COLABA CONVERSATION

Navigating Faultlines of Recovery

December 2021

RAPPORTEURS' REPORT

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KONRAD ADENAUER STIFTUNG

BILL & MELINDA GATES foundation

MacArthur Foundation

CIFF CHILDREN'S INVESTMENT FUND FOUNDATION

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Observer Research Foundation
20 Rouse Avenue, Institutional Area
New Delhi, India 110002
contactus@orfonline.org
www.orfonline.org

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World Heritage Site

INTRODUCTION

AKSHAY MATHUR
Director, ORF Mumbai

The second iteration of Colaba Conversation—Mumbai's signature forum for discussing international policy issues affecting the city, the nation, and the world, co-hosted by ORF and the Government of Maharashtra—was held on 1-3 December 2021. The conference included 30 sessions, hosted over 100 speakers from 20 countries. Nearly 2,50,000 viewers followed the sessions online.

This year's dialogue saw significant interventions by **Subhash Desai** (Minister for Industries and Mining, Government of Maharashtra, India); **Aaditya Thackeray** (Minister for Tourism, Environment & Climate Change and Protocol, Government of Maharashtra, India); **James Sangma** (Environment Minister, Government of Meghalaya, India); **Frances Adamson** (Governor of South Australia, Australia); **Florian Stegmann** (State Minister and Head of the State Chancellery, Baden-Württemberg, Germany); **Almut Moller** (State Secretary, Hamburg, Germany); **Jo Johnson** (Chairman TES Global and former Minister of State for Universities, Science, Research and Innovation, UK); **Jayant Sinha** (Member of Parliament, Lok Sabha, India); **Priyanka Chaturvedi** (Member of Parliament, Rajya Sabha, India); **Amar Patnaik** (Member of Parliament, Rajya Sabha, India); **Dian Triansyah Djani** (G20 Sherpa, Indonesia); **Ambassador Robert Blake** (Senior Advisor to US Special Presidential Envoy for Climate John Kerry, US); **Kamal Kishore** (Member Secretary, National Disaster Management Authority, India); **Tajinder Singh** (Deputy Secretary General, International Organization of Securities Commissions); **Ajoy Mehta** (Chairman, MahaRera, India); **Manisha Mhaiskar** (Principal Secretary, Environment and Climate Change, Government of Maharashtra, India); and **Lakshmi Puri** (Former UN Assistant Secretary-General).

The conversations at this year's dialogue reflected on the long-term implications of the pandemic and explored the policy measures that we need to design and execute to address the systemic fault lines that are now becoming visible.

Therefore, the theme for this year's dialogue was **Navigating Faultlines of Recovery**. Specifically, the conversation was guided by five pillars:

1. **Capacity Conundrum:** Building institutional strength for crisis response and recovery
2. **Inequity Pandemic:** Reconciling the duality of response and recovery
3. **Multistakeholder Multilateralism:** Rise of small nations, private enterprise, civil society in global governance
4. **Corporations beyond Borders:** Extraterritorial regulation and responsibility of multinationals
5. **The Blue Imperative:** Economic, political and security roadmap for leveraging the oceans

The pandemic has made it clear that the state's capacity to respond is key for immediate response and long-term recovery. There is a clear 'capacity conundrum' at all levels of government—city, state, national and multilateral. India's experience with the first and second wave of the pandemic revealed the conundrums and fault lines between its federal governance architecture.

Despite the focus on the pandemic, the dialogue confirmed that climate change is the single most important policy imperative today and the single biggest opportunity for business, enterprise, and entrepreneurship. Mumbai's leadership in leading the green revolution can galvanise the nation towards a trillion-dollar green economy.

A new long-term concern has been the pandemic's grim implications and collateral damage on the world's poorest. The 'inequity pandemic,' as it is being increasingly called, reflects the duality of response and recovery. The rich have easier access to vaccines, online education, technology jobs, and economic recovery stimulus, whereas the poor still seek access to necessities such as food and healthcare.

The discussions revealed that an equitable recovery requires policies for financial inclusion and financial integration led by banks and the financial services industry that ensures that the products and services are designed for those marginalised. Also, a new generation of micro-entrepreneurs, individual experts, and independent artists that are purely digital have been the drivers of the economy and livelihoods during the pandemic, which desperately need support.

Meanwhile, fractured global governance is increasingly shaped by powerful cities, smaller nations, private enterprises, and civil society. Private enterprise is already a key stakeholder in climate governance, private consortiums are designing global regulations, and cities are emerging as primary voices in international coordination. The emergence of new stakeholders in global governance—cities, enterprises, non-government institutions—is providing a new impetus for international cooperation, which is needed to solve policy issues at all levels—global, national or local.

As the world prepares for recovery, India is finding itself in this unique moment in global governance. India's presidency of BRICS in 2021, membership of the United Nations Security Council in 2021/22, chairship of the World Health Organization executive board in 2021, and upcoming presidency of the G20 in 2023 provide the nation an opportunity to design 'multistakeholder multilateralism' during a critical phase in international cooperation.

The pandemic has also highlighted the strength of corporations, which have been able to deliver and benefit due to scale when many other startups and small enterprises failed or folded. Many corporations have reconfigured their supply chains to align with emerging geopolitical trends. Those focused on digital, healthcare, and green energy businesses have particularly benefited. But with big power also comes big responsibility, particularly on regulation, taxation, and sustainability.

In line with their scale, the imperative for regulating multinational corporations—'corporations beyond borders'—is now the primary agenda on national and multilateral forums. The business participants reaffirmed that multinationals have become increasingly cognisant of their corporate responsibility and global influence, and proactively participating in designing, developing, and implementing regulations.

Burnt by supply chain disruptions and threatened by the rise of an antagonistic China, the strategic developments in the Indo-Pacific and the Arabian Sea are shaping the security priorities across the region. Many littoral states now have their own infrastructure and economic development plans to address strategic, development and sustainability needs. India also needs its own blue imperative for coastal cities, marine resources, and blue economy, which puts coastal cities as the primary stakeholder in regional geopolitics and geoeconomics.

This rapporteurs' report captures the deliberations on these contentious issues and challenges confronting the world as it navigates the fault lines of recovery.

The next iteration of Colaba Conversation in 2022 will hopefully transition to the 'live physical format,' including panel sessions, roundtables and other interesting forms of deliberation. India's acceptance of the G20 presidency in December 2022, progress on its net-zero commitments made at COP26, and integration into global value chains supported by the government's 'Atmanirbhar' initiative are likely to be on the agenda for the next dialogue.

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Day 1
December 1, 2021

INAUGURAL SESSION: NAVIGATING FAULTLINES OF RECOVERY

Kalpit A Mankikar

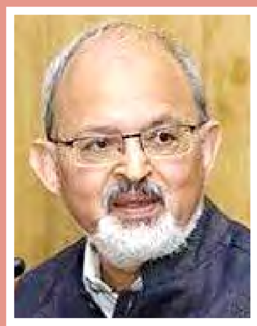
After a long disruption due to the COVID-19 pandemic, the world is slowly beginning to crawl forward. Yet, even two years after the first COVID-19 case was reported, there seems to be no end in sight. Colaba Conversation 2.0's inaugural session, aptly titled 'Navigating the Faultlines of Recovery', aimed to assess the existing cracks and the potential to get back on track.

The virus has spared no one, not even the mightiest cities across the globe. The developing world, typically looking to guide the emerging

MASTER OF CEREMONIES

AKSHAY MATHUR
Director, ORF Mumbai

WELCOME REMARKS



SUNJOY JOSHI
Chairman, ORF

OPENING PLENARY SPEAKERS

ALMUT MOLLER
State Secretary, Hamburg, Germany

FLORIAN STEGMANN
State Minister and Head of the State Chancellery, Baden-Württemberg, Germany

FRANCES ADAMSON
Governor, South Australia

economies on governance, had to contended with severe capacity failures. And none of the powerful developed capital cities, whether Paris, New York or London, was prepared for what was coming.

COVID-19 is a wake-up call to the fractured nation-state construct that was conceived and built for the 20th century. The fractured state construct is not just a feature of regions in disarray (ungoverned states like Somalia, Sub-Saharan Africa, or Afghanistan), but run deep through Europe, the Americas and Asia.

Notably, in the fight against COVID-19, one feature remained the same across all countries—the first respondents were the cities. Cities are key in dealing with challenges that require a common and coordinated response, and strengthening their capacities is vital. It is in this context that Almut Moller discussed how the European Union has started to acknowledge the role cities will play in the transitions ahead. Moller added how a driving force can emanate from the cities and where the idea of cohesion of a bigger picture is very important.

She noted that the most important political task is tackling climate change and managing the transition of economies and societies to be embedded in the European green deal. “A real source of strength for cities is to identify what is available in terms of shaping what I call the most important opportunity but also challenge…the green transition,” Moller said, endorsing the need for a sustainable recovery.

Indeed, successful transitions are possible when cross-border, subnational cooperation is achieved. “It [the pandemic] has shown us that we need to face global challenges with joint forces in today’s globalised world. The exchange of experiences

INAUGURAL ADDRESS

SUBHASH DESAI
Minister for Industries and Mining, Government of Maharashtra, India

VOTE OF THANKS

PRIYANKA CHATURVEDI
Member of Parliament, Rajya Sabha, India

and collaboration on the subnational regional and local level play a vital role," said Florian Stegmann. For instance, Baden-Württemberg extended its use of artificial intelligence and digitalisation in crisis management beyond its borders. The state worked with France and Switzerland extensively during the pandemic to transfer critical patients to intensive care units in those countries.

Citing examples of cooperation between Baden-Württemberg and Maharashtra, Stegmann added that the focus on crisis management during the pandemic was not only cross-border related but extended to providing emergency aid to India and Maharashtra. This was done by sending 400 ventilator units to India during the second wave of the pandemic. Local German companies based in Maharashtra were also quickly supported to ensure that their workforce was taken care of. Maharashtra is also part of a coalition led by Baden-Württemberg to determine a common and ambitious climate protection policy.

A large part of pandemic recovery includes re-establishing global supply chains and restoring trade and investment linkages between regions. Global trade is estimated to have contracted about 9 percent in 2020. Global investment flows took a bigger hit, almost halving in 2020. This forced firms across the world to rethink their domestic production and reduce reliance on imports.

Frances Adamson noted how South Australia and Maharashtra can work together to be drivers of change in the Indo-Pacific region. The exchange of goods, services, people, and ideas between the two states will help the regions work towards better cooperation in the defence, energy, and minerals sectors. South Australia envisions becoming a global exporter of clean hydrogen and has already invested AUS$40 million to advance such projects. Maharashtra is an ideal international partner to embrace innovative technologies to tackle climate change, Adamson said. She also identified several other common areas of interests for the two states—the adequate supply of clean water, water security, education, and health infrastructure.

Subhash Desai said that as India's leading industrial state, Maharashtra must ensure that new initiatives are quickly introduced as the pandemic wanes to kickstart businesses and investments in the region.

While the manufacturing and industrial sector was badly hit by the pandemic, the Maharashtra government decided that protecting the life and healthcare of the people working in these industries was a priority while planning the recovery phase. The government took industry leaders in the state into confidence and chalked out rules that could be easily implemented to arrest the slump and protect the workforce simultaneously.

After the second COVID-19 wave, the state attracted investment proposals worth INR 50 billion, signing agreements with more than 60 investors from the US, UK, Germany, Japan, Singapore, South Korea, and other countries. The state's 'plug and play' scheme proved to be a game changer in this regard. Two big issues that new organisations face when they want to set shop in a region is the lack of land and manpower.

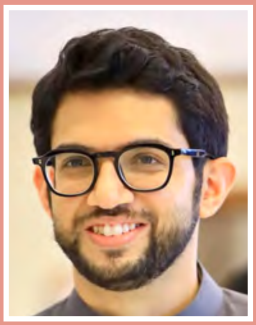
This scheme addressed both issues. Land parcels and constructed buildings or sheds were made available for short-term leases, a departure from previous policies that focused on the long term. An exclusive job portal was set up for the new labour force entering the state. Additionally, the 'Maitri' platform was set up provided a 360-degree view to those wanting to set up business in Maharashtra.

Desai also spoke of how Maharashtra is pushing forward with its e-mobility plans, converting public transit vehicles, and providing charging infrastructure across Mumbai and the state.

As the world recovers from the pandemic, there are hopes for a sustainable revival that paves the way for equitable growth. Priyanka Chaturvedi pointed out that addressing the challenges ahead must now be approached afresh with new partnerships and stakeholders. She stressed that the time is ripe for the emergence of a new form of multilateralism, which can well begin in Mumbai.

AAMCHI MUMBAI: YOUTH TOWNHALL WITH AADITYA THACKERAY

Promit Mookherjee



AADITYA THACKERAY
Minister for Tourism, Environment & Climate Change and Protocol, Government of Maharashtra, India

HOST

AKSHAY MATHUR
Director, ORF Mumbai

Mumbai, which has always been a commerce and trade hub, is now also taking steps to turn green and sustainable. This and other issues of concern for youth in Mumbai (where half the population is under 30), were discussed at the interactive session between college students and Maharashtra minister Aaditya Thackeray.

Thackeray said that a key focus of the government is to make the city more liveable, comfortable, and affordable while creating a safe and healthy environment. He said that cities will have to align their development plans with the realities of climate change, and mitigation efforts must be combined with adaptation measures. The key to this lies in decarbonising the energy and transport sectors.

Mumbai has already taken the lead in this regard by becoming a part of global C40 cities initiative. Private players are showing an interest in producing renewable energy, and the city will soon have 2,100 electric buses. Plans are also underway for the government to have only electric vehicles (EVs).

Mumbai is also aptly positioned to promote the blue economy by helping improve trade connections between India and Africa, and the Middle East. An expansion of the city's port and dockyard infrastructure can help spur trade and leverage connectivity to trading hubs within and outside India. In this direction, the Maharashtra government has signed multiple memorandums of understanding with industries and data centres, and allotted land for the relevant activities.

Mumbai has also taken several steps to ensure environmental sustainability. Six new sewage treatment plants are being set up, which can reduce the amount of untreated water directed into the sea by 3,200 million litres. It is also looking at bioremediation and creation of thrash boom barriers.

The government is considering ways to balance development with environmental security. The Mithi two-work package will significantly improve the quality of water in the region. The Mumbai-Nagpur Highway has been designed to include wildlife corridors that do not interfere with the local fauna. There are also plans to build 200 MW solar power generating capacity around the highway.

Thackeray also spoke of how EV technology has rapidly evolved and cleared hurdles related to driving range and charging infrastructure. Maharashtra's metro cities are setting up charging infrastructure at bus depots and highways, and over the next 18 months, prompted by government mandates, many housing societies, hotels and offices will introduce charging infrastructure. The state government has also reduced the licensing requirements for new hotel operators to promote tourism. It has also introduced innovative ideas like Ro-Ro tours and promoting the state's cultural and natural beauty.

"There is also a need to promote the night economy. Mumbai is a safe city, and the young people want to enjoy the nightlife it provides. We need to learn from global cities such as New York and London, which have done a great job to promote their night economy," said Thackeray.

He also spoke about the need to promote startups by reducing regulations and improving the ease of doing business. The government's MSME policies have already reaped benefits. Apart from financial incentives, innovation must be encouraged and should start from schools and colleges through innovation labs.

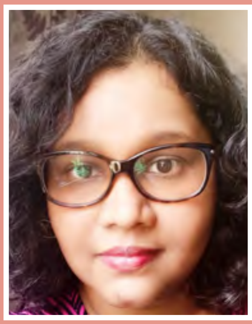
Maharashtra's cities like Pune and Mumbai are known for their space crunch but are continuing to grow. As a result, infrastructure and affordable housing projects are coming up in areas like Karjat and Panvel. The Mumbai Trans Harbour Link and the Worli-Sewri connector are key infrastructure projects that can shape the growth of this region and for it to become a model for sustainable growth. Maharashtra can become a sustainable financial and population hub, but his will require government push and a sense of conscious citizenship from its people, Thackeray said.

FUTURE OF ENTERTAINMENT

Sayli Udas-Mankikar

MITHILA PALKAR
Actor, India

HOST



SAYLI MANKIKAR
Senior Fellow, ORF

India's Hindi film industry (Bollywood) is going through a period of adjustment. The COVID-19 pandemic disrupted the industry and turned it on its head as theatres remained closed for many months. But viewers were not short of content, which was easily available on OTTs and social media platforms.

At this point, few can assess the future of the entertainment industry and there are no clear answers. However, it is widely believed that it could transform further from the current multimedium, multilingual, and multiplatform nature. The young actors at the centre of this creative whirlwind seem to be enjoying this period. “My grandfather used to say that I am a jack of all trades, master of none. This I think has helped me,” said Bollywood actor and OTT mainstay Mithila Palkar. Known for films like *Chopsticks* and *Tribhanga* and Netflix series *Little Things*, Palkar says experimenting is what helps her associate and disassociate with everything.

The ubiquitous nature of social media puts undue stress on celebrities to constantly create content and remain relevant. While this puts huge pressures on how much of one’s true self can be revealed on these mediums, maintaining the balance is like walking a tightrope. However, Palkar feels that people seeing her in her real space via social media—a middleclass Marathi household in Dadar where she lives with her grandparents—has worked to her advantage. While she finds herself bracketed in certain kinds of roles (the bubbly girl next door) because of how she appears on social media, she would not have it any other way. “This will mean disassociating myself from my audiences… yes I have ended up playing similar characters in the past and I am making a conscious effort to choose different roles to challenge me.”

Palkar noted that cookie-sized videos (15-second movies) are among the new entertainment trends that film personalities must embrace. “It is fun. I have learnt over a period that it is important to identify these trends as part of the package and not the entire package,” she said. These trends, however, give rise to unhealthy competition. She said it is important for actors to realise what works for them, and what helps them keep their sense of self intact.

Young entertainers are also facing extreme burn out. The pandemic only exacerbated “FOMO” (fear of missing out) and “fear of failure”. “When our entertainment is limited to 30 seconds and that is all that we are ready to consume, we will lose patience,” she added.

But new actors are challenging themselves to look beyond Bollywood and experiment with regional cinema. “I was very excited to act in a different language because it is such a big challenge to experiment and speak a language that you do not understand,” Palkar said of her experience.

Palkar said that the entertainment industry and actors have learned to navigate the restrictions imposed by the pandemic and innovate. For instance, she started doing monologue shows and shot for advertisements at home. She also noted that as regular shoots have resumed in recent months, those on set are regularly tested for COVID-19, which shows how the industry has evolved to the needs of the time.

CONTENT SUBCONTINENT

Noyontara Gupta

The Indian film and television industries have expanded their sphere of influence globally, reaching epic proportions in terms of output, viewership, and revenue. Mumbai, dubbed the ‘city of dreams’, has played a pivotal role in transforming India into a content powerhouse.

For better or worse, the COVID-19 pandemic has served as a catalyst for change, impacting both creators and audiences significantly. The need for content had never been more acute, with the entire population forced to stay home. The news and

SPEAKERS

KUNAL VIJAYKAR
Filmmaker and Television personality, India

NIRMIKA SINGH
Songwriter, Poet, Lyricist and Executive Editor, Rolling Stones India

GOLAM RAHMAN
Editor, Ajker Patrika, Bangladesh

ANUPAMA MANDLOI
Producer and Independent Media Consultant

SAMPADA MALLA
Writer, Producer, Nepal

MODERATOR

UJJWAL KUMAR CHOWDHURY
Secretary, Global Media Education Council

entertainment industries have had to adapt quickly to keep up with the unprecedented demand while following protocols. To meet the demand, content creators and enablers invested in equipment, and many built home-studios as well.

An interesting development during the pandemic is that while television consumption increased, cable distribution fell significantly. This shows there is now a need for a technology-enabled media environment, Anupama Mandloi said. As broadband enters more homes, pre-programmed entertainment will be left behind.

Media, particularly of the print variety, was acutely impacted by COVID-19. In Bangladesh, most print media ceased publication during the pandemic, barring a few Dhaka-based newspapers, said Golam Rahman. Over the years, people have been gravitating towards the internet for news and the pandemic has further popularised digital platforms like Facebook and Twitter. However, smaller newspapers have suffered as they were deprived of the privilege of online publication, Rahman added. The face of the music industry has also changed. Live shows and tours were cancelled, impacting the venues and the hospitality industry.

The popularity of short-form content has skyrocketed, and by 2025, India is will likely have 650 million consumers of short-form videos. Content creation has also become easier due to constantly evolving platforms and improved access to the digital sphere. As the content game continues, new forms will come, as will new formats, said Nirmika Singh.

Kunal Vijaykar noted that digital content has not just caught up with television but left it far behind. The rise of YouTube has forced television channels to create a digital footprint as well. Many run trailers and other promotional content on the platform to attract and engage a larger viewer base. Indian content creators have also made their mark on YouTube. There are over 1,200 Indian YouTubers with more than one million subscribers. “Those who may have missed the boat will have to catch up very fast,” observed Vijaykar.

Sampada Malla said that Nepal is an avid consumer base of Indian content (films and TV shows), but the local industry is now developing its own content, which has kept it going during the pandemic. Nepal also has a unique TRP system where it judges a show’s popularity by the number of YouTube hits. This is an example of how digital media has cemented its presence in the content game. Yet, OTT is a challenge since native content is growing at a slow rate due to the popularity of Indian content (despite Indian OTT subscriptions not easily accessible to the Nepalese).

In India, OTT has been a transformative development in terms of content creation. Vijaykar highlighted how content diversified and improved qualitatively and quantitatively due to the rise of streaming services. Actors have found a new platform, and writers and directors have a certain creative liberty that was never available in mainstream television or film. The audience has diversified as well. However, a digital divide remains, according to Ujjwal Kumar Chaudhury, with only a 50-percent Internet penetration rate (although the number is expected to grow consistently).

A key point of concern for the industry and content creators relates to intellectual property (IP) rights.

As production houses are unable to retain IPs, their valuation tends to be lower than to the volume of the content they generate, Mandloi said. There is a huge potential for regional IP or Indian IP to be adapted globally, but opportunities are limited since producers are considered vendors, and not service providers. Censorship regulations also hinder Indian content creators.

As India enters a new digital era, its content creators have seen opportunities flourish. Content in various languages has found an audience across the country. Additionally, the avenues of monetisation have increased, digital performances have diminished distances, and art can now be sustained as content. “When you go local, you truly go global,” said Singh.

Mumbai continues to remain a major content generating hub, but the pandemic has proved that creation can happen anywhere. The present digital divide ensures that traditional cinema and television will not disappear just yet. A lot remains to be accomplished (such as talent creation, improved monetisation, and IP ownership), but the industry will continue to adapt and shape itself to the new digital trends.

CREATION, CONSUMPTION AND CAPITAL IN THE VIRAL WORLD

Shashidhar KJ

It is a point of pride that India has the fastest-growing internet population globally, driven by cheap mobile internet. The Telecom Regulatory Authority of India pegs the current number of broadband internet subscribers at over 794 million. As the internet explosion approaches a billion broadband subscribers, internet companies have seen the number of Indian users shoot up exponentially.

It is estimated that YouTube has over 459 million users in India, with the number projected to grow to over 800 million by 2025. At Facebook, the number

SPEAKERS

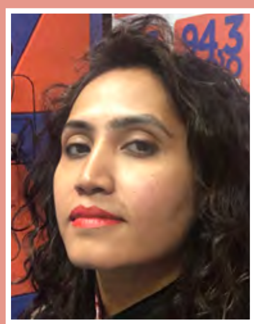
MARIA GORETTI
Author, TV Presenter and Chef, India

AJAY CHOPRA
Chef, TV presenter and Managing Director, Zion Hospitality, India

RACHANA RANADE
Founder, Rachana Ranade and Associates; Finfluencer and Chartered Accountant, India

SARANG SATHAYE
Co-Founder, Bharatiya Digital Party (BhaDiPa), India

MODERATOR



ANNIE ARAKKAL MARWAHA
Radio Presenter and Executive Producer, 94.3 Radio One, India

of Indian users is 340 million users, with the country now accounting for the platform's largest user base. For context, the population of the US is around 332 million. As more Indians login, the internet is starting to take a distinct Indian taste. Social media companies like YouTube, Facebook, Instagram, and Twitter are seeing dividends as creators make more content and increase their viewership to a global audience.

This panel consisted of some of India's best YouTubers who discussed their journey and the challenges of building an audience.

Sarang Sathaye talked about why he doubled down on making content in a regional language (Marathi). "When we started this channel, this was when All India Bakchod [AIB, a comedy collective that shot to fame for their sketches] had cracked something in the Hindi space. At the same time there was a conversation about how there is going to be digital penetration in India with the 4G coming in and how Jio is going to disrupt the market. On the other side there was a conversation about *Natsamrat* making Rs 45 crore in the box office." He noted that Telugu and Tamil movies make double the amount on a regular basis. "The Marathi speaking population across the globe is 72 million, which is bigger than most of the European countries. And if they can have their own industry why can't a Marathi language digital industry exist was the question that we had to address," Sathaye elaborated.

The panellists also discussed the importance for creators to find a niche to build an audience. Rachana Ranade explained why and how she found her niche. "As a student I used to consume a lot of content on television, and all these guys on business news channels used to put all sorts of jargon while telling the news, and as a kid I used to get so confused." She shared anecdotes of seasoned banking professionals forgetting the basics. "So that is where my journey started off simplifying concepts for those who are not coming from a commerce background."

Ajay Chopra shared his perspective on building cooking channels on YouTube. "Every food YouTuber is trying to create original content but there is no original food. I never invented dal makhni, somebody else invented dal makhni, and I am going to make dal makhni," he said, adding that personas matter more than recipes to connect with audiences. "For me the consistent comments that I get on my YouTube channel…One is your recipes work, second is I relate to you because you are like my you know big brother who is talking to me."

Maria Goretti touched upon how YouTubers are sustaining their operations. She stated that it was only when she started posting recipes online during the pandemic that she received enquiries that presented her with more opportunities to monetise through private cooking sessions and menu design. "So, from making YouTube videos there to where I am today, I can make menus, I can train chefs, you know I go and I do all kinds of everything, even behind the scenes," she added.

Ranade stated that YouTube niches will eventually be sustained through a mix of sponsorships, advertising revenue, and accompanied monetisable content like courses. "I tried to compile almost

65 to 67 concepts for any person investing in the stock market. So today over the period of the last two years I have seven courses on my platform, and I think that is one good way I can monetise on the platform," she said.

As we celebrate the success of Indian content creators, the subtleties of monetising content should get more focus. Successful Indian YouTubers solely relying on advertising revenue is the exception and not the rule. The relationship of technology companies and Indian content creators is still very unequal. India may be bringing in most users for YouTube, but Indian content creators cannot make ends meet through advertising revenue from uploading video content and will have to rely on alternative sources of marketable income.

A NET ZERO ROADMAP TO INDIA'S GREEN FUTURE

JAYANT SINHA
Member of Paliament,
Lok Sabha

Mannat Jaspal

The COP26 held in Glasgow in 2021 can be defined as a momentous event in the history of climate change negotiations. It galvanised greater political consciousness, consensus, and commitment towards climate action. It also compelled many countries to ramp up their climate ambitions and marked a turning point for India, with Prime Minister Narendra Modi declaring a net-zero target for 2070. This propelled the levers of development towards a greener and more sustainable pathways.

For India to realise its net-zero targets and achieve sustainable prosperity, it must transform its current development pathway into one of deep decarbonisation, said Jayant Sinha. India today emits about 3.5 billion tonnes of carbon equivalent GHG emissions per year. Given that it is a growing economy, forecasts say that India's total GHG emissions can reach over seven billion tonnes by 2050, notwithstanding the various green policies already institutionalised.

The Indian economy is at the cusp of a transformation and major reforms will have to be initiated by the government with the support of the private sector, Sinha opined. The energy system will have to move away from fossil fuels towards renewable sources. Transportation too must transition from petrol and diesel vehicles to zero-emission vehicles. Additionally, the industrial and commercial usage of fossil fuels will have to be progressively restricted through a carbon emissions trading system. The country's vast agriculture sector will also have to transform to more sustainable practices.

The transition to low carbon pathways of development will be augmented by the rising availability and affordability of green technologies. Green technologies are becoming more cost-effective than brown technologies and have the potential to drive high-productivity growth. Solar energy with battery storage, electric vehicles, plant proteins, and biofuels have penetrated into commercial value chains and become symbolic of a new wave of green revolution. India must jump onto this green bandwagon to stay competitive and relevant in a new economic world order, one that is driven by a green cause. The role of innovation is paramount, and Sinha extoled the spirit of entrepreneurs in driving the green transition.

Transitioning to a green economy will not only lead to a better environment but it will also have economic outcomes, like increased GDP, new employment opportunities, and investments. This is in addition to the many lives that lowered air pollution will save. According to Sinha, massive green investments will drive economic growth, enhance sustainable livelihoods and income generating opportunities for the youth.

Sinha also emphasised that careful planning must be undertaken to ensure that the transition is just, fair, and inclusive. A climate-compatible development plan should ensure that the local stakeholders are not disadvantaged, particularly the most vulnerable and the marginalised. As industries are restructured to transition away from fossil fuels, the workforce needs to be re-skilled and aligned accordingly. The new policies must address the transition challenges with poverty alleviation, fairer income distribution, and investments into social infrastructure and development.

India needs substantial investments to make a rapid and seamless transition to a green economy. Various estimates suggest it will require around

US$170 billion per year and trillions of dollars in the next few decades to meet its climate mitigation and sustainability goals. Given the government's constrained fiscal capacity, the bulk of the investments will have to come from the private sector.

Global commercial capital will play a large role and nations with pools of untapped wealth looking for return-seeking investments can also drive capital in emerging economies like India where the marginal cost of energy transition is much lower.

Sinha claimed that the coming decade will be decisive for India and underscored the importance of strategic policies and investments to accelerate a green future. Coordinated efforts and actions must be enforced to balance the twin goals of sustainability and prosperity. India's net zero target has set a path for a sustainable future and can be a leading example for many emerging and developing economies.

TARGETING A TRILLION-DOLLAR GREEN ECONOMY FOR INDIA

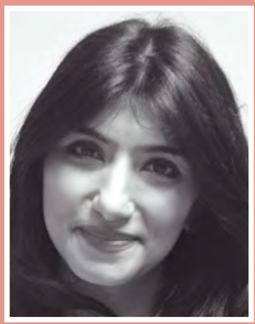
Noyontara Gupta

In recent times, the ‘green economy’ has emerged as a key pillar of the global agenda on sustainable development. If the last decade has been any indication, there is an urgent need to transform and decarbonise the global economy. India has the potential to provide enormous support in achieving the 1.5-degree Celsius climate goal. It is also estimated that a circular economy path could bring annual benefits to the tune of US$130 billion by 2050 for India alone. In the process, greenhouse gas emissions will fall by 44 percent and traffic congestion and pollution will decrease significantly.

INTRODUCING THE PANEL

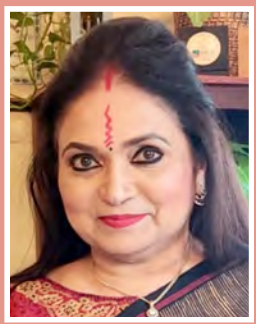
PETER RIMMELE
Resident Representative to India, Konrad-Adenauer-Stiftung (KAS)

SPEAKERS



SHLOKA NATH
Acting CEO, India Climate Collaborative; Head, Sustainability and Policy and Advocacy, Tata Trusts, India

ANA TONI
Executive Director, Institute for Climate and Society (iCS), Brazil



MADHU VERMA
Chief Economist, World Resources Institute, India

MODERATOR

SHIKHA BHASIN
Senior Programme Lead, Council on Energy, Environment and Water (CEEW), India

According to the World Economic Forum, India's transition to a net-zero economy could bring in more than US$1 trillion in economic opportunities by 2030, and create 50 million jobs and have an economic impact of around US$15 trillion by 2070. However, this requires an ambitious green transition roadmap. As India cements its role as a leader in various multilateral green energy development initiatives, the bigger picture looks promising, said Peter Rimmele. The establishment of the International Solar Alliance only reinforces India's position in the global promotion and patronisation of green technologies.

Despite the dilution of several targets at COP26, Shikha Bhasin said that the pledges by countries are bringing the world under a 2-degree Celsius target for the first time. However, it is important to note that the net-zero targets pledged by developing countries will require significant investments from international banks, insurers, and asset managers. In India specifically, the net-zero target will require the mobilisation of over US$10 trillion in investments.

There are significant economic and employment gains that India can realise in the process. Even short-term targets of renewable energy and emissions reductions offer numerous economic and development opportunities. Research from the Council on Energy, Environment and Water estimates that the renewable energy targets of 100,000 megawatts of solar and 60,000 megawatts of wind power capacity will likely generate over 1.3 million jobs.

The green economy talks about low carbon resources, efficient and socially inclusive pathways of system redevelopment. Investing in various ecosystems—be it wind energy, solar power, forest restoration or agriculture decarbonisation—is integral to achieving India's trillion-dollar green economy target.

Madhu Verma emphasised that efforts must be made on the part of the government to invest in natural systems like forests. Investing in the forestry sector has visible benefits and co-benefits in terms of ecosystem services. Assigning value to conservation processes, risk mitigation, and carbon sequestration and making them visible in the accounting system will also help draw investment.

Community development is an often-ignored factor. Traditional knowledge systems are a cost-effective mechanism that are as efficient, if not more, as modern mechanical technologies. Indigenous knowledge systems can be scaled up and replicated to help achieve the economic target.

There has been a growing interest among stakeholders in supporting a green transition for India. In the last stimulus, the central government has shown an inclination towards the green recovery as well. Investments in climate-friendly transport and energy, battery development, afforestation have all set India on the path of an equitable green recovery.

Shloka Nath noted the benefits of agroforestry, which can enhance farmer incomes and biodiversity and make agriculture resilient to climate impacts. Sustainable cold-chains, involving the use of solar energy to power rural cold-chains that can store fruits and vegetables, can also have an impact on reducing emissions and post-harvest losses significantly.

India's ambitious climate action targets require the inclusion of the MSME ministry because such firms constitute a large part of the corporate supply chain. It is critical for philanthropy and other pools of finance to work with MSME actors and help the sector transition to clean energy, said Nath. Funding can be a powerful lever that can enable innovation and bridge the gap between demand and supply, and between corporates and MSMEs.

India has a strong ecosystem of climate actors, but there is a tendency to work in silos. This ecosystem will have to come together to make the systemic shift towards a low-carbon future that forms the basis of a green economy. Significant work still needs to be done with communities and grassroots organisations to build capacity to withstand climate shocks.

India's transition to a green economy depends on three key drivers of growth—technological development, financial innovation, and strong political leadership. "India's green growth is not for itself alone. "It will have a multiplier effect, blazing the trail that combines inclusive prosperity with decarbonisation," said Nath.

Brazil faces both similar yet vastly different challenges. For Brazil, a key solution to stopping emissions is to stop deforestation. Deforestation brings neither development nor economic growth but is propagated by speculation of land by the rich, which aggravates inequalities. There is also a lack of political will in the country, Ana Toni noted.

Economic studies have shown that if Brazil has the political will, it could bring down its carbon emissions by 82 percent by 2030, at a very low cost of US$19 per gigaton. But without the necessary political leadership at the federal level, the country has faltered in its journey towards a green economy. It will have to go through a total upheaval of its development model and a review of its entire economy, from infrastructure to energy and transportation and more to set it back on course.

Net-zero targets and commitments towards renewable energy that may have seemed unbelievable a decade ago are now not just realistic but also integral to India's approach to a green economy, and laying the foundation towards achieving the 1.5-degree Celsius target.

India requires an accelerated approach to green technology, innovation and an overarching framework that catalyses green finance, as well as a plan for climate adaptation. Such goals, integrated with global cooperation among developing and developed countries, strategic knowledge partnerships, and strong political leadership that is dedicated to working towards climate change, will be essential to achieving a trillion-dollar green economy for India.

BUILDING THE INDIA-UK KNOWLEDGE HIGHWAY

Dhaval Desai

The negotiations on the India-UK Free Trade Agreement (FTA), slated for early 2022, will help the two countries collaborate better on higher education. India's National Education Policy (NEP), which focuses on the internationalisation of higher education, will ease the process of increased inter-university collaboration, creating an ideal environment to foster greater knowledge partnerships. The FTA will only lend momentum to this end. Jo Johnson and Vidya Yeravdekar echoed this optimism.

SPEAKERS

VIDYA YERAVDEKAR
Pro-Chancellor, Symbiosis International (Deemed University) & Principal Director, Symbiosis, India

JO JOHNSON
Chairman TES Global, Senior Fellow, Harvard Kennedy School; former Minister of State for Universities, Science, Research and Innovation; former Director of the Number 10 Policy Unit, UK

CHAIR

LUIS MIRANDA
Co-Founder and Chairman, Indian School of Public Policy, India

China's importance as the UK's knowledge partner has increased over the years and it is expected to displace the US as the UK's most important research and knowledge partner.

Research led by Johnson (in a study titled 'The China question: Managing risks and maximising benefits from partnership in higher education and research') has identified substantial and growing dependencies on the inflow of students and research in crucial fields of strategic significance between the two countries. In 2000, China and the UK had 750 research collaborations. In 2020, this rose to 16,267, amounting to 11 percent of the UK's total research output. More than a fifth of this research involved sensitive areas, including science and technology. The study concluded that the UK needs to diversify its knowledge partnerships with other key countries to balance its dependency on China.

India, on the other hand, has been slow off the block. A decade ago, it was at the 22nd position in terms of the UK's knowledge partners. It has now risen to the 16th position, but the ascent has not been as rapid as China's. Nevertheless, the UK remains a preferred destination for Indian students, and India is also the most frequent collaborator in Europe, signifying the potential for partnership.

Johnson also led another research project titled 'Natural partners: Building a comprehensive UK-India knowledge partnership,' jointly published in December 2021 by ORF, Harvard Kennedy School and King's College, London. "India, because of its sheer size, the depth of human capital, had the greatest potential to match China eventually," Johnson said.

The paper urges the proposed UK-India FTA to build a comprehensive knowledge partnership. It explores how the two countries can support more mobility between their education systems. For instance, ways in which students can carry credits earned at institutions in one country into an institution in the other without duplicating courses and incurring additional expenditure. "The idea is to put at the heart of that FTA, a credit transfer and accumulation agreement between the UK and India," he explained.

The paper suggests measures to enhance the UK's competitiveness and attractiveness to Indian students. Currently, the UK offers a two-year work opportunity for postgraduate students before they can move into a more permanent skilled worker category, if they so choose.

The number of Indian students going to the UK is 300 times higher than the number of UK students coming to India. Johnson urged the UK to make this relationship less imbalanced. "India's national education policy sets out an ambitious goal to internationalise India's higher education system, and the UK must send significantly more UK students to India to study to increase their levels of Asia and India literacy," he stressed.

Just a few months before the publication of both research papers, India adopted its new NEP in 2020. While focusing on 'education for all' as perceived by the earlier policies, the NEP presents a focused, progressive, and futuristic roadmap, and emphasises multidisciplinary education and internationalisation of higher education.

Elaborating on the policy roadmap, Yeravdekar, part of the policy group that recommended ways to globalise higher education, enumerated its innovative recommendations. India looked at the US and Europe for engagement in higher education but has not enhanced its profile in the international arena, she lamented. This is true even with the SAARC and ASEAN nations, except a few meaningful collaborations with Africa.

The policy addresses this lacuna, and lends further support to ongoing Scheme for Promotion of Academic and Research Collaboration and the OBREAL Global Collective, which facilitate universities worldwide to conduct joint research with Indian counterparts.

As recommended by the NEP, India has established an Academic Bank of Credits to allow a redeemable digital storage of credits if a student switches from one course to another at UGC-recognised universities. This is in line with the recommendations of the UK-India comprehensive partnership framework.

Such credit equivalence, according to Yeravdekar, will lead to "increased student mobility, will enable understanding of different cultures, and help university collaborations create a global citizenship." Johnson agreed, adding that such initiatives will create multilateral networks of universities, provided the governments are amenable to making this happen strategically. "If the UK and India were to decide to increase student mobility between their two countries, the governments would have to put in place incentives for institutions to use such systems more proactively," he remarked.

In the past two decades, China's rise has made it inevitable for the world to engage with it on challenges confronting humanity, such as those related to public health, climate change, renewable energy, and food security. While decoupling and disengaging will impede and hinder this process, it will also be unwise to allow universities to collaborate with China unquestioningly.

Johnson explained that the depth of collaboration with China has led to increased dependencies, which have not been examined from a public policy perspective. "We must use knowledge collaboration as a way of dialling down tensions wherever possible. However, we have to recognise that there may be a need for countries to operate a kind of 'traffic light' system to warn policymakers and funders of R&D when dependencies arise in particular areas of research having strategic dimensions," he said.

If dependencies with any country go above a certain threshold, funders and policymakers must make a strategic political consideration of whether it is in the national interest to continue at that level. Beyond such a threshold, collaborative research must be conducted only with the political consent of decision-makers.

DEVELOPING A GREEN TAXONOMY FOR INDIA: A RULEBOOK

RENITA D'SOUZA
Fellow, ORF

Renita D'Souza

As one of the world's fastest growing economies, the third-largest carbon emitter, and the second-most populous country, India's climate action will be decisive for global climate change mitigation. At the COP26 meeting, Prime Minister Narendra Modi delivered five elixirs to the fight against climate change. In doing so, he demonstrated India's readiness to be a leader on the international chessboard of climate change.

The highlight was the much-awaited commitment of becoming net-zero by 2070. This has significantly raised India's climate change ambitions. Committing to the five-point action plan while aspiring to be a US$5 trillion economy will make India's development pathway exemplary in circumventing the trade-off between climate change and economic growth—a lighthouse for emerging economies.

India's green transition in the face of its renewed climate commitments will require billions of dollars in investment. The investment peculiarities of green projects do not allow them to align with the risk-return profile demanded by conventional financial institutions. India has managed to attract only a trickle of the green finance that serves such projects. One of the reasons limiting the inflow of green finance is the high-risk perception it carries as an emerging economy.

This situation can be partially remedied by articulating a national green taxonomy. A green taxonomy standardises the notion of green finance and establishes eligibility criteria for it. The development of green taxonomy is likely to rule out plural definitions of green, minimise incidence of information asymmetry and in turn the risk of greenwashing. There are many investors keen on financing environmental protection and climate action while making returns. A taxonomy can provide guidance and confidence to such investors and boost green finance. This has motivated the research on India's green taxonomy.

Several nations have formulated their own version of a green taxonomy, with salient features that can be incorporated into the Indian version.

There are multiple ways in which a green taxonomy can boost green finance, reinforcing the need to develop such a framework. Importantly, it provides the much-needed visibility to green sectors other than renewable energy and helps finance them. By delineating eligible economic activities, the taxonomy helps financial institutions understand the investment peculiarities of green projects and leverage financial innovation to deal with them.

The taxonomy provides direction to develop green financial markets and the green finance ecosystem. It also helps formulate an appropriate incentive structure to promote green finance. Financial institutions and businesses can refer to the taxonomy to manage their environmental footprint while regulators can mandate disclosures based on the taxonomy. The government can use it as the touchstone to assess the alignment of environmental outcomes with a net-zero India.

The monograph on the green taxonomy identifies a five-point action plan, an illustrative rulebook that policymakers can refer to develop a taxonomy for India.

First, develop a taxonomy that focuses not just on climate change mitigation and adaptation, but also on other pressing environmental problems confronting India, and for economic activities in high impact sectors such as power, manufacturing, transport, agriculture, waste and buildings.

Second, eligibility criteria in terms of greenhouse gas emission thresholds must be based on latest climate science and be consistent with the 1.5°C goal.

Third, the technical screening criteria must be technology agnostic so that the taxonomy is not rendered irrelevant or redundant in case of a technological breakthrough. A technology agnostic taxonomy allows the nation the freedom to choose a green pathway from several alternatives.

Fourth, the taxonomy must be harmonised with international frameworks while adapting to the specific domestic circumstances.

And fifth, the taxonomy must align with national environmental norms and standards that may also need to be made comparable to international ones to circumvent greenwashing. New norms and standards may also need to be established where they do not exist.

There are also several recommendations for developing an ecosystem that supports the implementation of the taxonomy. Such recommendations relate to correcting the poor compliance culture in the context of environmental norms and standards, measures to circumvent greenwashing while implementing the taxonomy, and mandatory disclosure and reporting protocol aligning with the taxonomy.

CREATING HIGH OPPORTUNITY INCLUSIVE NEIGHBOURHOODS

Janhvi

Urban housing has always been looked at as a subset of real estate, and real estate investment in India has always had an element of speculation. Given the fast pace at which Indian cities are growing, it is important to look at housing provision beyond being a derivative of real estate. The challenge in the housing sector is to ensure that urban agglomerations become vibrant and inclusive living abodes for all.

Few Indian cities exist without migrant workers. Over time, they have become significant contributors

SPEAKERS

MALCOLM ATHAIDE
Co-founder and CEO at Agrim Housing Finance, India

AMITA BHIDE
Professor and Dean, School of Habitat Studies, Tata Institute of Social Sciences (TISS), India

REJEET MATHEWS
Programme Director, Urban Development, WRI, India

AJOY MEHTA
Chairman, MahaRERA, India

MODERATOR

DHAVAL MONANI
Director of Affordable Housing and Associate Professor at Anant National University; Resident Fellow at IDFC Institute, India

to the development and economy of that space. The economically weaker sections and lower income groups are moving up the socioeconomic ladder, making them the ideal candidates for rental housing. Yet, the policy focus has been on providing them with ownership housing. However, a fundamental shift has taken place that has opened possibilities to develop inclusive, sustainable, and resilient neighbourhoods with provisions for work, education, and health.

The Pradhan Mantri Awas Yojana programme aims to provide 20 million affordable homes, four million of which have already been granted. Ajoy Mehta noted that there remains a huge dearth of affordable housing, especially in cities like Mumbai. People either reside in slums or dilapidated buildings on the verge of collapse. The Real Estate (Regulation and Development) Act does not cover resettlement or free housing in entirety, and only covers the sales aspect. Affordability of homes depends on the land cost; since land cost is extremely high in cities like Mumbai, there is little possibility of building affordable housing.

Distance is also a factor since housing needs to be closer to employment opportunities, which are generally concentrated around the city centre. However, most affordable projects come up near the city periphery. In Mumbai, rental housing does not function as per the approach determined by the Mumbai Metropolitan Region Development Authority (FSI-led construction) for the target group in focus.

Currently, most migrant workers stay in the slums in extremely dilapidated conditions as these are cheap and closer to work opportunities. Amita Bhide argued that affordable housing should have acceptable standards where the opportunities remain constant, and workers can access relatively safe living conditions.

Insufficient data is a key hurdle in accurately assessing housing needs. According to Rejeet Mathews, one way to look at data is via surveys. Migrants often do not possess documentation, a recurring issue that means they cannot qualify for subsidised housing programmes. Studies show that saving money is of a higher priority to migrants than living in good quality housing.

Housing finance is the biggest challenge that individuals from the economically weaker sections grapple with because of a wide disparity in access to credit. Getting smaller loans from microfinancers is easy, but a housing loan requires them to be formally entrenched into the economy, explained Malcolm Athaide. As millions of informal workers receive salaries in cash, they have no access to formal credit.

A potential solution to this problem is the creation of high opportunity neighbourhoods through rental housing, which will also ease the challenges of finance. This could include elements like proximity to the workplace, and health and education facilities. Opportunity neighbourhoods in commercial and residential areas will have different considerations, including the people needed for informal and formal employment in the offices and the houses in the vicinity.

While rental housing emerges as a key solution, financing for such houses is unavailable. Most Indians prefer ownership and rent mainly out of compulsion. “The returns from a rental housing investment are just about 2-3 percent. Why should I invest? If fixed deposit is giving 5.5-6 percent, why should I invest in a house and get a 2-percent return for rents?” Mehta argued. He also pointed out that regulatory problems also force people away from renting properties.

The Chinese special economic zones (where they set up worker estates in cities) is a potentially good model to emulate. Local governments build and manage these estates, allowing industries to invest and develop. Bhide argued that this model could work in India as well, as could the UK’s social landlords model. Tamil Nadu and Kerala have successfully implemented similar rental housing model for women labourers. Mumbai too has a provision for multipurpose housing for women, and there is scope to consider such plans for the migrant labour community.

Most affordable housing projects are relegated to the periphery of cities. According to Mathews, since this is inevitable given the space constraints in most cities, an ideal solution will be to ensure good transportation systems. Another approach is to provide trunk infrastructure in existing high-density, low-infrastructure neighbourhoods.

The panellists agreed that rental housing is the best way to provide affordable housing. A regulatory framework could be set up to facilitate affordable housing and can ease the pressure from exhaustive housing demand. To achieve inclusivity, the experts suggested that the approach could look at different parameters and factors that affect affordability.

Day 2
December 2, 2021

FROM CRISIS TO RECOVERY: INDONESIA'S VISION FOR THE G20 PRESIDENCY IN 2022

Shruti Jain

DIAN TRIANSYAH DJANI
G20 Sherpa, Indonesia

The Group of Twenty (G20) countries account for 80 percent of the world's GDP, 75 percent of trade, and 60 percent of the global population. The G20 has emerged as one of the leading global forums for multilateral cooperation, providing an equal footing to both advanced and emerging economies. After an eventful year led by Italy, the G20 presidency for 2022 has been taken over by Indonesia. The baton will then be passed onto India in 2023. This 'duplex of Asian G20 presidencies' led by Indonesia and India will take on a formidable agenda, one that is likely to shape the world economy for the next decade.

Restrictions on transport and movement during the COVID-19 pandemic caused barriers to economic activity in most sectors. A report by United Nations Conference on Trade and Development states that in the first quarter of 2020, the global economy contracted by 3.5 percent and global manufacturing dropped by 6 percent. While the vaccinations have paved the way for global economic, social and health recovery, the growth has still been uneven. For several emerging markets and developing countries, the recovery has been constrained by factors, such as the lack of vaccinations, a resurgence of variants, high debt burdens, and disrupted global value chains.

Global coordination is essential to ensure that recovery from the pandemic is even and equal. The G20 as an international forum plays a key role in steering a recovery pathway that is inclusive, especially of the Global South. According to Dian Triansyah Djani, "Recovery must be done together, the world must recover at the same pace and no gaps should exist in order for us all to realise a full global recovery."

Within this context, the G20 Indonesian presidency has announced its main theme—recover together, recover stronger. The Indonesian presidency aims to ensure the collective ability to create a sustainable and inclusive underpinning for global growth and recovery. Indonesia's three main priority areas—global health architecture, digital transformation, and sustainable energy transition—intend to provide a "comprehensive exit strategy to support global recovery and shape a more adaptive G20 against future crises."

"We will focus on several areas of priorities — promoting productivity, increasing resilience and stability, ensuring sustainable and inclusive growth as well as enabling environment and partnership, not forgetting to forge a closer collective global leadership. The theme and priorities that we are engaging in will ensure that the world can emerge from the current crisis in a better and more resilient shape," Djani said.

To build the path of global recovery, the Indonesian presidency has recognised six priority areas in the finance track—synchronising exit strategies to support global recovery, containing the scarring effect of the pandemic on the economy to support stronger future growth, strengthening the payment system in the digital era, promoting sustainable finance, expanding an inclusive financial system, and the international tax agenda.

The Indonesian presidency has also set 12 priority areas under the sherpa track, which will be discussed in 11 working groups and one initiative group. "Contrary to the Italian Presidency, we will add two other engagement groups, the Supreme Audit Institution 20 as well as the Parliament 20," Djani said.

In recent years, the G20 has been criticised for its inadequacy, and lack of legitimacy and consensus building while addressing global challenges. The upcoming G20 presidencies provide an opportunity to the Global South to restore the multilateral systems and set a more inclusive agenda.

"In the spirit of our presidency, we want to make sure that the G20 is relevant not only to the member countries but also for the rest of the world and its citizens. Hence, we are inviting representatives from all parts of the spectrum, including the Pacific Islands Forum as well as the CARICOM countries," Djani stressed.

Given the global challenges posed by the pandemic, the onus to seek common ground on issues related to global trade governance, international financial architecture, global health architecture, energy transition, digital transformation and sustainable development lies with the upcoming G20 presidencies. The G20 platform offers new opportunities for Indonesia and India to place Asia at the forefront of global social, economic and health recovery. It is essential for both countries to build synergies and synchronise their efforts to forge the path of inclusive growth.

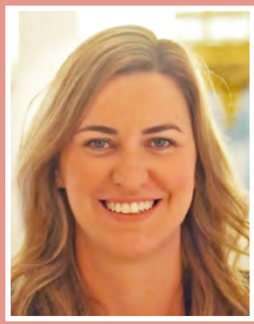
"Indonesia will expect the continuity from India, which we trust will bring the torch of the developing world and bring in the development perspective in the G20 discussion," Djani said.

THE RISE AND FALL OF MULTILATERALISM

Aarshi Tirkey

The global order is in transition. Since the advent of the 21st century, the world has been moving towards structural and normative multipolarity. However, this transition has brought with it challenges to the multilateral frameworks that continue to reflect the power structures of a bygone era. During the COVID-19 pandemic, multilateral organisations struggled to perform as platforms of international cooperation. Some of the issues that came into focus include undue political influence and the absence of equal representation for all countries. Multilateralism is going through a period

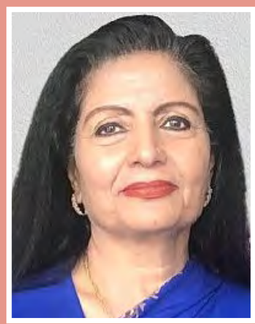
SPEAKERS



ERIN WATSON-LYNN
Special Advisor, G20 Women Summit, Australia

HERIBERT DIETER
Senior Fellow, German Institute for International and Security Affairs, Germany

AMAR BHATTACHARYA
Chair, UN Independent Taskforce on climate finance; Senior Fellow, Brookings Institution



LAKSHMI PURI
Former Assistant Secretary General UN, and Ambassador of India

MODERATOR

RAJAT KATHURIA
Dean, School of Humanities & Social Sciences, and Professor of Economics, Shiv Nadar University, India

of 'crisis' as countries question its relevance and its place in their foreign policies.

Rajat Kathuria acknowledged that this crisis is unlikely to be resolved soon. However, it is imperative that instead of categorising the journey of multilateralism as a 'rise and fall', it should be referred to as 'highs and lows' or 'ups and downs'. This is because despite its current turbulent phase, multilateralism cannot be written off just yet. Many positives have emerged from the current multilateral system and a few setbacks should not overshadow these achievements.

Amar Bhattacharya noted that the international community's attempts to slow down climate change and push for a sustainable future are among the biggest accomplishments of the current multilateral system. Other achievements include the numerous disarmament treaties, humanitarian projects, standards setting, and the comprehensive human rights covenants.

There are many factors behind the onset of the current crisis, including the lack of representation of emerging powers in the United Nations Security Council (UNSC), and a lack of consensus-building in the international community. The panellists identified the 'hijacking' of intergovernmental organisations by powerful states and emerging powers wanting a say in the multilateral system as the two key causes for the crisis. Other issues identified include the lack of reforms of international institutions such as the International Monetary Fund (IMF) and the World Bank, and the elitism and implementation paralysis at the UN. Ambassador Lakshmi Puri noted that powerful states have attempted to bend international law to their convenience, while global institutions and intergovernmental forums have lost focus of their agendas. Additionally, the international community's inability to effectively deal with the COVID-19 pandemic has highlighted the failures of multilateralism. Nevertheless, there are certain feasible steps to remedy the shortfalls in the current multilateral system. For instance, a review conference under Article 108 and 109 of the UN Charter to design and build a new 21st century is a viable option, according to Ambassador Puri.

Erin Watson-Lynn noted several measures that could alleviate the current situation. These include strengthening the UN's crisis response capacity and financial viability, increasing the number of UNSC permanent members, and decreasing the ambit of global intergovernmental institutions to focus on important issues. For instance, the G20's scope and ambit has widened over the years, but the forum has been unable to achieve its intended outcomes, she noted. While it is better to have some dialogue than none at all, it takes considerable political will and focus from members of international platforms to act upon the agreed commitments.

Heribert Deiter stressed that the current multilateral system had indeed already failed. Global trade and finance, once thought to be the strengths of the system, have now become a liability. Additionally, with the IMF and World Bank losing relevance due to deep-rooted structural issues, it is perhaps time to consider alternative systems for the international community. A system of general trade agreements between like-minded states, which was the norm during the Cold War, may be the apt alternative to bilateral or multilateral agreements, Deiter said.

Multilateralism appears to have run aground not only because its agenda has changed, but also due to the rise of the Global South. Multilateralism must adapt to the new challenges posed by the modern world order or be replaced by a new system better suited to the challenges of the 21st century. As countries increasingly coalesce in smaller groupings across regions, these ‘regional blocks’ could well become the ‘building blocks’ of a fresh approach towards multilateralism.

DECRYPTING CRYPTO

Shashidhar KJ

SPEAKERS

USSAL SAHBAZ
Managing Partner, Ussal Consultancy, Turkey

DONNA REDEL
Professor, Fordham Law, USA

MEGHNA BAL
Fellow, Esya Centre, India

MANHAR GAREGRAT
Executive Director & Chief of Staff, CoinDCX, India

OLA DOUDIN
CEO and Co-founder, BitOasis, UAE

MODERATOR

SIDHARTHA SHUKLA
Journalist, ET Prime, India

Bitcoin, the first cryptocurrency, was created in the aftermath of the 2008 global financial crisis. Satoshi Nakmoto, Bitcoin's creator, was critical of central banks and financial intermediaries, saying that the conventional fiat currency requires enormous trust to make it work.

More than 13 years later, as the world fights waves of the COVID-19 pandemic, these observations still hold water. The global financial ecosystem is experiencing strain from the pandemic as inflation surges with increased money supply, consequently reducing the value of fiat currencies. Against this backdrop, investors are increasingly turning to cryptocurrencies as a hedge against inflation.

Ussal Sahbaz, explained this phenomenon by alluding to the Turkish Lira's devaluation. "Turkey has an open regime where one can transfer US Dollars or Euros easily abroad and there are no restrictions on buying foreign currency. That being said, the interest in crypto also reflects the fact that the citizens are cautious about keeping their foreign currencies in the resident banks. Because of what we saw in the Euro debt crisis ten years ago, those accounts can be frozen too. So given this lack of trust in the traditional financial system, I think it is kind of natural in the emerging markets that people are hedging themselves by buying cryptos."

However, over the last decade, there have been several debates on how to deal with this new financial instrument. Government responses range from a complete ban of cryptocurrencies in favour of a state-mandated digital currency (China), to more liberal regimes that permit and govern cryptocurrencies (Japan). Regulators across the world are trying to increase or reduce their jurisdiction on cryptocurrencies, financial instruments that are designed to work outside the centralised forces of government.

"At the current moment, we are having a regulatory squabble in the US, as to who is going to regulate the various cryptos and amidst the squabbling they still have not put forth a regulatory framework that is helpful for…lawyers or for businesspeople or anybody that's doing investments in this area," said Donna Redel.

Redel said that the US government is regulating Bitcoin as a commodity but there is not enough clarity on other cryptocurrencies, and the Securities and Exchange Commission is weighing in on a case-by-case basis.

Manhar Garegat said that the Reserve Bank of India (RBI) has consistently opposed cryptocurrency operations in the country while the Indian markets regulator, Securities and Exchange Board of India (SEBI), has mostly stayed out of the debate.

Meanwhile, the central government has introduced a legislation in parliament that seeks to ban all private cryptocurrencies. This comes on the back of the Supreme Court of India setting aside an RBI notification that effectively banned cryptos in India.

Garegat explained that industry players are in conversation with various officials to clear the air and have asked the government to regulate cryptocurrencies as an asset class rather than currencies, legal tenders, securities or commodities. But considering the varied use cases in decentralised finance, Garegat conceded that defining them only as assets will not be enough. "We sort of started with one aspect and we said we will build on top of that," he added.

Ola Doudin offered an overview of the regulatory landscape in West Asia. She explained that the currencies of most countries in the region are pegged to the US dollar and are thus subject to any change in its valuation. Therefore, any crypto adoption in West Asia is not for payment purposes but for investment and speculation.

She added that the UAE and Bahrain are ahead of the curve in setting up preliminary regulatory frameworks but there is attention from both central banks and capital market regulators since cryptocurrencies function similarly to securities and currencies.

“Ultimately the ones that we see taking the lead are the central banks because their top concerns are anti-money laundering (AML) and combating financing for terrorism (CFT) regulations, information sharing, dominantly led by the financial intelligence units. The capital markets are still taking a back seat,” she explained.

Meghna Bal noted that the Indian government is suspicious of cryptocurrencies, and the enforcement bodies have summoned crypto-exchanges for violations of the Foreign Exchange Management Act in the absence of regulatory clarity.

Bal opined that cryptocurrencies should be regulated as any other financial product and that existing rules are sufficient to manage them. “It is not that the RBI, the regulator of FEMA, cannot bring crypto-exchanges under its ambit. It just has to issue a notification and exchanges would have to apply for a money changing licence to create regulatory clarity,” she said. The panellists agreed that creating a new regulatory body exclusively for cryptocurrencies would be counterproductive and only serve to muddy regulatory waters.

Though there is a tug of war between regulators, cryptocurrency adoption does not show any signs of abating. Large institutional investors like insurance companies, pension funds and wealth funds are all dipping their toes. Therefore, it is imperative for regulators to bring clarity and transparency to safeguard people’s money.

Regulators must recognise that cryptocurrencies were born as a reaction to the lack of trust in the actions of central banks and their inability to ensure better financial participation and outcomes for individuals over decades. Adversarial stances towards cryptos do not help, and governments that adopt such positions risk missing out on the innovation that friendlier shores can accommodate.

GENDER RESPONSIVE RECOVERY: POLICY AND FINANCE FOR FOSTERING EQUALITY IN A PANDEMIC

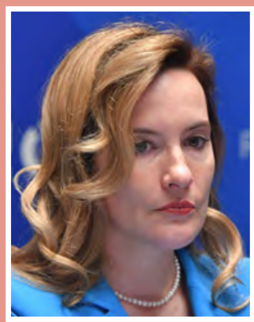
Ananyashree Gupta

Women have faced the brunt of the socioeconomic impact of the pandemic, from unemployment to loss of income and livelihood opportunities, rise in food and nutrition insecurity, rise in unpaid care work, and increased instances of domestic violence. For holistic post-COVID-19 economic recovery in India, it is imperative that women and girls are at the front and centre of such efforts. Data from December 2020 showed that almost 47 percent of working women in India suffered permanent job loss compared to only 7 percent men. Additionally, one out of every four

SPEAKERS

PRIYANKA CHATURVEDI
Member of Parliament, Rajya Sabha, India

YAMINI AIYAR
President and Chief Executive, Centre for Policy Research, India



VICTORIA PANOVA
Vice President for International Relations, Far Eastern Federal University, Russia

CHETNA GALA SINHA
Founder and Chair, Manndeshi Bank, India

MODERATOR

SUNAINA KUMAR
Senior Fellow, ORF

women are downshifting their careers or leaving the workforce altogether due to the high-pressure experience during the pandemic with intensified domestic duties.

As the pandemic persists, it is crucial to understand the impacts of these issues on women. According to Priyanka Chaturvedi, it is important to ensure that the focus remains on ensuring more empowerment to women, an economic growth model for women, and placing them at the centre of the post-pandemic recovery. For instance, the Maharashtra government, she said, has successfully identified such gaps and organised gender-based vaccination camps, especially focusing on pregnant women and lactating mothers.

Given the pandemic's impact on the female labour market, innovative policy measures are needed to bring women back into the workforce. Yamini Aiyar noted that even during demonetisation, women were the first to lose jobs and the last to recover. This points to the larger issue plaguing India's labour market—even in the pre-pandemic period, the country had one of the lowest female labour participation rates among the major economies.

It is also important for India to rethink the structure of its social safety architecture and make greater investments in social security nets to better respond to the economic needs of women, especially when they exit the labour force.

School education in India also has a gendered dimension. Amid the closure of schools, both public and private, it is likely that girls were harder hit than boys, risking many of the gains made in recent years to improve girls' education across the country. As schools reopen, parents may opt to prioritise the boy child's education over the girl's, especially if incomes recover slowly. Additionally, pandemic-induced stresses could exacerbate social structures that place excessive dependence on girls to support their families through domestic or economic activities, which may impact their attendance in schools.

The panellists agreed that a structured and agile policy response is needed, especially one that is cognisant of the different social realities for girls and boys, to lessen the impact on girls' education. Victoria Panova drew parallels between the state of women in Russia and India. She also noted that while women experienced huge job losses, those in leadership positions fared much better than men in similar roles. For instance, Finnish Prime Minister Sanna Marin's policies focused on issues of equality, environmental sustainability, and fair social security, which helped curb the spread of COVID-19 in the country, Panova said. Despite women evidently doing well in positions of political authority, they form only a small proportion of parliamentarians around the world. More women are needed in policymaking processes to ensure equitable access to digital technologies, finance, and infrastructure.

Chetna Gala Sinha noted that policies are also needed to encourage the greater financial inclusion of women, eventually moving from financial inclusion to the financial integration of women. For this, policy must focus on creating jobs for women in women-owned enterprises, especially when it is tough to gain and grow jobs for women in other sectors. There is also a need to reflect upon regulations for granting soft loans to women and first-time borrowers.

Aiyar noted how political parties stereotype women as homemakers during election campaigns, with poll promises are tailored as such. Instead, she suggested, parties must ask women what they want.

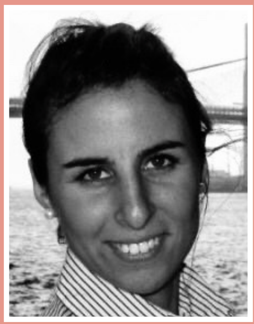
Governments and industry giants like Amazon have already begun programmes to encourage women's financial independence, but in the post-COVID-19 recovery phase, more focused policies will be needed to bring women back into the workforce. Additional efforts must be made to address other issues that impact women, including domestic violence and access to education.

WILL THE BANKS JOIN THE GLASGOW AGREEMENT?

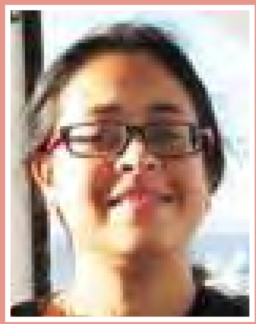
Mannat Jaspal

The recently concluded COP26 and Glasgow Climate Pact propelled countries to ramp up their climate target ambitions, but failed to raise climate finance commitments by developed nations under the common but differentiated responsibility principle of international environmental law. The commitment by developed countries to deliver US$100 billion in support by 2020 is likely to get pushed by a few years. Therefore, all hopes of driving the net-zero transition hinges on the ability to mobilise global private commercial capital. Banks and financial institutions will be key to this process.

SPEAKERS



DELFINA LOPEZ FREIJIDO
Head of Sustainable Finance, Banco de la Nacion Argentina



SAON RAY
Professor, ICRIER, India

RATHIN ROY
Managing Director, Overseas Development Institute, UK

SURANJALI TANDON
Assistant Professor, NIPFP, India

MODERATOR

MANNAT JASPAL
Associate Fellow, ORF

However, research shows that commercial banks still find it easier to invest in fossil fuels and brown industries. According to a report by the Climate Policy Initiative, 38 of the 60 largest commercial and investment banks have committed to exclude direct financing to coal fired power plants and yet provided US$52 billion to the 30 largest coal power plant developers in the world. Indian banks rank fourth globally in financing coal plants, having provided US$155.6 billion in loans between 2012 and 2019.

According to Delfina Lopez Freijido, the financial community, including the banking industry, has been making efforts to align their business models with sustainable development goals. Trillions of dollars of green bonds have been issued, which is testimony to the growing popularity and demand for green investments. This action has been propelled by an increased sophistication in the market in terms of tools, standards, frameworks, data, reporting and disclosures. However, the global green market represents less than 2 percent of the global capital market and most of the lending is still not aligned to sustainable development and climate-specific goals.

Therefore, it is critical to understand the challenges faced by global banks, asset management companies, and financial institutions when investing in green sectors, and encourage the financial system to broaden, deepen, and accelerate the transition to a net-zero economy.

One of the biggest challenges the industry faces is that the definition and standards of green finance are varied across sectors and countries, Saon Ray said. It is an evolving concept that leaves room for subjectivity and speculation. Therefore, it is critical to design a standardised taxonomy and reporting frameworks that can guide financial institutions in their assessments and investment decisions. Banks need to embed climate financial risk into their supervisory approach, which will allow them to manage climate related financial risks and opportunities better. State financial corporations can lead the way and advise banks and financial institutions on products and instruments, which will help address the issues of quantifying and measuring risk. A reasonable taxonomy with good business planning and credit analysis will help reduce financial risk and allow banks to capitalise on the opportunities that come from more sustainable investments.

Banks lend finance consistent with the theory of efficient markets to maximise profit and thereby maximise prosperity in society. Rathin Roy said that banks will invest in green projects only if it is profitable, else they will be effectively taxing the shareholders by earning less or taxing the taxpayers in case of mounting stranded assets (given the history of stranded assets, including the 2008 financial crisis). He warned that overregulation will harm any efforts made to green the financial system. Instead, fiscal and government policy must use market-friendly incentives to encourage investment in green sectors. Lopez echoed this argument, remarking that regulations must work in tandem with policy and governments must clean up the cross incentives and incorrect market signals.

Banks are an important fulcrum in the entire financial system, particularly in emerging and developing countries. With increased stakeholder activism and pressure from investors, financial institutions are already making concerted efforts to transition their portfolios away from fossil fuels.

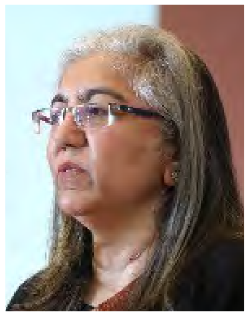
But, Suranjali Tandon noted, the transition will not happen overnight, and must be tapered by prioritising sectors and recognising the different channels through which the banking system can lead the way. It is important to acknowledge the diversity within the financial sector and the banking industry to ensure the efforts are effective and efficient. Tandon added that the central banks are in the business of pricing risks and can help in stress testing so that risk averse producers and consumers too can make more sustainable investment decisions.

Financial institutions can play a pivotal role in promoting an economy-wide transition, one that is not limited to financial withdrawal from carbon emitting sectors. They can have a tremendous influence over companies' production behaviours and ensure sustainable practices across the value chain. While policy and regulatory support is instrumental in facilitating the transition, corporate governance in financial institutions, stewarded by the board of directors, can help ensure long-term climate resilience, which will prove to be critical for business survival in the future.

CONNECTING CONTINENTS AND VALUES IN THE DIGITAL AGE

Dhaval Desai

SPEAKERS



RUCHITA BERI
Senior Research Associate, Manohar Parrikar Institute for Defence Studies and Analyses, India

AARON AKINOCHO
CEO, AG MEDIAS CONSULTING; Editor-in-chief, Comprendre Media, Benin

KWAME OWINO
CEO, Institute of Economic Affairs, Kenya

SANUSHA NAIDU
Senior Research Fellow, Institute for Global Dialogue, South Africa

MODERATOR

VIVAN SHARAN
Partner, Koan Advisory, and Visiting Fellow, ORF

Connectivity has been at the centre of discussions within the context of South-South cooperation for a few decades now. Within just a few years, and particularly during the COVID-19 pandemic, the discussions have swiftly moved to digital connectivity, giving rise to several conceptual challenges. Differing stances on digital payments and e-commerce have made the developing countries approach new areas of technology cooperation with caution. Though South-South cooperation has come far from the G77 era and there is greater convergence, several issues, including equity and access to digital tools, continue to pose challenges. As the world goes increasingly digital in the post-pandemic era, Kwame Owino, Aaron Akinocho, Ruchita Beri and Sanusha Naidu discussed how Global South countries, especially India and those in Africa, can converge and cooperate on issues impacted by the new digital paradigms of connectivity, equity, and accessibility.

Embracing the digital age is no longer an option, and India and Africa must find ways to build confidence and engage on these issues. Such engagement will necessitate shared values in terms of digital equity and access. Politically and socially, they will have to determine how the digital age will not exacerbate existing inequities. The pandemic has widened the equity and accessibility divide between those who do not have the privilege to work from home and move up the productivity ladder, and those who could afford and access means to the digital transitions. Therefore, normative values may cease to matter in the digital age if they fail to derive monetary value.

The closure of schools and colleges made education one of the pandemic's worst-hit areas globally. The biggest challenge was the lack of adequate investments in essential digital infrastructure to continue education, leading to an exponential rise in the demand for global online education services. While students who could afford and access the digital tools could transition to online education, skill-building suffered in the total absence of physical skilling labs. Classroom teaching had to transition almost overnight to the digital mode, which most developing countries found extremely difficult. The pandemic also highlighted the need for cooperation between institutions and universities.

According to Owino, Africa can gain a lot from India's technological expertise in establishing such background infrastructure, especially to provide affordable access to data to aid the digital transition. Referring to recent studies, he pointed out that the significant barrier for Africa in the next decade will be access to the digital tools of education. "Africa, especially the Anglophone countries where English is the primary language, presents a huge market for Indian tech firms with global footprints," he said. As the common language of instruction, English will supplement any effort for deep and meaningful engagement in this area. Despite China cornering much of the market, Indian tech firms will continue to have their own space, which can grow significantly in the years to come.

The digital divide, in some ways, is following the same trajectory as the physical divide that is witnessed across Africa. Just ten countries in Africa, a continent of 64 nations, are responsible for driving 94 percent of the continent's online business. Of that, Kenya has a large share. Still, South Africa accounts for nearly 50 percent of intra-Africa trade, especially in digital product exports.

Akinocho noted how the digital divide was more pronounced in smaller countries with poor digital infrastructure. Establishing digital connectivity is the foremost challenge in such countries, notwithstanding their size. Bilateral partnerships with countries like India, which bring democratic values and match the competitiveness of China's soft loans, can help Africa channel investments in digital connectivity. He also urged the Francophone African countries to start giving prominence to the English language to facilitate greater cooperation with India. "We are now in a connected world, and the French-speaking African countries have to break the language barrier and embrace English," he said.

Over the years, India's engagement model with Africa has been demand-driven, consultative, involving local resources and supported by capacity building initiatives based on Africa's priorities. India recognises Africa's pursuance of Africa-owned, Africa-led development. This development cooperation model has been possible through several instruments such as India's lines of credit. The importance accorded to Africa by India in its development cooperation agenda can be seen in the fact that about 40 percent of India's lines of credit to developing countries go to the African continent. The cooperation has focused on primary sectors such as agriculture and agri-based industries, irrigation, infrastructure, energy, and health.

Development cooperation in health has gained immense significance during the pandemic. The pandemic exacerbated inequities in developing nations in access to primary healthcare and medicines. India has constantly raised its voice against vaccine nationalism and has called for global access to the COVID-19 vaccines. Through its friendship initiative, India has supplied millions of vaccines to several countries across the world, including in Africa.

"India has stood by African countries and helped them voice their concerns regarding inequity of access and also ensured that its development partnerships in Africa derive tangible benefits for the intended cause," Beri remarked. She also highlighted the Indian Technical and Economic Cooperation programme, which helped several African countries initiate capacity building programmes in various sectors.

While digital has become the new normal, both India and Africa must explore more such opportunities for cooperation in multiple areas that technology offers. India has worked to bridge Africa's digital divide since 2009 through the Africa e-network, relaunched in 2019 as the e-Arogya Bharti programme, to provide medical consultations and tele-education.

India also launched the e-VidyaBharti programme, which provides access to African students to over 500 courses in various disciplines and offers 15,000 scholarships to African students to pursue higher education in India. "These online initiatives for Africa have expanded India's reach in the continent as compared to its physical outreach through the I-TECH programme," Beri pointed out.

What makes the India and Africa relationship dynamic is the historical basis upon which it is defined, said Naidu. "You can't ignore the value proposition that South-South cooperation has when it comes to the two regions."

The way India defines its relationship with Africa, its role in fighting for social justice and freedom from the colonial powers form the backbone of the mutual ties even now. The questions of equity and access set value propositions defined by India's historic and unwavering stand on apartheid, racism, discrimination, engagement with the Non-Aligned Movement and even the Bandung Conference.

"Yes, we have different interpretations of it, but I think you can't ignore it because it plays a vital if not pivotal role in how India rediscovers Africa in the 21st century. Those values were non-negotiable around trade ties, cultural and people-to-people exchanges, development cooperation through Lines of Credit and I-TECH. They will continue to bedrock future India-Africa partnerships in the digital world. Just as it is with shared values, it is also a matter of shared aspirations," Naidu remarked.

WELLBEING 360: ASSESSING THE IMPACT OF THE PANDEMIC ON CHILDREN

Mannat Jaspal

SPEAKERS

MAAIKE BIJKER
Monitoring and Evaluation Specialist (Research), United Nations Children's Fund (UNICEF)

ANANYA AWASTHI
Assistant Director, India Research Centre, Harvard T.H. Chan School of Public Health, India and Founder, Anuvaad Solutions

MAYURI GHOSH
Head, Healthy Cities and Communities Initiative, World Economic Forum

BHAVANI RV
Poverty and Social Protection Specialist, Food and Agriculture Organization (FAO), Bangladesh

MODERATOR

LEENA WADIA
Senior Fellow, ORF

The COVID-19 pandemic has wreaked havoc on all, but the impact is felt most acutely by children across health, education, and social parameters.

Issues of nutrition, food security and education access are often referred to as wicked problems with many interdependent factors and interlinkages, and compounds when viewed in India's development context. As India is working towards becoming an economic powerhouse, it continues to harbour half of the world's undernourished children. While this is a major concern in rural India, children in urban areas suffer from obesity. This dichotomy points towards an unbalanced food consumption pattern. Various social, health and economic inequities were always at play. However, the pandemic has exacerbated the long-standing issues of malnutrition and food insecurity among children.

The lockdowns have widened the rural and urban divide, said Ananya Awasthi. While psychological stress and mental health issues have been uniform across the spectrum, food consumption patterns among children have been varied. In urban areas, the consumption of nutrient-deficit processed food has risen and increased social media exposure and targeted advertising during the lockdown has contributed tremendously to this worrying trend. In semi-urban and rural areas, the closure of government schools disrupted the food security net for millions of children who were dependent on the mid-day meal scheme. While the vast cohort of *anganwadi* and ASHA workers have tirelessly strived to improve the health outcomes during the pandemic, the last-mile delivery of essential health services in rural areas have been severely impacted.

The pandemic caused further shocks in the education system with school closures and the tenuous transition of students and teachers to online learning modes. Many schools, including private and public, faced several challenges such as rise in the number of dropouts (particularly among female students), fall in productivity and learning outcomes, and an increase in digital divide.

The lack of affordable resources caused immense learning losses and the situation is particularly dire for children from vulnerable and marginalised communities. Access to online resources, internet and digital platforms is the lowest in South Asia, and the falling educational outcomes among children during this period will have a catastrophic impact on their future prospects, said Bhavani RV. Even those who did manage to have some access, could not gain as much since the effectiveness and rigour of education standards via the digital medium is highly questionable.

Bhavani said that the pandemic has triggered many social issues, including a rise in child labour, teen pregnancies, domestic violence, early child marriages, increased vulnerability to child abuse and child trafficking, high infant and maternal mortality rates, and rising cases of stunted children and anaemic women and COVID-orphans.

Evaluating the impact of the pandemic over a larger timeline, Maaike Bijker remarked that we have a lost generation of children, whose weak performance over various health and educational outcomes will have a debilitating bearing on many social parameters. Unemployment levels will rise, the proportion of people below the poverty line will increase, and income inequality will deepen. These factors have the tremendous potential to threaten the overall economic, political, and social stability of a nation.

Bijker added an interesting inter-generational perspective on how the nutritional status of the mother affects the child's health and learning abilities, while the educational level of the mother has a strong bearing on the nutritional status of the child. It is important to consider such interlinkages when designing long-term policies for children in the context of pandemic recovery.

All panellists echoed the need to design and scale cost-effective, evidence-based, inclusive, and sustainable policies to tackle the undeniable challenges posed by the pandemic, particularly for children and women.

Nutrition-specific and nutrition-sensitive interventions that takes cognisance of the different realities of children in India are required. Behaviour change communication is key to improve healthcare outcomes. Education and awareness dissemination can play a crucial role in this regard, both in urban and rural areas. The government must ramp up their nutrition-specific budgets. There is sufficient evidence to indicate a strong association between supplementary nutrition programmes and nutrition outcomes.

To overcome the learning loss among children, governments and civil society organisations must come together to address the various challenges facing the education system today. Remedial programmes should be designed that recognise the varied home learning environments of students. Teachers too need to be sensitised and supported during the transition process.

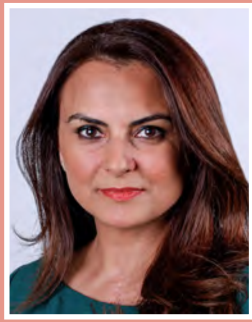
While the government has made considerable efforts to attenuate the effects of the pandemic, state capacity needs to be expanded in both size and scope. To achieve a long term and meaningful solution, a multistakeholder approach is needed. The private sector, multilaterals, civil society organisations, academia and the community at large must play their parts to ensure the holistic wellbeing of all children.

THE ARABIAN SEA RESET: FROM REGIONAL DISPUTES TO GROWTH AND PROSPERITY

Mannat Jaspal

SPEAKERS

HASAN ALHASAN
Research Fellow, Middle East Policy, IISS, Bahrain



MINA AL-ORAIBI
Editor-in-Chief, The National, UAE

INDRANI BAGCHI
Associate Editor, The Times of India

MODERATOR

NAVDEEP SURI
Distinguished Fellow, ORF

West Asia witnessed a significant realignment in 2021. Several major trends and alliances are being seen in the Arabian Sea landscape, with regional powers willing to bury the hatchet and look past internal conflicts for the sake of security, harmony, and economic prosperity. At the Gulf Cooperation Council meeting in Saudi Arabia, the rift between Qatar on one side, and Saudi Arabia, UAE, Bahrain, and Egypt on the other was mended. While there may not have been a full rapprochement, at least some of the hostilities seem to have abated. Significant progress has also been made in the Israeli-UAE relationship, with several initiatives taken not just to establish diplomatic relations but a broad-based and long-standing relationship. Remarkable headway has also been made between the UAE and Turkey (first with the visit of UAE National Security Advisor Sheikh Tahnoun Bin Zayed and then Abu Dhabi Crown Prince Sheikh Mohammed Bin Zayed), with reports indicating commitments of billions of dollars in investments. The formation of the West Asia Quad between India, Israel, UAE, and the US seems to be another promising development that can wield significant heft in the region.

According to Mina al-Oraibi, common challenges and threats, such as the pandemic and climate change, have been a unifying agent, and countries recognise that economic prosperity and political stability can only be achieved collectively. For example, the UAE announced the ten principles that will govern the country's future over the next 50 years, and development and economic prosperity have been touted as the guiding levers for its foreign policy.

Countries that are embroiled in internal and sectarian conflicts, such as Iraq and Syria, are witnessing protests mainly by young people who are now vociferously demanding legitimacy through competence and good governance. Political crises in Tunisia, the rejection of the Islamic parties during elections in Iraq, and anger towards the Hezbollah in Lebanon all point to the petering out of 'political Islam'. However, on the contrary, the Taliban sweeping to power in Afghanistan has been a worrying spectacle.

Hasan Alhasan echoed al-Oraibi's reasoning that there has been a pronounced but fragile de-escalatory trend in the region. This can be attributed to economic fatigue and pandemic distress and the modernisation of regional economic powerhouses, such as Saudi Arabia and the UAE, that depend on a stable regional environment for their strong geopolitical and economic positioning. He added that while economic factors are the significant propellors, strategic drivers are also at play. A degree of uncertainty about the US's commitment to the region as a reliable security partner has driven the regional players to de-escalate and manage external differences more diplomatically. He also warned of the potential spoilers to the whole de-escalation process, such as the impact of Houthi movement in Yemen on Iran-Saudi relations. Iran's evolving nuclear programme could be another possible spoiler. So, while there has been a regional de-escalation, it is a very fragile process, one that could easily be undermined.

India and the Arab region have also witnessed dramatic progress and strong momentum in ties. Indrani Bagchi explained that India has a solid historical and cultural connection with the Arab world. Millions of Indians reside and work in the Gulf, and India enjoys strong trading partnerships with many Arab nations. But given India's large and diverse Muslim population, the geopolitical dynamic between the regions has always been complicated. India has been building connections with the Gulf Arab world and the Levant Arab world, most prominent being the India-UAE relationship and India-Israeli ties. Relations with Saudi Arabia have also been on the uptick and Iran remains an important partner, especially in the current

Afghanistan context. The core of the relationship lies in mutual economic advantages but it is also driven by India's transformation in the technology sphere and its supply of unskilled and semi-skilled labour to the region.

Bagchi also noted that the US has been trying to reset its position with its Arab partners. A fundamental factor has been the US's reduced energy dependence on West Asian countries and also its shifting priorities to counter China's growing prominence and hegemony in the global world order. Interestingly, China has become the largest trading partner for the Arab Gulf states and is an increasingly important source of foreign direct investments. Today, China is the largest competitor for the US, and West Asia could become an area of contestation between the two.

While the Arab region is witnessing monumental changes, it continues to be an important and strategic partner for India and the growing engagement between India and the Arabian Gulf countries augurs a period of sustained economic prosperity and political stability for the two regions.

#SHEINVESTS: WOMEN AS MARKET-MAKERS

Shruti Jain

SPEAKERS

SHILPA KUMAR
Partner, Omidyar Network India

RADHIKA GUPTA
MD & CEO, Edelweiss AMC, India

MODERATOR

SHAILI CHOPRA
Founder, SheThePeople, India

Women have traditionally faced significant barriers to accessing and using financial services, limiting their autonomy and decision-making power. However, in recent years, the proliferation of digitalisation has opened up new opportunities for women to access financial products and services. COVID-19 has also accelerated the pace of the digital revolution in the financial services sector around the world, providing more choices to women. Shaili Chopra noted that several new players are putting traditional banking systems up for significant change much sooner than they might have anticipated.

Women's growing contribution to the development of financial markets as fintech leaders, retail investors, angel investors, venture capitalists, and private equity owners cannot be overlooked. With increased spending power, women's control over wealth has risen substantially. Today, women represent a significant investor market segment; thus, it is critical to be cognisant of their investment preferences and needs. It is also essential to understand how a new narrative can be built to dispel the myths around female investors and whether more female investors and women in fintech can help meet the acute need for private and public capital for gender-impact and gender lens investment.

As more women are gaining control over financial assets, it has become increasingly crucial that firms and entrepreneurs understand women's differentiated preferences, needs and behaviours. According to Shilpa Kumar, "In the end, if one wants to serve a population, which comprises both men and women, one needs to have entrepreneurs who understand these needs and who can drive products and services towards both these sets of people."

While the finance industry has come a long way, certain unconscious behaviours and gender miscues that lead to gender-related stereotypes in providing financial services, which can negatively affect the confidence and perception of women investors. For instance, according to a recent study Merill Lynch Wealth Management, 42 percent of women surveyed said they felt stereotyped by their financial advisor.

"Women consumers need to be addressed with a different voice, which is why the participation of women at the producer and maker stage is very important," said Radhika Gupta.

Financial entrepreneurs, firms, and advisors must be conscious of varying perspectives and gender-related stereotypes. "If you ask me, what is that single one word which makes all the difference, I would say it is being conscious and deliberate about how one thinks and try to get different perspectives on board," Kumar said.

Many women report lower self-confidence in their investment acumen and financial decision-making skills. Therefore, one way forward to encourage more women to engage in financial services is through financial literacy, campaigns and conversations.

According to Gupta, it is not the shortage of information that prevents women from participation, but the belief that the domain is too complicated to get involved in. "Women can do with a lot more role models to ensure them that investing is not difficult. Unfortunately, the impression of finance for a lot of women still is that it is a male-dominated field, and inaccessible, and I think both role modelling and campaigns will definitely help."

Furthermore, Kumar noted that many women lacked the confidence to manage their finances. In case of the death of the family's sole earning member, women were normally not equipped to deal with their wealth. "Financial knowledge and financial literacy are life skills that every woman needs to have," she noted. Therefore, there is a need for increased awareness and understanding of financial services amongst women consumers.

Challenges regarding access to financial services also differ in urban and rural India. Lack of meaningful access to digital technology can impede women's uptake of financial services. Apart from access, women also face societal, market and regulatory constraints. Barriers such as KYC procedures, information asymmetry, lack of capital and collateral also inhibit women's participation.

The ability of women to provide collateral is further constrained as they are given a much lower share of family property than men. This is substantiated by the fact that even though women constitute 42 percent of the agricultural labour force, only two percent of the land farm is owned by them.

Thus, there is a need for a well-rounded approach that includes improving infrastructure at the macro level, financial literacy at the meso level; a change in attitude and support by the government and a formal banking sector at the micro-level. India can adopt streamlined, customised platforms that integrate a gender lens to meet the specific needs of women at different lifecycles. With growing female investors, it is crucial for financial firms and individuals to establish an inclusive environment and adapt to their varying preferences and interests.

Day 3
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DECODING INDIA-US CLIMATE PARTNERSHIPS

Promit Mookherjee

AMBASSADOR ROBERT BLAKE
Senior Advisor to Special Climate Envoy John Kerry, USA

The relationship between India and the US has recently been reimagined and reinvigorated. In addition to the traditional areas of collaboration, the two countries will now work on climate change mitigation and adaptation. Given India's strong commitments at the COP26, continued support from the US will be essential to channel the quantum of funds needed to accelerate the green transition.

Discussing the new dynamics between the two nations, Ambassador Robert Blake said that the two countries' long-term relationship in trade and investments strengthened during the COVID-19 pandemic. Going forward, the most critical area of common interest will be the battle against climate change.

At COP26, Indian Prime Minister Narendra Modi announced some historical goals for the country, including achieving net-zero emissions by 2070, reducing carbon emissions by one billion tons, and cutting carbon intensity by 45 percent by 2030. The commitments are forward-looking, and the Indian government needs to formalise the goals through inclusion in the country's nationally determined contributions.

Ambassador Blake further added that achieving these goals will require a collective effort from governments, multilateral institutions, industry and individuals.

The US-India climate and clean energy agenda partnership launched in April will be the basis for renewed cooperation between the two countries. The overarching objective is to tackle the climate crisis through two distinct tracks jointly. First is the US-India strategic clean energy partnership, co-led by the US Department of Energy and the Indian Ministry of Petroleum and Natural Gas. This dialogue focuses on encouraging research and the deployment of clean energy technologies. The second track is the climate action and finance mobilisation dialogues jointly launched by the US's Special Presidential Envoy for Climate John Kerry and India's Minister for Environment Bhupendra Yadav in New Delhi. This track has four pillars—climate action, finance mobilisation, adaptation and resilience forestry. The US and Indian governments are working closely to implement the new partnership and help transform the commitments made at Glasgow into reality.

India is a vast nation, and some of its states are larger than some countries. This shows that climate change engagement is required at the state and local levels. "We have a saying in the United States that all politics is local, and that statement holds equally true in India," Ambassador Blake said. Without support from the local grassroots, climate ambitions are unlikely to succeed.

Ambassador Blake cited the efforts of several US agencies in supporting India. For example, the United States Agency for International Development, or USAID, provides funding for disaster-resilient infrastructure and reforestation schemes, and the US Energy Bureau is helping several Indian states reform their electricity distribution firms and revise their regulatory landscapes to attract investors. He also highlighted the importance of ensuring a just transition for the most vulnerable communities. For instance, many eastern states in India derive large incomes from the coal sector. The US-India energy partnership will help generate alternative livelihoods for coal dependent communities to ensure no worker is left behind.

While tackling climate change is a daunting task for India, Ambassador Blake stressed that the US is keen to support the country in reducing its carbon emissions and adapting its infrastructure for the future.

THE ESG IMPERATIVE FOR GLOBAL FINANCIAL MARKETS

Renita D'Souza

SPEAKERS

GIRISH JOSHI
Chief, Trading Operations and Listing Sales, BSE, India

CLAUDE LOPEZ
Head of the Research Department at Milken Institute, US

LUCREZIA REICHLIN
Professor of Economics, London Business School, UK

TAJINDER SINGH
Deputy Secretary General, International Organization of Securities Commissions

MODERATOR

GABRIELE LIOTTA
Global Leadership Fellow, World Economic Forum

Significant investment to the tune of trillions of dollars is required to achieve sustainable development goals and net-zero emission targets. Environmental, social, and governance (ESG) related investments and sustainability-linked products are witnessing a huge inflow of funds, as noted by Tajinder Singh. This massive inflow of sustainability related investments comes in the wake of a change in the way businesses operate. As Gabriele Liotta detailed, the change is affected by climate change, inequality, lack of economic opportunities, the COVID-19 pandemic, and changing expectations around the role of corporations.

To thrive, businesses have to commit to long-term sustainable value creation that embraces the demands of the people and the planet, Liotta said. In capital markets worldwide, there is recognition that ESG is key to risk management and enterprise value creation. Investors are turning their attention to ESG factors in a significant way.

According to Girish Joshi, ESG has become necessary for every investor and stakeholder while committing funds and resources to investment or lending activities. As is apparent from various datasets on ESG investments, ESG assets have demonstrated a significant rise. Europe leads in this trend, followed by the US.

ESG are popular instruments as far as trading on the stock exchanges is concerned. There is growing interest in ESG assets in Asia, and Assets Under Management (AUM) under ESG investments have increased. The number of ESG-conscious investors incorporating these factors in their investment analysis and risk matrix is increasing. Regarding India, the AUM under ESG investments has quadrupled in the last two years.

Joshi mentioned that the Bombay Stock Exchange (BSE), in 2012, was the first to sign the mandate of the Sustainable Stock Exchange initiated by the UN. Subsequently, the BSE introduced indices like S&P BSE Greenex, S&P BSE Carbonex, and the S&P BSE ESG index to encourage better ESG reporting. The BSE also tied up with Global Reporting Initiative to conduct awareness programmes to encourage listed companies to do better ESG reporting. Additionally, the Securities and Exchange Board of India has mandated the top 1000 listed companies to undertake business responsibility and sustainability reporting from FY 2022-23, and has published a consultation paper on how asset managers should disclose their ESG portfolio.

Claude Lopez also reiterated the strong appetite for ESG investments among investors and firms. Nevertheless, there is no concrete way of determining that a particular investment belongs to the E, S or G aspects. There is a lack of comparability in ESG performance assessments among firms, with some of these assessments often performed by rating agencies. The agencies have a lot of variation in methodologies, and there is no clear understanding of the dimensions of ESG. There is a lack of clarity on the goals sought to be achieved through risk management in the context of ESG. Once there is clarity, the relevant variables can be identified, which may be industry-, region- and even nation-specific since the differences across contexts need to be taken into account.

Accounting for such differences will allow the concerned entity to grow without committing the fallacy of applying criteria relevant to just one part of the world or system. For instance, firms will be able to attract investments. This will help achieve accountability per a well-defined set of criteria. Lopez also mentioned how clarity about the E, S and G dimensions will help firms determine which dimensions resonate with their core business and need focus.

Lopez noted that E, S and G are three different dimensions. A lot of work has been accomplished in the domain of environment, specifically climate change. In the context of ESG indices and investments, there is often an erroneous aggregation of these three different types of information. Hence, an improvement in one dimension cannot be regarded as an aggregate improvement. She emphasised the need to incentivise firms rather than make them feel that they are being sanctioned in terms of managing their ESG risks.

Lucrezia Reichlin emphasised that while companies are enrolling for sustainability reporting, the problem of underreporting in the business sector is an important one. This underreporting may be attributed to the phenomenon of the alphabet soup, a scenario where several contradictory and non-comparable standards exist. Singh also highlighted this problem. According to him, the existence of various reporting frameworks and standards has resulted in incomplete and inconsistent sustainability reporting. This impairs the ability of investors to make informed decisions, raises concerns around mispricing of assets and accentuates the risks of greenwashing, all of which adversely affect the interests of investors.

According to Reichlin, establishing the International Sustainability Standards Board (ISSB) under the umbrella of a credible standard-setter such as the IFRS Foundation is an essential first step towards resolving the alphabet soup and creating a reality that involves coherent, comparable, and mandatory standards that are auditable.

Over the past two years, the IFRS, in collaboration with the Value Reporting Foundation and other bodies, has developed the prototype of general sustainability standards and broad sustainability disclosure requirements under the ISSB. Following this work, ISSB will begin by developing standards in the domain of climate and later broaden its horizon to other domains important to the cause of sustainability. The ISSB plans to develop standards and disclosure frameworks for industry, requiring companies to disclose how their emissions profile, governance, strategy, and risk management align with climate change mitigation and adaptation. Although the architecture of the standards framework is built on ideas similar to the Taskforce for Climate-Related Financial Disclosures, the ISSB prototype is more granular and prescriptive.

Reichlin expressed concern about the adoption of ISSB, which aspires to be a global standard. The successful adoption of the ISSB as the global baseline by different national jurisdictions calls for strong consultative committees and extensive engagement with these jurisdictions as the national adoption process is contingent on nations' legal frameworks and policy views. Singh also stressed the need for national jurisdictions to adopt this global baseline to the extent that it is consistent with their regulatory framework for consistency and comparability. According to him, the gamechanger in the context can be a possible International Organization of Securities Commissions (IOSCO) endorsement of this global baseline.

According to Singh, investor protection, market integrity and financial stability are the core objectives of the IOSCO. The IOSCO has worked on the issues of sustainability disclosures, greenwashing, asset manager disclosures and practices, and ESG ratings and data providers, all of which demand accurate ESG data. The IOSCO published a report that indicated gaps and inconsistencies with regards to complete and consistent information, and as a solution, encouraged the IFRS Foundation to make progress towards launching the ISSB. The experience, across two decades, of setting international standards for global markets in over 140 jurisdictions, demonstrates that securities regulators have two main concerns—content and governance.

The IOSCO has collaborations with IFRS and other voluntary reporting frameworks to develop content that meets the needs of investors and policymakers. Various reporting bodies, such as the Value Reporting Foundation, the SASB, CDP and Climate Disclosure Standards Board, have subsumed and merged under the ISSB. This merger has resulted in the thinning down of the alphabet soup. The cause of content has been aided by the ability to develop standards based on the best-of-breed frameworks formulated by the bodies mentioned above that incorporate expertise and proven content.

On governance, Singh noted that there could be a robust process with multiple checks and balances in terms of the standard-setting. This process will be strengthened by private-public collaboration and the participation of securities regulators who are responsible for the supervision of capital markets. This robustness can be ensured through the standard-setting due process, consultation, multistakeholder approach, and the public interest oversight through the well-established three-tier governance structure with a monitoring board chaired by the IOSCO.

Liotta reiterated that although there is a growing interest in the ESG arena, there are also several investment challenges. Nevertheless, a global approach has emerged that inspires transparency, rigour, and robustness to tackle these challenges.

THE LURE OF CRYPTO

Shashidhar KJ

SUMIT GUPTA
CEO and Co-Founder, CoinDCX, India

HOST

AKSHAY MATHUR
Director, ORF Mumbai

In recent times, the phenomenon of non-fungible tokens (NFTs) has swept across the world as artists pioneered a new application of cryptocurrencies. Cryptocurrencies have exploded in the 13 years since they first appeared. These financial instruments have seen their share of controversy, causing severe distrust among governments and people alike. A long shadow of suspicion has been cast over cryptocurrencies since their initial use as a currency on the dark web and the several subsequent fraudulent initial coin offerings (the crypto equivalent of an initial public offering).

However, these new-age financial instruments have emerged as the best performing asset class during the pandemic as economic activity continues to be sluggish and global inflation soars. So what makes cryptocurrency such an attractive proposition?

"Crypto is seen more as an asset plus which is a hedge against inflation, a tool for portfolio diversification," Sumit Gupta said. Gupta's statement rings particularly true in advanced economies with a negative interest rate regime from their central banks. Simply put, a negative interest rate regime encourages spending by citizens and aids credit growth where banks will not have to charge customers larger interest rates. However, the downside to this regime is that deposit savings products and asset creation tools by banks will not be able to offer better rates of return for customers.

The pandemic has devastated the lives of ordinary people, and with increased layoffs, individuals are forced to dip into their savings. Negative interest rate regimes do not offer much in recovering lost assets and savings. With shrinking avenues to invest money, large institutional investors such as insurance companies, pension funds and wealth funds are looking to leverage cryptocurrencies for a better rate of return, adding further legitimacy to cryptocurrencies.

Cryptocurrencies are also subject to immense speculation and price fluctuations, with many bull and bear runs. However, this is precisely why cryptocurrency investors want to go long in this asset class. "People are investing in it from a long-term perspective, keeping it as a part of the portfolio and holding it for a very long time, probably years, which is something common narrative among retail investors. Now the market is pretty big, approximately close to $3 trillion which clearly shows that the space is big now and cannot be ignored," Gupta said. He added that it is now common to see social media posts urging people to "hodl [hold on for dear life] on cryptocurrencies". Hodl, a misspelling of the word hold, is an often-used slang to encourage investors to hold on to their cryptocurrency even during volatility.

Gupta sees the rise of cryptocurrency as similar to the growth of the internet and e-commerce, with the potential to revolutionise sectors. "Now what has happened is the entire infrastructure which is running on top of the internet is now being written by a new kind of code, a decentralised code leveraging blockchain technology. I fundamentally believe that the world moves in a direction of efficiency. Whatever is more efficient, people will adapt naturally. Similarly, what is happening in crypto and blockchain is making these things efficient in the Internet world. It is making things more secure, efficient, cheaper, reliable, and completely transparent."

Gupta expressed excitement about the future of cryptocurrencies and decentralised finance. He pointed to NFTs as an example of how cryptocurrencies can build new use cases beyond a payments infrastructure or a financial product. NFTs function as cryptographic tokens that can be associated with both digital and physical assets. Using blockchain, users can bid for these tokens and be assured that they can be given a certificate of authenticity or proof of ownership. Artists are particularly enthused about this technology as blockchain technology assures a unique signature and ownership of digital art, such as digital paintings, GIFs, Internet memes and music. Establishing ownership files is challenging in the digital world as other users can copy someone's work. It is not difficult to imagine that an application can be created to scan the internet for a particular digital asset and determine royalties for the artist or the owner of the NFT.

But the promise of cryptocurrencies is precarious and will depend on regulations that will support these innovations. In India, a bill has been introduced in parliament that seeks to ban all "private cryptocurrencies" in favour of a central bank digital currency (CBDC). Though there are intense debates worldwide on how CBDCs will be implemented and whether countries even need them, the reality remains that regulators must contend with cryptocurrencies. Banning them is counterproductive, and India will lose the global innovation race as local talent and capital in cryptocurrencies will move to friendlier shores.

Gupta believes that India has all the right ingredients to become a leader in the cryptocurrency space but needs regulators to act more cooperatively. India's fast-growing Internet population is one of its biggest advantages. Combined with the overall buzz on cryptocurrencies and more people becoming aware of new instruments, this can serve as engines of new use cases. "Cryptocurrency is a pure technological game. In crypto you need two things one is the internet and the second is unique people who understand the technology. If you combine these two you will start churning so many use cases," Gupta said.

Nonetheless, he noted that regulators' fear of cryptocurrencies remains due to the scams and frauds from the early days. Gupta urged the industry to adopt anti-money laundering, countering terror financing, and know-your-customer norms and regulations to bridge this trust deficit. In addition, he stressed the advantages of transparency in transactions on the blockchain, which would make it difficult for mal actors to invest in these instruments and move money across borders. Indeed, regulators can work with cryptocurrency exchanges to curb financial crime. Nonetheless, investing in cryptocurrencies requires a lot of investor education. Therefore, while caution is warranted, education is more important.

GEOECONOMICS OF NEW CRITICAL MINERALS

Promit Mookherjee

Critical minerals constitute a set of raw materials needed to manufacture high-tech industrial products, renewable energy technologies, consumer electronics, aerospace engineering and military hardware. The supply of critical minerals such as Lithium are affected by geopolitical developments, state-led commercial considerations and the export policies of producing nations.

A small set of countries and firms currently own almost all critical minerals. Going forward, green supply chains must ensure a steady supply of

SPEAKERS

JOHN COYNE
Head, Northern Australia Strategic Policy Centre and Head, Strategic Policing and Law Enforcement, ASPI, Australia

NATASHA JHA BHASKAR
General Manager, Newland Global Group, Australia

TAE-YOON KIM
Senior Energy Analyst, International Energy Agency

ABIGAIL WULF
Director, Critical Minerals Strategy, SAFE, USA

MODERATOR

RYAN MANUEL
Chief Asia Strategist, Silverhorn Investment, Hong Kong

these minerals necessary for newer technologies, especially in the renewable energy and transport sectors.

According to Abigail Wulf, the import dependence faced by the US for oil is a driving reason behind electrifying the transport sector. In doing so, the US has managed to wean itself off the dependence on OPEC for oil. However, it is now dependent on China for critical minerals.

The US, the EU and India are beginning to implement electrification targets for 2035 and 2050. Businesses are also pivoting towards electrification. How can supply chains adapt, and how can the US and its allies remain competitive in an increasingly electrifying world?

There are concerns over the new energy transition supply chains being mainly dominated by China, including for "minerals and materials processing, battery component production, and the high-tech manufacturing innovation and expertise that flow from the ability to control those supply chains," Wulf said.

The US is completely reliant on imports for 13 of 35 important critical minerals. To bridge the gap, there is a need to look at domestic production and increased collaboration with economies like Australia, Canada and the EU. China also controls a majority of anode, cathode and electrolyte production capacity. Without significant innovation and strategic acquisition of assets, most countries will likely become mere assemblers of new technologies. This dependence is worrying because other countries risk losing out on the economic opportunity, jobs and innovation that will flow from the energy transition.

Most countries want to reduce dependence on a strategic competitor, especially for defence applications. For example, the US has a powerful military that can afford technologies and precision-guided munitions. Yet, it continues to depend on other economies for raw materials. Going forward, countries will need to break into these emerging supply chains while ensuring increased transparency and adhering to high environmental, social and governance standards.

Tae-Yoon Kim noted that there is no shortage in the absolute amount of critical resources. The challenge is to bring these resources into production with investments. Yet, there is no guarantee that supplies will be available at the right time and the right price. Therefore, policymakers need to expand their horizons to incorporate these aspects into their energy policies.

Recently, there has been a rapid reduction in the cost of clean energy technologies from batteries to solar panels. This has led to a situation where raw materials, including minerals and metals, account for a large portion of clean energy costs. Countries want to develop their cleantech industries and maximise economic benefits, but they will have to devote significant attention to these emerging supply chain issues.

Natasha Jha Bhaskar stressed the need to diversify international partnerships, economic relationships and deploy economic diplomacy in strategic areas. Presently, there are three evident trends in the India-Australia partnership. First, Australian resource exports to India, particularly metallurgical coal, copper and gold; second, Australian direct investment into mining tenements; and third, the competitive edge of the mining equipment and technology services that Australia can provide.

The engagement on ethical critical mineral supply chains will be a key area for India and Australia. This was reflected in the recent memorandum of understanding that elevated the bilateral relationship to a comprehensive strategic partnership. However, certain gaps in ties remain—the lack of Indian public-private sector investment in Australia's critical mineral space, and Indian companies have been very slow and conservative in sourcing critical minerals from Australia compared to Southeast Asian countries. There is also a need to align Australia's resource capabilities and experience in technology and regulation with India's manufacturing potential. India will need to be more proactive to realise the potential of this relationship. Further, India's progress should be measured based on outcomes and not just activities.

John Coyne cautioned against the increased dependence on China for rare earth elements. The breakdown of existing supply chains amid the pandemic and China's "aggressive" posturing reinforced the importance of sovereignty and national resilience for other countries. This has led to newer multilateral engagements, such as the QUAD and AUKUS. Such new arrangements will be essential to develop a resilient supply chain that is not dependent on China.

Kim said that there is a need to innovate on the demand and supply side to reduce the material intensity of final products and extract inputs efficiently. Innovation can aid the shift to materials that will have a broader supply and could prevent a single country's monopolisation of the supply chain. In the US, a lot of money is spent on research and development, but not enough is done on the demonstration and manufacturing end, which hinders increased innovation, said Wulf.

The panellists agreed that India must play a more proactive role in multilateral alliances. The efforts to diversify the supply chain should also be rooted in implementing strict ESG standards. Investment in research and development should be combined with market diffusion and demonstration pilots. In the future, like-minded countries will need to forge strong alliances capable of taking bold steps while working with private players.

ASSESSING THE FUEL AND NEW MOBILITY TRANSITIONS

Promit Mookherjee

The transport sector is a major contributor to India's urban air pollution crisis and carbon emissions. Electric vehicles (EVs) have emerged as a key low emission solution to counter this problem. Increasingly, both central and state governments have been enacting policies to create consumer demand and charging infrastructure for EVs. However, given their dependence on coal for power generation, pressing questions on the lifecycle benefits of EVs persist.

SPEAKERS

AKSHIMA GHATE
Senior Principal, RMI-India

SHILPI SAMANTRAY
Senior Manager and Lead, Electric Mobility, Ola Mobility Institute, India

RAVIN MIRCHANDANI
Chairman, Ador Powertron, India

ANIRBAN GHOSH
Chief Sustainability Officer, Mahindra Group, India

MODERATOR

SHREYA GADEPALLI
Founder and Managing Trustee, The Urban Works Institute, India

Further, the economics of EVs currently favour adoption in the limited vehicle segments. Continued subsidies on EVs could also divert potential investment into other low emission modes, such as public transport and non-motorised transport. Therefore, policymakers must be clear about the role of EVs from a broader perspective of sustainable green growth.

It is a widespread perception that replacing existing cars with electric cars is a cure-all solution to reduce the negative externalities from the transport sector. However, this perspective ignores other solutions for decarbonising transport, such as demand reduction and the shift to public transport.

Speaking on this dichotomy, Shreya Gadepalli said that an "electric car is essentially like a Diet Coke, sounds good, but isn't that great for the health of our world." Essentially, an electric car has significant emissions from a lifecycle perspective, especially if the electricity is generated from coal. More cars will also mean more congestion in our cities.

Anirban Ghosh had a different perspective. According to him, electric cars are entirely different from existing cars and provide a better experience to consumers. While they might not be an all-encompassing solution, they are a big bonus. Decarbonising electricity and electrifying all sectors is a solution that can fit well into this paradigm.

EVs are essentially an efficiency-improvement strategy. These vehicles reduce the emissions per kilometre but not the actual kilometres travelled. As efficiency improves, people could start using EVs more, leading to an increase in emissions.

Addressing this issue, Shilpi Samantray said that the transport sector contributes around 13 percent of carbon emissions, so any effort to decarbonise transport is welcome. However, a holistic approach is needed to reap the maximum benefits from an EV transition. Manufacturers will need to employ sustainable ways of recycling and urban mining. Further, concerted efforts need to be made to align the EV charging strategies with the increased proliferation of renewable energy. This approach can significantly reduce the lifecycle emissions from EVs and make them a vital tool in the battle to decarbonise transport.

There is strong policy support for EVs in India. The FAME-II scheme provides large scale subsidies on EV purchases and charging infrastructure. However, despite the support, EV uptake in India has been lower than expected.

Akshima Ghate noted some initial hurdles to implementing the policies, but EV sales have been promising in the last two years. Notably, sales have been exponential in two main segments—electric buses and two-wheelers.

The biggest challenge to EV adoption currently is the lack of charging infrastructure. Although the funds are available, the implementing agencies (such as DISCOMs and city authorities) cannot plan and install the charging infrastructure. Therefore, capacity building and reforms of specific regulations will be needed to scale up charging infrastructure. Once this happens, EV uptake will improve rapidly.

Ravin Mirchandani said that the many forms of zero-emission transportation would need to be explored. While EVs seem like the best solution to move forward, other technologies such as hydrogen could become relevant. India lacks the advantage of economies of scale, unlike China. The involvement of the private sector will be essential to achieve the scale needed for a shift from hydrocarbon related mobility to electric mobility and eventually to hydrogen mobility.

There is also a pressing need for EVs to promote the complete ecosystem in terms of battery manufacturing—electric drivetrain manufacturing and electric charger manufacturing. Presently, Indian technologies are not cost-competitive compared to the Chinese. The government must move away from the lowest-cost mentality to promote these technologies.

Government contracts should provide a preference for Indian-made components even if they are more expensive. This will give the impetus for the private sector to scale up and eventually achieve the scale needed to reduce costs. Further, the government will need to establish charging infrastructure and EV components standards, allowing the industry to focus its attention on particular products and thereby achieve scale.

Anirban Ghosh said that the private sector will be a key player, but government subsidies are essential to speed up the innovation cycle of any technology. Any new technology has a natural incubation period where it takes a long time to evolve and become cost-competitive. However, given the urgency to promote clean technologies to combat climate change, there is a good case for government support to speed up the innovation cycle to ensure faster adoption.

Overall, EVs are an important step to combat climate change. However, if the goal is deep decarbonisation, EVs must be part of the broader strategy. Essentially, cities must be planned to reduce the need to travel while also improving public transport systems to encourage a shift away from private vehicles.

Ghate noted that "there are three strong pillars for deep decarbonisation. One is demand reduction, second is modal shifts and third is technology." All three pillars will have to be deployed in tandem to achieve deep decarbonisation. This will require better city planning; and increased coordination between the plethora of government agencies involved in transport planning and civil society in general.

MINISTERIAL ADDRESS ON THE CLIMATE CRISIS

Kalpit A Mankikar and Aditya Pandey

JAMES SANGMA
Environment Minister, Government of Meghalaya, India

Natural calamities have battered India in recent years. Through his address, James Sangma aimed to raise awareness on the extent of the danger that looms if the warnings go unheeded and suggest a few potential solutions.

He began by pondering over the Anthropocene phase, which is characterised by frenetic human activity with side effects on the environment. "We don't know whether it is heralding the end of human future or just another ecological course correction." He cautioned that humankind has embarked on an uncharted territory where natural disasters of enormous magnitude, which were previously rare events, are now a regular feature across the globe. He said that by mid-2021 alone, at least 40 countries had experienced natural calamities with devastating consequences.

India, in particular, bore the brunt of extreme natural events once a month between 2018 and 2020. In 2020, such events caused losses to the tune of US$87 billion. Data published by the National Disaster Management Authority highlights India's vulnerabilities. Nearly 12 percent of the country's land is exposed to floods; 68 percent to droughts, avalanches, and landslides; 58 percent to earthquakes; and 5,700-km of its 7,516-km coastline is prone to cyclones and tsunamis.

Sangma also noted that reports indicated that over 75 percent of Indian districts with populations exceeding 638 million; should be considered extreme climate event hotspots. He warned that adverse climatic changes and their disastrous aftereffects will usher in a cascading wave of deprivation, degradation, and violence.

He stressed that India's disaster resilience and emergency response plans need a massive overhaul. "Governments all over the world at local, national and regional levels need to heavily invest in developing an extensive climate risk atlas sharing this data across all sectors – both government and non-government. Despite having one of the finest weather forecasting systems and technology, aspects of volatility and complexity of climate catalysts need to be included," he added. He also called for innovations in financial instruments against unpredictable and volatile disasters to reinforce principles of disaster resilience.

Meghalaya's mitigation and adaptation plan is being modelled on disaster resilience and inspired by ideas and technologies from different countries, he said. The state is also developing a biodiversity heat map to chart and assess responses to forest fires in a swift and decentralised manner.

The minister also stressed the importance of community preparedness and participation in disaster relief and resilience. The Meghalaya government, for instance, runs the Choupal programme, where officials meet with community leaders to raise awareness about climate change and disaster risks. Sangma also cited the example of Odisha, which has included disaster management in the school and college curriculum. He recommended adopting a decentralised system where the local population is actively involved and trained for disaster preparedness. The future of disaster management is participatory.

He also noted Japan's internationally acclaimed disaster governance model, Jijo Kyojo Kojo (which translates to self-help, mutual help and government help). In the aftermath of the 2011 Tohoku earthquake, Japan's government initiated a drive to train all levels of society to prepare for any disasters.

Sangma stressed the need to finetune public policies and implement laws effectively to ensure India steers away from adverse climate change impacts. He also noted that society must have greater involvement in the fight against such catastrophes.

KEYNOTE: CREATING FINANCING MECHANISMS FOR SUSTAINABLE INFRASTRUCTURE IN CITIES

KAMAL KISHORE
Member Secretary,
National Disaster
Management Authority,
India

Kalpit A Mankikar
and Aditya Pandey

Kamal Kishore spoke extensively on the need to create sustainable infrastructure in cities. While developing countries face infrastructure deficits, the infrastructure in most developed countries may need replacing. The new infrastructure should withstand extreme disasters, which are now a common occurrence. All countries have an excellent opportunity to build or rebuild their infrastructure sustainably.

"India is at a stage where half of its infrastructure being planned for 2050 is yet to be constructed. This presents us with a once-in-a-lifetime opportunity to ensure that its proposed infrastructure is resilient and sustainable in nature," he said.

Resilient infrastructure must be designed to fulfil the needs of the present and future generations. It must have the ability to withstand shock, extremities, and harsh realities of environmental disasters. The vagaries of nature are manifold and loom large over several parts of India.

Although India had a 99 percent normal monsoon in 2021, it saw a 25 percent deficit in rainfalll in August and a 34 percent surplus in September. "Erratic rain continued to ravage states across the country in the form of floods in Andhra Pradesh where a portion of a dam was partly washed away, thus affecting settlements downstream. Despite working extensively on flood management after 2015, Chennai was again adversely affected by floods this year," he added.

Extreme events are also being seen across the country. Excessive rainfall has caused flash floods, landslides, and river blockages in the Himalayan states. In addition, cyclones, which were earlier mostly occurred on the country's eastern coastline (along Andhra Pradesh, Odisha, West Bengal and Tamil Nadu) are now developing on the West coast as well.

As the number of unforeseen events rises, it is key to evolve risk analytics that focuses on risks at the local level. This information must also be made available to all major players in infrastructure planning—financiers, planners, builders—thereby democratising information flow and planning. A robust effort should also be made to ensure that the risk assessment matrix accounts for future uncertainties.

The standards for building infrastructure and related regulations must become more stringent. "Infrastructure upgradation is in itself a complex task with its own cost implications. If any planner aims for infinite resilience, they know that it shall cost infinite money. Therefore, planning should be such that there is clarity as to what performance outcome and standard does the planner expect from the infrastructure systems," he said. Kishore also endorsed the need to regulate those involved in infrastructure building to encourage innovation.

Plans should be made ahead of time to restore infrastructure services quickly in the aftermath of calamities. "States like Odisha have made tremendous progress in reducing loss of lives by 95 to 98 percent during a cyclone. However, there have been instances where settlements are left without power [supply] for 30 days," he said. He argued that governments must prepare standard-operating procedures to provide spare and essential infrastructure components like power, telecommunications, water supply, and road transport amid and after extreme events.

Sustainable infrastructure must be financed in a way that encourages resilience along with effective risk management. "When we perform feasibility analyses for infrastructure projects, we should not only focus on upfront costs but also on lifecycle costs," he said. For example, if the infrastructure is not resilient in the face of extreme weather events, the losses incurred over the lifecycle of the amenity will make it very expensive.

DEPLOYING AND FINANCING SUSTAINABLE INFRASTRUCTURE FOR CITIES

Shashidhar KJ

For developing countries like India, the infrastructure and construction sector is vital for economic growth and is a ripe investment source. In FY2021, US$81.72 billion flowed into India's infrastructure sector, accounting for 13 percent of the country's foreign direct investment. India is currently estimated to have infrastructure projects worth US$1.3 trillion in the pipeline. About 20 percent of these projects are in the cities and urban centers, which are responsible for driving economic growth.

SPEAKERS

HEM DHOLAKIA
Lead Specialist - Research, CDRI, India

OLGA CHEPELIANSKAIA
International Climate Change Consultant and Founding Director of UNICITI

LUBAINA RANGWALA
Program Head, Urban Development, Sustainable Cities & Transport, WRI, India

JAGAN SHAH
Resident Senior Fellow, IDFC Institute, India

MODERATOR

MIHIR SHARMA
Director, Centre for Economy and Growth Programme, ORF

However, India's geography is precarious from a climate emergency perspective—it is a tropical country and the peninsula is subject to cyclones coming in from the Bay of Bengal and the Arabian Sea. When cyclones make landfall, human habitats face the wrath of the oceans, wind and lashing rains. Urban centres in the Indian plateaus and plains are plagued by severe air pollution due to bad planning. Additionally, the COVID-19 pandemic exposed vulnerabilities in all facets of society and infrastructure management. It is thus important to strongly consider what it means to build resilient and sustainable cities for the future.

Lubaina Rangwala stressed the need to include holistic solutions from the planning stage. "If Mumbai, for example, is now building the metro network across the city, what is really important to also understand and read and acknowledge is that they have multimodal integration plans that are now webbed into the contracting process," she said. To tackle Mumbai's flooding issues during the monsoon season, the city needs a mix of gray and green infrastructure, Rangwala said. "How can nature-based solutions then become part of that planning process? These are some of the softer aspects of infrastructure and planning that actually mostly get missed out or are less attractive, and therefore there are finance gaps that cities face," she added.

Olga Chepelianskaia mentioned that 60 percent of the infrastructure projects due by 2030 are yet to be built, and as the climate crisis accelerates, it is crucial to take alternative decisions. "If you look at Singapore, it is almost never flooded, but if you look at Jakarta…Bangkok and Mumbai, floods are constant issues, with these cities having comparable climates. We need somehow to find a way of reconciling building fast and affordable because that's a real need. We cannot also deny building sustainable and livable buildings. But we usually tend to address the first need only," she said.

Chepelianskaia also raised the point of legacy and heritage infrastructure in the context of the COVID-19 pandemic. "With the pandemic, all the offices that are no longer in use or hardly used, what do we do with all this infrastructure? What do we do with the abundant industrial areas that no longer fulfil their purposes?" She said that demolishing these existing infrastructures is not viable since they leave a huge carbon footprint. In addition, she advocated for better planning using alternative materials like timber and bamboo and including passive design techniques to naturally cool areas rather than cooling solutions like air conditioners. "Sometimes it comes to just protecting a natural area at the planning level and prohibiting encroachment and construction and letting it play its role. This also can make a huge difference." Notably, a policy push is needed to allow new innovative methods. For instance, building codes prohibit structures made from bamboo or timber, despite demonstrating that it is fire-safe.

Hem Dholakia said that future infrastructure will have to be integrated across sectors. He pointed to the increasing merging of electrical and transportation infrastructures with the increased adoption of electric vehicles. Conversely, he said, there will be more decentralisation of infrastructure, like solar panels on rooftops and rainwater harvesting, as municipal corporations seek to increase people's participation. "If there are so many of these projects, whether these are small projects that individuals take up or large national infrastructure pipeline projects that state and central governments take up, how do we ensure that we are pricing physical climate and disaster risk as part of all these investment decisions?," he asked.

Jagan Shah highlighted the importance of accounting for risk in urban planning when financing infrastructure projects. For instance, if new housing projects are undertaken in Mumbai's slum areas, people are at risk of complete displacement unless provided alternative housing at the same or a nearby location. "We need to look at the world through the window of risk. Because fundamentally for a country like India, which has such a large number of poor and vulnerable populations, risk is the window through which they look at the world. That lens gives you a much sharper picture of what the sort of the reality of the Indian city is about," he opined.

The panellists agreed that Mumbai could serve as a microcosm for the issues faced by large cities. The COVID-19 pandemic mandated social distancing, but this is tough to enforce in public transportation systems. Rangwala noted that Mumbai's suburban railway system is the lifeline that allows the city to function. Given that it is usually overcrowded, the suburban railway network emerged as a major vector for rising cases during the second wave of COVID-19. But as the pandemic subsides, there should be some focus on establishing integrated multimodal systems. "Through the pandemic, a lot of what we have been able to do is reflect on some of these systems that have been crumbling from a long time ago. When we are looking at some of the areas of decarbonising the transportation sector, a lot of attention moves to electric mobility or clean fuels for private cars. But we completely missed the entire picture that most of Mumbai travels through public transport," she said, highlighting an area that needs more attention.

Importantly, Rangwala noted that when building large infrastructure projects, governments must account for and address factors like passive design, integration across sectors, risk mitigation and pricing, new materials and decentralised municipal initiatives, and update building codes.

AN URBAN DETOX FOR HEALTHY CITIES

Sayli Udas-Mankikar

MANISHA MHAISKAR
Principal Secretary, Environment and Climate Change, Government of Maharashtra, India

Maharashtra is one of the few Indian states that has embraced the climate agenda in letter and spirit. The state recently established the Maharashtra Council for Climate Change, headed by Chief Minister Uddhav Thackeray. Maharashtra addresses all its environmental concerns through this council, which is also creating a climate roadmap.

"The sixth IPCC report released in 2021 made three things very clear. The first thing is that climate change is real. Secondly, that climate change is here at our doorstep. The third and the most important thing that the time for climate action is now," said Manisha Mhaiskar.

The council will ensure that all the efforts and actions of various departments converge towards a concentrated effort to tackle climate change. Climate action rests on several aspects, primarily reducing greenhouse gases by decarbonising the power sector. At the COP26 summit in Glasgow, Prime Minister Narendra Modi committed that India will decarbonise its energy sector by 2070. This also means that renewables will have to meet at least 50 percent of the country's energy requirements, making solar power a primary resource.

The transport and mobility sector is the next biggest priority in climate action. Maharashtra is the first state to develop a comprehensive electric vehicle (EV) policy. It has also chalked out a plan to convert 100 percent of its public transport to electric in the next three years. The transport and power sectors have a huge bearing on industries and agriculture, which must also follow sustainable and climate-friendly practices.

Maharashtra is also one of the most urbanised states in India, with more than 50 percent of its population living in cities or urban agglomerations. Since cities are touted to be major pollutants, Maharashtra has initiated a vital step to gauge this. The state has identified 43 cities, called Amrut cities, for a greenhouse gas inventory that will be put together after evaluating their carbon footprint. Once the greenhouse gas inventory is ready, these cities will create individual roadmaps to achieve net carbon neutrality. The cities will need adequate finance to support these green transitions.

The state government has a Majhi Vasundhara (my earth) programme through which it works with urban and rural local bodies on a framework related to the elements of nature to reduce carbon emissions and increase carbon sinks. The programme has extended into the education space where a 'green curriculum' is being introduced in schools to educate students on being eco-friendly.

Climate action needs to be addressed holistically as it directly impacts people. Only when interventions are made at multiple levels will a green transition become a reality, Mhaiskar noted.

CITIES THAT BREATHE: BATTLING CLIMATE CHANGE FOR CLEAN AIR

Noyontara Gupta

SPEAKERS

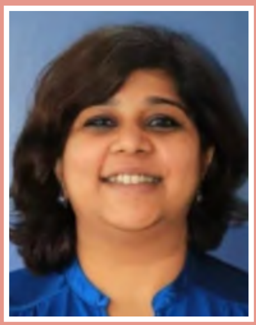
AMAR PATNAIK
Member of Parliament, Rajya Sabha, India

SHRUTI NARAYAN
Regional Director, South and West Asia, C40 Cities, India

BRIKESH SINGH
Chief of Communications and Engagement, Asar, India

ANUMITA ROY CHOWDHURY
Executive Director, Research and Advocacy, Centre for Science and Environment, India

MODERATOR



SWATI D'SOUZA
Country Lead and Coordinator - India, International Energy Agency (IEA)

Indian cities have consistently featured on global lists of cities with the worst air quality, particularly in recent years. Air pollution in Delhi often receives the most attention, especially during the winter months. But air pollution is a perennial battle because of external factors such as stubble burning, vehicular pollution, pollution from coal power generation, and burning solid fuels like firewood.

Swati D'Souza noted that air pollution in India resulted in an estimated six lakh premature deaths in 2019. A critical analysis should be performed on the contribution of decarbonisation towards clean, good quality air.

Air pollution is not bound by geographical boundaries. Hence, cities cannot operate alone in tackling it and expect a meaningful impact. Shruti Narayan said the C40 initiative has created city-to-city networks to encourage cities to learn from each other and coordinate in combating poor air quality and pollution.

The multifaceted nature of air pollution needs to be considered, as it requires multiple targeted solutions. Besides identifying those most vulnerable to the impact, infrastructure, transportation, and energy use must all be considered. Bringing the conversation about poor air quality to the forefront requires critically analysing the economic losses incurred by air pollution and bringing together different stakeholders to develop integrated, holistic policies.

Amar Patnaik expressed concerns about increased pollution levels in Odisha despite more households adopting LPG. Various government schemes, subsidies and interventions resulted in sustained action in the state. However, the phenomenal increase in gas prices and a consistent difficulty in acquiring cylinders has forced many rural households to turn back to using firewood as a fuel source.

Subsidy schemes must be implemented considering that rural household incomes are not comparable to urban households. Training rural households to use local biomass will also give them a sustainable alternative while awaiting the next LPG cylinder, thereby smoothening the transition. Pollution also exacerbates inequities in addition to causing economic losses, which requires considerable attention.

Air pollution cannot be solved if organisations continue to work in silos; collective impact requires collective action. Civil society, the media and the government will all have to work together to keep the conversation going year-round, instead of limiting it to ‘peak’ months.

Efforts must also be made to bridge the gap in reporting on the technicalities of air pollution and poor air quality across media. Building awareness will help people make informed decisions and get involved in advocacy for better air quality. Brikesh Singh emphasised the need for greater efforts by governments and local bodies to encourage citizens to take protective measures against air pollution and practice a greener and more sustainable lifestyle.

In the coming years, India will face two key challenges—the public health risk associated with air pollution and initiating climate-sensitive growth that reduces climate change risk. In addition, it will have to undergo a massive clean energy transition, a clean mobility transition, introduce a circular economy that deals with waste, and a dust management approach to meet air quality targets.

By successfully meeting renewable energy targets, India can severely cut its use of coal, but the country currently lacks the right blueprint. Clear strategies will have to be developed to transform energy use, the mobility sector and mitigate waste and dust. Reiterating the need for city-to-city action, Anumita Roy Chowdhury spoke of integrated regional strategies enabling India to control and protect public health.

Political discourse plays a significant role in the battle for clean air. Integrated policies will be tough to implement if the government and the opposition are not on the same page. There is a shortage of targeted action plans regarding climate change in political manifestos. A key solution will be to take a more data-oriented approach to tackle climate change and pollution, initiating policies and schemes, and building cooperation between states.

Publicising said data would also aid transparency and encourage a greater sense of responsibility and awareness among citizens. The ignorance at the ground level about climate change and air pollution and how acutely they impact individuals pose a significant challenge that will have to be tackled with urgency, especially during a global pandemic.

VALEDICTORY SESSION: MAXIMUM CITY: STRENGTHENING MUMBAI'S LEADERSHIP IN BUSINESS

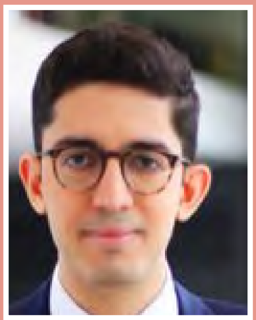
Janhvi

Mumbai, India's economic capital, is home to top business houses and is the mecca of the entertainment industry. The city has been put on a fast track for infrastructure development to speed up connectivity. However, with the unfettered influx of people and geographic constraints, it is time for a more substantial consensus to put the city on a more robust growth path.

Paving a sustainable and inclusive growth path will therefore need to factor in the concerns and expectation of young business leaders, entrepreneurs, and professionals; and focus on

AADITYA THACKERAY
Minister for Tourism, Environment & Climate Change and Protocol, Government of Maharashtra, India

HOST



JAY KOTAK
Vice-President, Kotak811, India

CLOSING REMARKS

RAJESH SHAH
Co-Chairman & Managing Director, Mukand Industries Ltd, India

making the city attractive for young talent keeping in mind the business, commercial and industrial trends and opportunities. Any future policy will have to champion enterprise.

Aditya Thackeray noted that people and their involvement with city issues form the core of this answer. Promoting innovation, escalating policy discussions with the people, and stakeholder engagement are key cogs in this process.

Jay Kotak added that cities are magnets for talent, and the ability to attract talent is perhaps the most important thing for any urban area in the world. In addition to attracting talent, he added that creating talent by reforming the education sector is also essential.

The government can push and incentivise policies to keep the city and state sustainable and environmentally friendly, but businesses will also have a key role in this transition. Companies, banks, finance corporations and offices must adopt measures towards carbon neutrality.

Affordable housing is also another major challenge for Mumbai to address. The city has made considerable efforts towards urban renewal. For instance, buildings older than 70 years are being redeveloped. Similarly, slum housing needs to be addressed, and the city's massive migrant population needs to be nurtured with adequate provision of social housing.

Affordable and accessible mobility and simultaneous infrastructure development is crucial for the Mumbai Metropolitan Region. Major road redevelopment work is underway across the city, putting Mumbai on the international map.

Harnessing Mumbai's potential also means developing good infrastructure, green cover, and improved waste management. Such initiatives can be executed well through public-private partnerships. For instance, in 2017, resident welfare associations, hotels, hospitals, malls and shopping centres worked with the Municipal Corporation of Greater Mumbai (MCGM) to reduce waste from 10,000 metric tons a day to about 6,500 metric tons a day.

Mumbai also needs to improve environmental sanitation to prevent diseases like malaria and dengue, consequently reducing the burden on health systems. As informal settlements turn formal, they will need sewage treatment facilities. The city gets most of its water from rainfall, which is subject to some uncertainty. To reduce this dependence, the state government has undertaken a project to build a water desalination plant. This could help the city achieve a 24/7 water supply.

The government is working with organisations like the World Resources Institute to make cities and streets safer. It has initiated an illumination survey of the city, where roads with no lights are being provided with street lights and toilets. Thackeray also noted how, once completed, the Worli Green Mile pedestrianisation project will allow people to walk through gardens and parks without stepping on a road.

According to Kotak, India is getting better at giving smaller entrepreneurs access to the government through platforms like Twitter, which is very important. Thackeray agreed that innovators and design thinkers must have such access. For instance, through the SMILE Lab, the BMC supports startup innovations in health, education and infrastructure, and helps them scale if successful in the test phase. Additionally, the state ranks high in the ease of doing business for micro, small & medium enterprises.

Businesses and industries must adapt to mitigate climate change. Measures such as the greening of buildings, increasing the use of electric vehicles, encouraging rooftop solar, and using wind energy should be introduced. For the energy sector, the key to renewables is the adoption of solar rooftops. However, in places with less space for solar rooftops, measures like putting homes on the green grid and using lights with sensors can be adopted. The state's EV policy has also been commended, with an ambitious goal of transforming all public transport in the state to electric by 2027. However, this raises the important question of financing the green transition.

Smaller manufacturing units or individuals need to be able to afford an EV or a place in a green building. Banks and financing organisations can offer support with better lending rates or policies that are conducive to individuals and smaller industries.

Mumbai has considerable potential to become a business capital that is environmentally sensitive and socially inclusive. To achieve this, the city's multiple stakeholders—business leaders, scholars, the government, and civil society—must come together to chart a growth path that helps it flourish.

ABOUT THE RAPPORTEURS

Janhvi is an intern with ORF's Urban Policy Programme.

Renita D'Souza is a Fellow at ORF Mumbai.

Dhaval Desai is Vice President, ORF Mumbai.

Ananyashree Gupta is a Research Assistant with ORF's Centre for Economy and Growth.

Noyontara Gupta is a Research Assistant at ORF.

Shruti Jain is a Junior Fellow at ORF Mumbai.

Mannat Jaspal is an Associate Fellow with ORF's Geoeconomics Studies Programme.

Shashidhar KJ is a Visiting Fellow at ORF Mumbai

Kalpit A Mankikar is a Fellow with ORF's Strategic Studies Programme.

Promit Mookherjee is an Associate Fellow with ORF's Centre for Economy and Growth

Aditya Pandey is a Research Intern with ORF's Strategic Studies Programme.

Aarshi Tirkey is an Associate Fellow with ORF's Strategic Studies Programme.

Sayli Udas-Mankikar is a Senior Fellow at ORF Mumbai

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Observer Research Foundation
20, Rouse Avenue Institutional Area
New Delhi - 110 002, INDIA
+91-11-35332000 Fax: +91-11-35332005
contactus@orfonline.org
www.orfonline.org