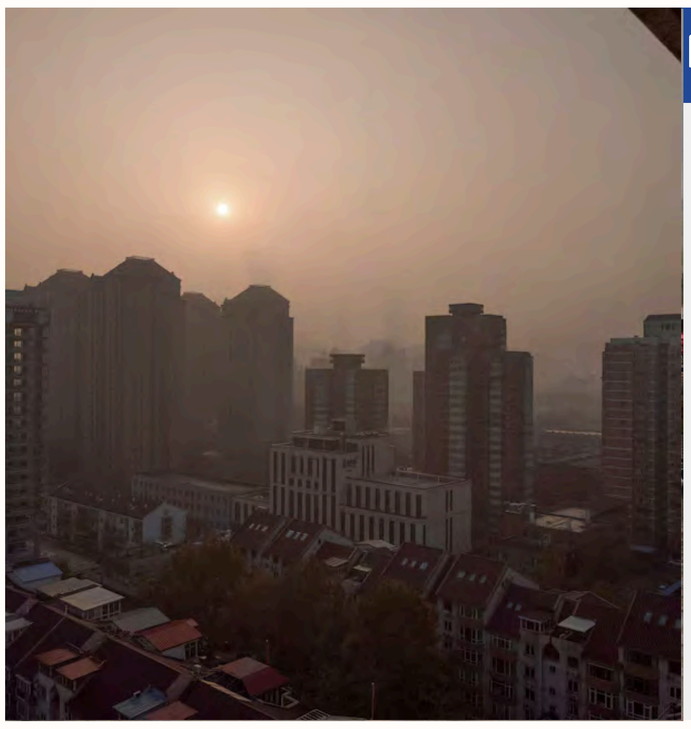
- **Ahmedabad's Heat Action Plan**, including early-warning systems, urban greening, lake rejuvenation, shaded public infrastructure and reflective roofs;
- **KDMC's BE COOL initiative**, which combines heat-risk mapping with passive-cooling interventions; and
- **Bogor's approach of integrating connected green spaces and climate-responsive building design with improved energy and material choices**, while integrating thermal performance into planning approvals and building permits.



Integrated and Low-Carbon Mobility

Mumbai can build stronger partnerships around public transport electrification, intelligent traffic management, last-mile connectivity and sustainable transport financing, drawing on experiences such as:

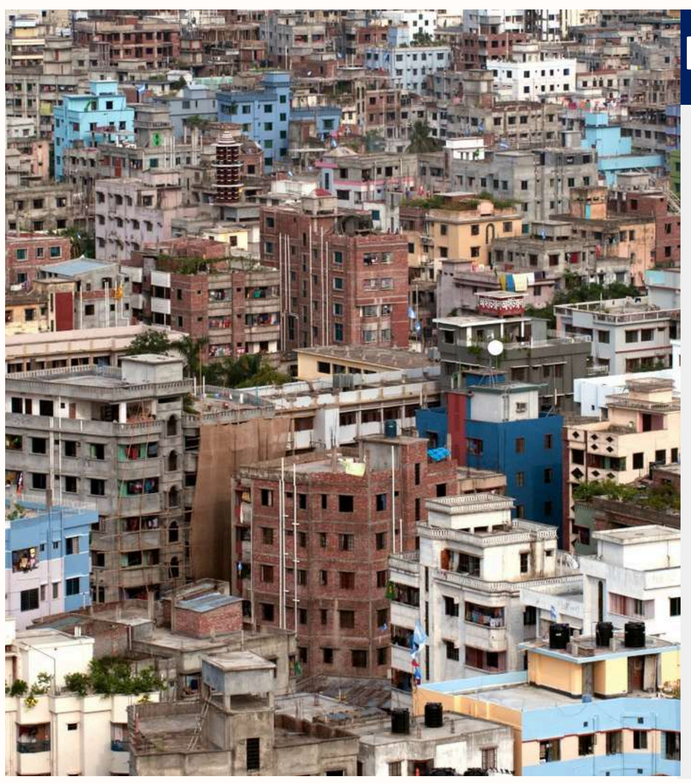
- **Shanghai's large-scale electrification of city buses and app-based taxis**, as well as battery-swapping for electric heavy-duty trucks supporting port logistics;
- **Kazan's ASUDD platform**, which uses real-time data from detectors and cameras, together with adaptive traffic signals, to manage traffic flows and priorities public transport; and
- **Curitiba's integration of BRT with land-use planning** and **São Paulo's financial support for electric-bus adoption**, demonstrating the importance of institutional and financial mechanisms alongside technology.



Metropolitan Air Quality Management

Mumbai could develop technical partnerships with Beijing and Durban around source-level air monitoring, data systems and coordinated pollution management, drawing on experiences such as:

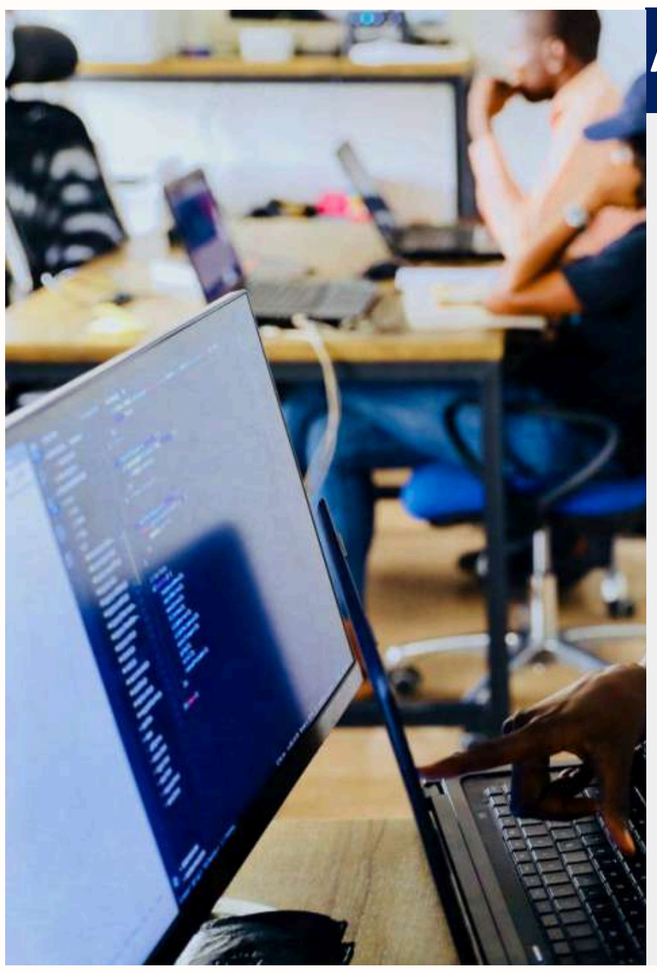
- **Beijing's sustained air-quality improvement** through cleaner energy transitions, vehicle-emission controls, stringent standards, real-time monitoring and enforcement; and
- **Durban's network of air-quality monitoring stations**, supplemented by low-cost sensors, open air-quality data and research partnerships.



Inclusive Housing and Urban Regeneration

Mumbai could strengthen its approach to affordable housing, rental housing and community-oriented regeneration by leveraging the experience of participating cities such as:

- **Perlis' needs-based housing model** combining subsidized ownership, rental housing, financial assistance and government-backed loan guarantees, including support for households with irregular incomes;
- **Tehran's experience of responding to rapid population growth, migration and housing pressures** through government support alongside private-sector, NGO and community-based institutions.



AI-enabled Urban Governance

Mumbai has an opportunity to build on its growing digital urban governance ecosystem through knowledge exchange with cities such as Moscow and Shanghai, drawing on experiences such as:

- **Moscow's digital twin**, integrating more than 9,000 data layers to support construction approvals, traffic planning, infrastructure placement and predictive urban planning; and
- **Maharashtra's existing digital foundations**, including 400+ online services, electronic payments, a consolidated "golden record" of citizen information and experiments in AI-assisted building permissions, providing a basis for further exploration of AI-enabled urban governance.
- Across these areas, the objective should not be to replicate individual city models, but to identify practices that are relevant to Mumbai, **test their applicability through targeted pilots, and develop solutions suited to Mumbai's institutional, environmental and socioeconomic context.**

The Conclave has laid a foundation for a sustained BRICS city-to-city cooperation platform, moving beyond knowledge exchange towards structured partnerships, joint initiatives and implementation. **The next phase would focus on:**

- **Establishing thematic networks** around priority areas such as coastal resilience, urban heat mitigation, sustainable mobility, inclusive housing, air quality and digital urban governance;
- Facilitating continued **exchange of knowledge, data and technical expertise;**
- Identifying opportunities for **joint research, capacity building and pilot projects**; and
- **Connecting cities** with potential **institutional, private-sector and financing partners.**

A shared digital platform and regular technical engagements could help maintain continuity, while subsequent editions of the Conclave could review progress, showcase outcomes and identify new areas of cooperation. Within this broader framework, Mumbai could serve as an active participant, pursuing targeted city-to-city collaborations based on the priorities and experiences identified during the Conclave.

This would help translate the Conclave from a one-time dialogue into a sustained mechanism for BRICS urban cooperation, innovation and collective problem-solving.

Event Sustainability Report

The BRICS Friendship Cities Conclave 2026 spurred a range of discussions during its 2-day stretch, bringing together conversations around resilience, innovation, cooperation, and sustainability. In the pre-event phase, it was realised that it was important for Mumbai First to promote sustainable practices in its operations. Therefore, in alignment with the values of the organization and the themes of the Conclave, sustainability was integrated into the planning and execution of the event through conscious material choices, responsible production practices, structured waste management, circularity-focused interventions and cleaner energy alternatives.

Our Sustainable Events Partner, *Greenmyna*, supported the implementation of these measures across the Conclave. Their endeavours focused on reducing waste, improving resource recovery, and ensuring responsible management of delegate materials, event branding, waste management, and energy use beyond the event.The objective was to ensure that sustainability was reflected not only in the conversations taking place at the Conclave, but also in the way the event itself was delivered.



Sustainablility Initiatives

Sustainable Event Production

848 kg CO2 greenhouse gases avoided



320 ltrs diesel combustion avoided

20 kgs bags upcycled



Cleaner Energy Alternatives



Circular Event Branding

178.15 kgs total waste managed



End-to-End Waste Tracking

Event Sustainability Report

What was done

A] Sustainable Event Production
Sustainability was integrated across event production through conscious material choices, including sustainable delegate materials, reusable and recyclable alternatives, responsible branding solutions and reduced reliance on single-use plastics to minimise waste and promote circularity.

B] Sustainable Delegate Materials
Delegate kits incorporated conscious material choices, including canvas bags, cotton lanyards, recycled paper badges, notepad, and eco-pens, reducing the use of conventional single-use materials.

C] Responsible Waste Management
A structured on-site waste management system enabled the segregation of dry and wet waste, ensuring materials were channelised towards recycling and organic waste processing instead of being sent to the landfill.

D] Cleaner Energy Alternatives
Battery energy storage was used as a cleaner alternative to conventional diesel-powered generators, helping reduce diesel combustion and associated emissions while supporting the event's energy requirements.

E] Circular Event Branding
Conventional flex branding was replaced with fabric and canvas-based materials. Following the event, approximately 20 kg of branding material was collected for upcycling into bags for municipal school students, helping extend its life beyond the Conclave.

F] Sustainability Awareness
Sustainability messaging across the event encouraged delegates to practise responsible consumption, reduce avoidable waste, and participate in effective waste segregation, reinforcing sustainability as a shared responsibility.

G] End-to-End Waste Tracking & Diversion from Landfill
Through recycling, organic waste processing and material upcycling, Greenmyna enabled the diversion of event-generated waste away from landfill, ensuring theta valuable materials were channelised towards more responsible end-of-life pathways.

MATERIAL	WEIGHT (kg)	OUTCOME
Paper	18.45	Recycled
Tetra Packs	5.5	Recycled
Cardboard	1.1	Recycled
Glass	9.15	Recycled
HDPE	4.15	Recycled
Lanyards	5.8	Recycled
MLP	4	Recycled
Banners	20	Upcycled
Food Waste	91.7	Composted
Residual Waste	18.3	Sent to Municipality for Incineration
TOTAL	**178.15kg**	

Mumbai First was pleased to strengthen its sustainability dimension and lead by example. We hope that the discussions from this Conclave are similarly reflected in the practices of its participating cities.

Event Sustainability Report

Remake Traceability Certificate

REMAKE TRACEABILITY CERTIFICATE

RECYCLE CREDIT

CERTIFICATION TYPE

0.048

CREDIT GENERATED

48.15 KG

TOTAL CONSIDERED QUANTITY

ReMake®

Issued to

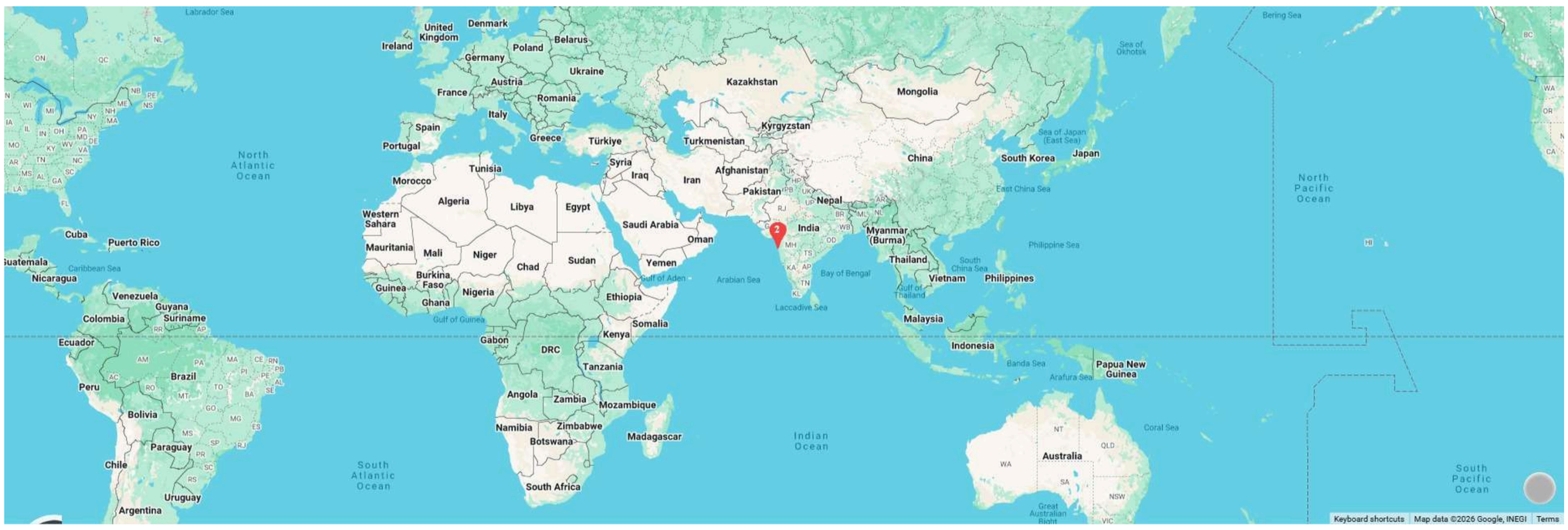
Mumbai First

RMX 4PK GWQ6

Material Credit ID#PCR4AT8M1E

Activity Date:

11 08 2026 to 22 08 2026



Product Details

Waste Description	Mixed Waste Scrap Consisting Paper, Duplex, Lanyard, MLP, PET, Glass and Cardboard
HSN/ SAC	3901
Waste Quantity Kg	48.15
ReMake® Credits	0 .0 48
Landfill Area Saved*	-
GHG/CO2 Emissions Saved Kg	72.225
Bio-Diversity Impact SDG Goals Met)**	1, 3, 4, 6, 8, 11, 12, 13, 14, 15 & 17
Social Impact*	Empowered 1 Reclaimer

MESSAGE FROM THE DEPUTY CONSUL GENERAL OF BRAZIL IN

CONSULADO GERAL DO BRASIL
CONSULATE GENERAL OF BRAZIL

28th September 2026

Dear Team Mumbai First,

It was a great pleasure for me to participate in the BRICS Friendship Cities Conclave 2026, organised by Mumbai First, and I would like to express my sincere appreciation for the opportunity to be part of such a meaningful conversation among cities and institutions across the BRICS.

I was particularly pleased to see Brazil's experience represented in discussions on sustainable urban mobility, urban planning and climate resilience. The experience of Curitiba, and the work of URBS and IPPUC, offer an important example of how public transportation and long-term urban planning can be developed together, while remaining attentive to the particular circumstances of each city. I was also very happy that Ms. Mariana Batista, representing C40 Cities, could contribute to this dialogue by bringing the Brazilian experience in public transportation and electric freight vehicles, as well as the broader discussion on cleaner and more sustainable urban mobility.

The exchanges also reminded me of how much Brazil and India have in common as large, complex and vibrant urban societies, and of how valuable it can be to place our experiences in direct conversation. From Curitiba's public transportation to Rio de Janeiro's experience in the recovery of its marine environment, there are Brazilian experiences that may offer ideas for Mumbai while, equally, Mumbai's own solutions can inspire us. The possibility of connecting these experiences is, to me, one of the most valuable aspects of city-to-city cooperation.

I was especially touched by the interest shown in continuing this dialogue beyond the Conclave, including through exchanges with Brazilian institutions and specialists. I hope that conversations may be initiated with IPPUC, URBS, Grupo Vapalu and Águas do Rio, among others, and that your initiative may open paths towards practical cooperation, knowledge exchange and, perhaps, new partnerships between Brazilian and Indian institutions.

The BRICS Friendship Cities Conclave is important precisely because it creates these human and institutional connections. Cities learn from one another not only through successful models, but also through the questions they share, the difficulties they encounter and the different ways in which they imagine their future.

I would therefore like to congratulate Mumbai First for bringing together such a stimulating community of cities, institutions and individuals. It was a privilege for me, and for the Consulate General of Brazil, to be part of this initiative. I very much look forward to continuing our conversation and to seeing the friendship between Brazil and India expressed increasingly through concrete exchanges, cooperation and shared urban aspirations.

- Railssa Peluti Alencar
  Deputy Consul General of Brazil in Mumbai

Unit No. 12B, 12th floor, Bakhtawar Building, R.N. Goenka Marg, Nariman Point, Mumbai - 400 021, Tel: +91 22-43214450, email id: cg.mumbai@itamaraty.gov.br

MESSAGE FROM THE CONSUL GENERAL OF THE RUSSIAN FEDERATION IN MUMBAI

ГЕНЕРАЛЬНЫЙ КОНСУЛ
РОССИЙСКОЙ ФЕДЕРАЦИИ
В МУМБАИ

CONSUL GENERAL
OF THE RUSSIAN FEDERATION
IN MUMBAI

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№ 2369

September 24 , 2026

On behalf of the Consulate General of the Russian Federation in Mumbai and on my personal behalf, I would like to express my sincere gratitude to Mumbai First for organizing the BRICS Friendship Cities Conclave 2026 and executing this important international event to the highest standards.

The Conclave provided a substantive platform for strengthening dialogue among cities across the BRICS countries and for an exchange of views on urban infrastructure, transport mobility, climate resilience, digital transformation and municipal governance. The active participation of Moscow and Kazan reflected the interest of Russian cities in expanding direct intermunicipal ties and pursuing more active practical cooperation with BRICS partners.

Russia attaches great importance to the regional and municipal dimension of BRICS and sees considerable potential for cooperation in digital technologies, smart-city solutions, transport, infrastructure and the exchange of best practices. It is precisely at this level that intergovernmental agreements find their most practical and direct implementation, having a tangible impact on the quality of life of our citizens.

I congratulate Mumbai First on the successful organisation of the Conclave and I am confident that the substantive discussions, business contacts and agreements reached will provide a solid foundation for new joint initiatives. We look forward to continued engagement and further strengthening the bonds of friendship between Russian and Indian cities.

Ivan Y. Fetisov

MUMBAI FIRST
Mumbai

MESSAGE FROM THE CONSUL GENERAL OF THE PEOPLE'S REPUBLIC OF CHINA IN MUMBAI

中华人民共和国驻孟买总领事馆

CONSULATE GENERAL OF THE PEOPLE'S REPUBLIC OF CHINA

11TH Floor, Nariman Bhavan, 227 Backbay Reclamation, Nariman Point, Mumbai 400 021

Tel: 6632-4303 / 04 / 05 / 06 Fax: 6632-4302

To,
Mr. Narinder Nayar,
Chairman – Mumbai First.

Date 20th September, 2026

The BRICS Friendship Cities Conclave 2026 served as a meaningful platform for fostering dialogue, friendship and practical cooperation among cities across the BRICS countries. The Consulate General of the People's Republic of China in Mumbai was honored to participate in the Conclave, with a delegation comprising representatives from the Chinese People's Association for Friendship with Foreign Countries, the Shanghai Municipality and the Beijing Municipality.

The active participation of Chinese cities reflected China's strong support for India's hosting of the Conclave, as well as China's continued commitment to advancing sister-city partnerships and strengthening people-to-people and local-level exchanges. Platforms such as this Conclave create valuable opportunities for cities to share experiences, exchange best practices, deepen mutual understanding and identify new avenues for practical cooperation in areas of common interest.

China and India are two ancient civilizations with longstanding ties and extensive exchanges. In this context, strengthening engagement between cities and local communities can play a constructive role in fostering greater mutual understanding and contributing to the sound and positive development of bilateral relations.

The Consulate General of the People's Republic of China in Mumbai warmly congratulates Mumbai First on the successful organization of the BRICS Friendship Cities Conclave 2026. We look forward to working together with all relevant partners to further promote exchanges, cooperation and friendship between Chinese and Indian cities, and to contribute to closer ties between our two peoples.

H.E. Mr. Qin Jie
Consul General
Consulate General of the People's Republic of China in Mumbai

MESSAGE FROM THE CONSUL GENERAL OF SOUTH AFRICA IN MUMBAI

SOUTH AFRICAN CONSULATE GENERAL
Urmi Estate, 9th Floor, Tower 'A', 95, Ganapatrao Kadam Marg, Lower Parel, Mumbai - 400 013. India

The 2026 BRICS Friendship Cities Conclave idea was a very good platform where cities from the member countries were able to share their experiences when it comes to protecting both the nature and the environment of their cities. The quality of both the presenters and the presentations was of high standard. As a result, different perspectives and lessons were openly shared amongst the member countries. I have no doubt that long lasting partnerships were formed amongst the cities and I hope that some of the conversations will continue into the future.

The discussions around addressing air pollution challenges stood out for me and I am glad that City of EThekwini (A South African City) was able to share its best practices, frameworks and policies in this regard.

Regards

Gedion

09/09/2026

SOUTH AFRICAN CONSULATE GENERAL MUMBAI 1

Tel No : (91-22) 24950494 / 24965996 / 24980097

MESSAGE FROM THE CONSUL GENERAL OF THE ARAB REPUBLIC OF EGYPT IN MUMBAI

Consulate General
of the Arab Republic of Egypt
in Mumbai

In my capacity as Consul General of Egypt Mumbai, I would like to express my sincere thanks to "Mumbai First" for facilitating the participation of the Egyptian delegation in the "BRICS Friendship Cities Conclave" that was held on 11 & 12 August 2026.The Conclave, which was organized, in cooperation with Maharashtra Government, under the theme of "Building for Resilience, Innovation, Cooperation and Sustainability" was a great opportunity to address important topics that are shaping the future of BRICS cities, namely climate resilience, sustainable development, digital transformation, urban governance, infrastructure, mobility and innovation.

The participation of the Egyptian delegation, nominated by the Ministry of Local Development and Environment, in the conclave underscored the Egyptian government's commitment to addressing the challenges hindering urban development. In this context, the Egyptian delegation addressed the efforts exerted by the Egyptian government to achieve integrated coastal zone management, including nature-based solutions and low-cost dams, focusing on the city of Alexandria, and reviewed the Egyptian government's efforts to reduce heat emissions, particularly in both cities of Cairo and Alexandria. These efforts include improving energy efficiency in buildings, expanding green spaces, monitoring cooling methods, and relying on centralized cooling plants that reduce electricity consumption.

There is no doubt that the Conclave which brought together government leaders, city administrations senior officials, diplomats, policymakers; international organizations high officials, academica and industry representatives, served as a platform for BRICS cities to exchange ideas, share best practices in successful governance, and explore opportunities for international cooperation and partnership to build more resilient and sustainable cities. Taking into consideration that cities have become the foundation of societal progress, it is vital to build on this significant initiative and to translate dialogue into concrete actions in order to address the challenges that hinder the BCRIS cities' development and prosperity. Accordingly, we are looking forward to continuing our engagement and exploring opportunities for further collaboration in the future in this important area.

Sincerely,

Dahlia Tawakol
Consul General of Egypt in Mumbai

BMC'S VISION FOR MUMBAI: BUILDING A CONNECTED, RESILIENT AND LIVEABLE CITY

A City on the Move

Mumbai's continued growth requires infrastructure that is safe, resilient and future-ready. Brihanmumbai Municipal Corporation (BMC) maintains 612 critical transportation structures, including flyovers, railway overbridges, foot overbridges and subways, of which 532 are BMC-owned, along with approximately 2,118 km of roads.

Building on this network, BMC is advancing major mobility projects that strengthen city-wide connectivity while integrating green infrastructure, open spaces, public amenities and citizen-friendly urban environments. The focus is increasingly on creating infrastructure that not only improves movement, but also enhances how citizens experience and use the city.

To strengthen its bridge infrastructure, BMC undertakes annual structural audits of bridges and takes up phased interventions, including repairs, rehabilitation, demolition and reconstruction, based on structural requirements. 101 works have been identified, of which 24 have been completed, with the remaining works scheduled in phases through FY 2028–29.

The Coastal Roads: Mobility with a New Public Realm

Mumbai Coastal Road (South)

The Mumbai Coastal Road (South) combines improved connectivity with the creation of significant new public spaces along Mumbai's western waterfront. The project has opened approximately 5.25 km of promenade between Priyadarshani Park–Haji Ali and Baroda Palace–Worli to citizens since 15 August 2025. A further 2.25 km of promenade, along with parking facilities at Haji Ali, is targeted for completion by December 2027.

A defining feature of the project is the opportunity to transform reclaimed land into large, accessible green and recreational spaces. Approximately 53 hectares of reclaimed land is being envisioned as a world-class urban green space.

Together, the promenades, landscaped areas, recreational spaces and waterfront access are envisaged as a new public realm for Mumbai, providing citizens with opportunities for walking, recreation and leisure alongside the city's transport infrastructure.

Mumbai Coastal Road (North)

The proposed Mumbai Coastal Road (North) will extend from the Versova Interchange to the Dahisar Interchange, creating a continuous coastal corridor and strengthening north–south connectivity across the western suburbs.

Reimagining East–West Mobility - Goregaon–Mulund Link Road

The Goregaon–Mulund Link Road (GMLR) is being implemented in four phases to strengthen east–west connectivity. Phase III includes a 13-metre-diameter twin underground tunnel through Sanjay Gandhi National Park and Aarey Colony. The underground alignment is designed to reduce land requirements and minimise environmental intervention.

The project is expected to significantly reduce travel time between Goregaon and Mulund while supporting more efficient movement and reduced fuel consumption and emissions.

BMC'S VISION FOR MUMBAI: BUILDING A CONNECTED, RESILIENT AND LIVEABLE CITY

Optimising Urban Space - Siddhivinayak Area Redevelopment

The redevelopment around Shri Siddhivinayak Ganpati Temple integrates public-realm improvements with supporting urban infrastructure. Phase I includes a two-level underground parking facility, enabling better use of limited urban land while supporting improvements to the surrounding public space.

The underground parking model, initially being implemented in G/North Ward, is envisaged for phased adoption in other wards.

Putting Pedestrians First – Improving Walkability

Through its 'Pedestrian First Campaign', BMC is improving selected Priority Footpaths connecting citizens to educational institutions, hospitals, railway stations and Metro stations.

The initiative focuses on creating safer, more accessible and pedestrian-friendly streets, while strengthening first- and last-mile connectivity. By improving everyday walking environments, BMC is placing greater emphasis on the pedestrian experience as an integral part of urban development.

Building the Mumbai of Tomorrow

BMC's infrastructure programme is evolving from a focus on connectivity alone towards integrated urban development—bringing together mobility, open spaces, greenery, public amenities and citizen-friendly public realms. From waterfront promenades and new green spaces to pedestrian-friendly streets and underground infrastructure, these initiatives seek to create a Mumbai that is connected, resilient, sustainable and more liveable, while ensuring that major infrastructure projects also contribute to the everyday experience of citizens.



(L) - Goregaon-Mulund Link Road (GLMR); (R) - Dharamveer Swarajya Rakshak Chhatrapati Sambhaji Maharaj Mumbai Coastal Road | Photo Courtesy: BMC

INSIDE MHADA'S VISIONARY C&DA MODEL DRIVING THE CITY'S LARGEST URBAN RENEWAL

With a legacy of 78 years, the Maharashtra Housing and Area Development Authority (MHADA) has evolved from a housing provider into a major institution shaping the future of Maharashtra's cities. Its emerging Construction & Development Agency (C&DA) model represents a significant shift—from conventional rehabilitation to integrated urban transformation, combining public purpose with private-sector capability.

Across Mumbai, a new generation of redevelopment projects is now taking shape under this framework. Together, these projects span approximately **925 acres and have the potential to impact nearly 80,000 residents**, making them among the most significant urban renewal initiatives undertaken in the city.

Mumbai's redevelopment challenge is fundamentally different from that of a conventional real estate project. The land is often fragmented, tenancies are complex, existing communities have strong social bonds, and redevelopment must balance multiple public and private interests. The C&DA framework seeks to address this complexity through a structured partnership.

Under this model, private-sector partners bring financial capacity, technical expertise, project-management capability and the ability to execute large and complex developments. MHADA, meanwhile, remains central to the process as the public institution responsible for protecting the interests of residents, ensuring regulatory oversight and safeguarding the larger public purpose. In simple terms, **the private sector brings execution capability; MHADA safeguards public interest**.

A Portfolio of Mumbai's Most Significant Redevelopment Opportunities:

The scale of MHADA's current redevelopment vision is reflected in the diverse portfolio of projects being taken forward across Mumbai. Among these are major initiatives at **Motilal Nagar in Goregaon, Kamathipura, Abhyudaya Nagar in Kalachowki, GTB Nagar in Sion-Koliwada, PMGP Poonam Nagar in Jogeshwari East, Adarsh Nagar in Worli, Bandra Reclamation, SVP Nagar in Andheri West, Ramkrishna Nagar in Khar and Old MHB Colony in Borivali**, among others.

Each project has its own history, demographic profile and development challenges. Yet they share a common objective: to transform ageing and under-utilised urban areas into well-planned communities with modern housing and supporting infrastructure.

The approach is therefore deliberately differentiated. Some projects are being advanced through the C&DA mechanism, while others are being undertaken through EPC or other suitable implementation frameworks, depending on their specific requirements.

1. Motilal Nagar

Spread across approximately 143 acres, the project brings together Motilal Nagar 1, 2 and 3 in Goregaon West into a comprehensive redevelopment vision. Rather than treating redevelopment as a collection of individual buildings, the project adopts a master-planning approach that looks at the entire neighbourhood as an integrated urban ecosystem.

The plan envisages rehabilitation for approximately **3,702 eligible residential occupants**, with homes of around **1,600 sq ft RERA carpet area**, along with rehabilitation of eligible commercial occupants. The project also integrates the rehabilitation of eligible slum dwellers and provides for substantial public infrastructure and open spaces.

2. Kamathipura

In South Mumbai, the Kamathipura Cluster Redevelopment Project represents another important dimension of MHADA's urban renewal strategy. Spread across approximately 34 acres, the project encompasses nearly 943 cessed buildings across lanes 1 to 15 and affects approximately 8,001 residential and non-residential occupants.

INSIDE MHADA'S VISIONARY C&DA MODEL DRIVING THE CITY'S LARGEST URBAN RENEWAL

The project, conceptualised as an "**Urban Village**," seeks to combine rehabilitation with improved infrastructure, commercial spaces, recreational areas and better-quality housing. Approximately **4,500 new housing units** are envisaged as part of the redevelopment, while substantial land is to be made available to MHADA.

3. Abhyudaya Nagar

At Abhyudaya Nagar, Kalachowki, the redevelopment challenge is equally significant. Spread across approximately **33 acres**, the project encompasses 48 buildings and around 3,410 tenements, serving nearly 15,000 residents.

Existing homes of approximately 210 sq ft are being replaced through a substantially larger rehabilitation footprint, reflecting the principle that redevelopment must deliver not merely new structures but a meaningful improvement in living standards.

4. GTB Nagar

The redevelopment of GTB Nagar in Sion-Koliwada introduces another important dimension to the C&DA framework. Comprising 25 buildings associated with the Sindhi refugee community, the project represents **MHADA's first C&DA-model initiative on private land**.

This approach demonstrates that the C&DA model is not limited to MHADA-owned land. It can also provide a mechanism for addressing complex redevelopment situations where multiple stakeholders and ownership structures need to be brought together within a transparent institutional framework.

The Scale of Partnership

The growing confidence of the private sector in MHADA's redevelopment framework is visible in the response to major projects at Adarsh Nagar, Worli; Bandra Reclamation; and SVP Nagar, Andheri West. For Adarsh Nagar and Bandra Reclamation, Adani Properties Private Limited, Lodha Developers Limited and JSW Realty & Infrastructure Private Limited participated in the bidding process. For SVP Nagar, the bidders included Reliance 4IR Realty Development Limited, Adani Properties Private Limited and Hanura Realty Private Limited. Following the bidding process, Adani Properties was selected for the Adarsh Nagar and Bandra Reclamation projects, while a consortium led by Hanura Realty was selected for SVP Nagar. The projects cover approximately **34.33 acres, 98.27 acres and 73.89 acres**, respectively. Their participation therefore represents an important vote of confidence in the institutional architecture and economic viability of MHADA's C&DA approach.

What should Mumbai's neighbourhoods look like for the next generation?

The true measure of redevelopment lies in what happens beyond the rehabilitation building. For a resident who has lived for decades in an ageing structure, redevelopment represents a profound personal transition. It involves uncertainty, temporary relocation and the disruption of familiar surroundings.

Mumbai's future neighbourhoods must be designed around mobility, public spaces, social infrastructure, environmental resilience and access to essential services. MHADA's redevelopment vision therefore places increasing emphasis on integrated planning. Schools and healthcare facilities, markets and community spaces, green areas and parking, water and waste management, drainage and energy efficiency are being considered as components of a larger urban system.

This is why the C&DA model must be understood not merely as a development mechanism but as a new social contract for urban renewal; one that seeks to align the aspirations of residents, the capabilities of the private sector and the responsibilities of the State.

Sanjeev Jaiswal
Vice President & Chief Executive Officer, MHADA

REPORT ON THE ROLE OF NMMC IN SUSTAINABLE URBAN DEVELOPMENT AND GOVERNANCE

1. Introduction

Navi Mumbai is a planned urban region that has experienced significant growth in population, economic activity and infrastructure demand. In this context, the Navi Mumbai Municipal Corporation (NMMC) plays an important role in managing urban infrastructure, municipal services, development regulation and citizen-oriented governance. NMMC's Development Plan identifies the need for planned, comprehensive, participative, stakeholder-friendly, rational and sustainable development, with citizen-oriented policies as an important objective. Sustainable urban development for NMMC therefore requires an integrated approach in which physical infrastructure, mobility, environmental management, public spaces, utilities and governance systems are planned and operated as interconnected components rather than as independent projects.

2. Integrated Urban Planning and Development Management

NMMC's Town Planning Department has an important role in regulating urban development through approval of building and development proposals, commencement and occupancy certificates, land-use changes, zone remarks and related development permissions. For sustainable development, planning should be closely coordinated with infrastructure capacity. Future development should be assessed in relation to the availability of water supply, sewerage, drainage, roads, public transport, parking, pedestrian facilities, open spaces and other essential services. Such coordination can help avoid infrastructure deficiencies and improve the efficiency of public investment.

3. Sustainable Infrastructure and Municipal Services

Water supply, sanitation, drainage, roads and other municipal infrastructure form the basic foundation of a sustainable city. NMMC can strengthen sustainability by adopting **asset based infrastructure management**, preventive maintenance, lifecycle-cost assessment and systematic infrastructure upgrading. Particular attention should be given to coordination between roads, footpaths, underground utilities and stormwater infrastructure. Utility corridors and service infrastructure should be planned in a manner that reduces repeated excavation of footpaths and roads. This can improve pedestrian accessibility, reduce maintenance disruption and increase the life of public infrastructure.

4. Sustainable Mobility and Public Transport

Sustainable urban mobility requires integration of public transport with pedestrian and road infrastructure. NMMT is an important component of this system. According to the NMMC's official NMMT information, NMMT operates **567 buses on 74 routes**, with approximately **1.8 lakh passengers served daily**. NMMT has also adopted Intelligent Transport Management System (ITMS) capabilities, including a Command-and-Control Centre, Automatic Vehicle Location System (AVLS), Automatic Fare Collection System (AFCS), Public Information System and real-time passenger information. The next step is to strengthen the connection between public transport and the street environment through continuous footpaths, safe pedestrian crossings, accessible bus stops, junction improvements, appropriate street lighting and universal accessibility.

5. Solid Waste and Environmental Management

Effective solid waste management is another important component of sustainable urban development. The objective should extend beyond collection and disposal towards **segregation, resource recovery, recycling, processing and environmentally responsible disposal**. NMMC can strengthen environmental sustainability through efficient collection systems, improved monitoring, decentralised solutions where appropriate, reduction of waste reaching disposal facilities and better utilisation of recovered resources. Similarly, parks, green spaces, water bodies, drainage corridors and landscaped public spaces can be treated as part of the city's **green-blue infrastructure**. Such systems can contribute to environmental quality, urban cooling, biodiversity, recreation and climate resilience.

REPORT ON THE ROLE OF NMMC IN SUSTAINABLE URBAN DEVELOPMENT AND GOVERNANCE

6. Digital Governance and Citizen Participation

Technology provides an opportunity to make municipal governance more transparent, responsive and evidence-based. NMMT's existing digital systems demonstrate how real-time information, data analysis and command-and-control systems can support service delivery. A similar approach can be progressively applied to municipal engineering through integrated GIS-based asset inventories, digital work orders, infrastructure-condition assessments, complaint monitoring and performance dashboards. Citizen feedback should form part of this system so that municipal agencies can identify service deficiencies and track their resolution.

7. Proposed Way Forward

A practical approach for sustainable urban development can be implemented in three stages:

Short term (0–6 months): establish infrastructure and utility inventories, identify critical pedestrian, drainage and junction deficiencies, standardise project-coordination procedures and define sustainability indicators.

Medium term (6–18 months): implement pilot complete-street corridors, improve utility coordination, strengthen digital asset management and improve the interface between NMMT, roads and pedestrian infrastructure.

Long term (18–36 months): scale successful pilot projects across Navi Mumbai, integrate asset-condition data with capital budgeting and institutionalise climate-resilient, green and accessible infrastructure standards.

8. Conclusion

NMMC's role in sustainable urban development extends beyond the construction and maintenance of individual infrastructure projects. The key opportunity is to develop an **integrated urban management approach** where planning, engineering, mobility, environmental management, digital governance and citizen participation operate together. The NMMC Development Plan itself emphasises planned, comprehensive, participative and sustainable development. By translating this vision into coordinated infrastructure planning, resilient engineering, sustainable mobility, efficient municipal services, green-blue infrastructure and measurable governance outcomes, NMMC can strengthen the long-term quality, efficiency and resilience of Navi Mumbai's urban environment.

In simple terms: the objective should be to move from “infrastructure delivery” towards “integrated and sustainable city management.”

Official references

- NMMC Official Website
- NMMC Town Planning Department Services
- NMMC Development Plan Report
- NMMT Official Page

The Team Behind the Conclave

Behind the BRICS Friendship Cities Conclave 2026 were countless hours of planning, teamwork, problem-solving, and a shared commitment to bringing the vision to life.

Team Mumbai First, united by a commitment to collaboration, international cooperation, and building lasting connections between cities.





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