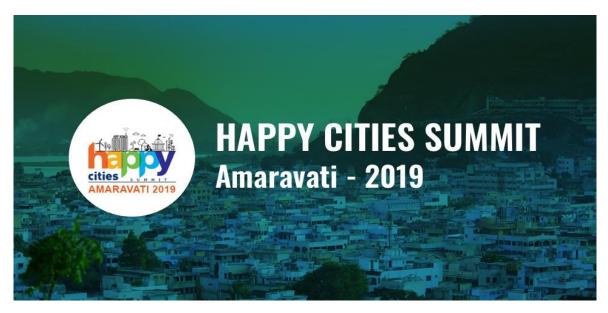
#### HAPPY CITIES SUMMIT AMARAVATI, 2019 PROCEEDINGS REPORT



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#### CONTEXT

Today, cities are going beyond the way it used to function. The governing bodies, city planners and administrators are putting their brains in understanding what constitute to make a "happy city". The authorities are prioritizing the importance of happiness and wellbeing along with social and economic policies related to cities.

Keeping in line, the Government of Andhra Pradesh organised the Happy Cities Summit Amaravati, 2019. The second edition of summit aimed at building up on the success and momentum of the inaugural summit in 2018 to establish Amaravati at the forefront of the discourse on urban innovation with a prime focus on citizen happiness in developing countries.

The summit had a focus on deriving mechanisms to make Amravati one of the happiest cities in the world. While in 2018, experts deliberated on the challenges that engulfed the governments across the globe in developing happy cities which led to announcement of 'Six Pillars of Happiness', the summit in 2019 witnessed experts further building up on these identified pillars. The six identified pillars were deep dived through focused panel discussions and solution workshops.



Image 1: Six Pillars of Happiness

The topics of these panel discussions and solution workshops were finalized after lot of internal deliberations on the key issues affecting communities around the world. For example, *Environment that is climatically and culturally suitable*, one of the key issue affecting this pillar of happiness was *'Inclusive Cities for Women'*, which was then taken up as one of the panel themes. Similarly, after deliberations on the *Economy & Livelihoods that encourage local enterprise, creativity and innovation*, one of the key issues affecting communities under this pillar was *'Vibrant Ecosystem for Youth Entrepreneurs'*, which was taken up as another panel theme.

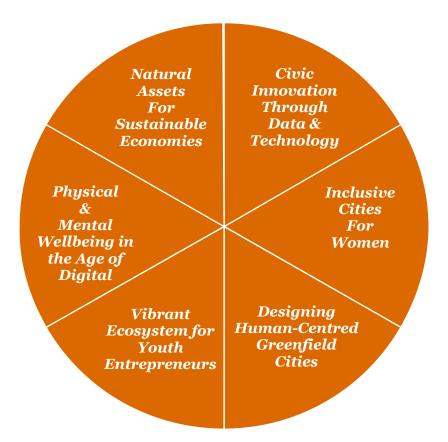


Image 2: Six themes of panel discussions

The sessions provided perfect platform to all the speakers to brainstorm and exchange their ideas. It also gave a chance to the audience to share thoughts on the issues affecting them.

This year as a prelude, Mayor's and City Leaders Roundtable was also organized a day before the summit to enable cross-learning and initiating collecting action among the most distinguished city leaders and decision makers.

The three-day summit provided a platform for better collaboration to large and global audience.

This report contains details of Happy Cities Summit-2019 held at Vijayawada, Andhra Pradesh from Feb 13-15, 2019.



#### N. Chandrababu Naidu, Honourbale Chief Minister of Andhra Pradesh

"Amravati will be at the forefront of the discourse on urban innovation with prime focus on citizen happiness. Our new capital will be the future for smart cities globally."

#### **PARTICIPATION AT THE SUMMIT**

The Happy Cities Summit 2019 saw participation from more than 700 delegates, global speakers, institutions, industry representation from more than 30 countries as indicated in the map below.



Image 2: Participating countries in Happy Cities Summit Amaravati, 2019

## SUMMIT AT A GLANCE

DAY 0 12 <sup>th</sup> FEB	SCHE	DULE	DAY 2 14	th FEB	
09:00 am - 12:30 pr	n Guided site visit to	Amaravati		Main Hall	Breakout
		and the second	09:00 am - 10:30 am	Panel: Vibrant ecosystem for youth entrepreneurs	09:00 am - 10:45 am Workshop Nudging private sector led development
- Charles and the second		La contration		10:30 am - 10:45 am Tea	Break
10 10 20	A TRU	The second	10:45 am - 12:15 pm	Panel: Physical and mental well-being in the age of digital	11:00 am - 12:30 pm Workshop Happiness index
a la company and the		A CALLER AND		12:15 pm - 01:00 pm Netwo	orking lunch
			01:00 pm - 02:30 pm 02:30 pm - 03:00 pm	Panel: Natural assets for sustainable economies	12:45 pm - 02:30 pm Workshop Scaling enterprise-led innovation
12:30 pm - 0	1:30 pm Networking lun	ch	02:30 pm - 03:00 pm 03:00 pm - 04:30 pm	Keynote by Charles Montgomery Valedictory Session	
02:30 pm - 06:00 pm City Leader's Rou Networking	maravati and discussions ndtable dinner 07:30 pm onwards		DAY 3 15	th FEB Amaravati Site V	/isit
DAY 13 <sup>th</sup> FEB			08:00 am - 09:00 am - Registrations		
			08:30 am - 1st Departure		
Main Hall	Brea	ikout		09:00 am - 2nd Dep	parture
09:30 am - 12:20 pm Summit 2018 Inaugural addre	Amaravati and recap of Happ sses by Hon'ble Chief Minister ss by Director General, Smart	r		09:30 am - 3rd Dep	
12:20 pm - 01:00 pm Network	ing lunch	02:00 pm - 05:30 pm	The second	And States	and the second second
01:00 pm - 02:30 pm Panel: Civic innovat	ion through data and	Amaravati Design Challenge Jury Presentation	William State		
02:30 pm - 02:45 pm Tea		06:00 pm - 07:00 pm	an and a start start		
02:45 pm - 04:15 pm Panel: Inclusive citie 04:15 pm - 04:30 pm Tea		APDRI Advisory board - Partners Meet			Seller Street
04:30 pm - 06:00 pm Panel: Designing Hu	man-Cented Green-feeld Citie	s mills		Ser Alt	
Networking	dinner 07:30 pm onwards		P		

Image 3: Schedule of Happy Cities Summit Amaravati, 2019

#### **INAUGURAL SESSION HIGHLIGHTS**

The summit was officially inaugurated by the ceremonial lighting of the lamp by Sri Nara Chandrababu Naidu, honourable chief minister of Andhra Pradesh along with the other dignitaries on the dais followed by cultural performance from members of state cultural committee.

Below are the introductory remarks by each dignitary.

- Vijay Naidu Galla, Vice Chairman, CII, Andhra Pradesh extended a warm welcome to everyone present at the summit.
- Hazem Galal, global leader for PwC's Cities and Local Government Sector, delivered the keynote address by sharing updates from different global cities and set the context for the summit.
- Francis Chong, Senior Director, Amaravati Partnership Office, MTI Singapore emphasized the importance of innovation while solving problems in cities.
- Dr. Prince Sodoke Amuzu, Mayor of Akatsi North, Ghana, congratulated the delegates of last years for coming up with six pillars of happiness and highlighted that these pillars are consistent with sustainable development goals.
- 4 Mr. Michael Costa, Australian Deputy Consul General stressed on two-way approach to increase trade and research & collaboration between India and Australia.
- Thushara Sanjeewa, Mayor of Kurunegala City Council, Sri Lanka congratulated everyone on the development of Amaravati.
- Kinlay Dorjee, Mayor of Thimphu, Bhutan shared Bhutan's journey in pursuit of happiness.
- Dr. Adnan Alta Altinors, Turkey Consul General appreciated the ambition and dedication of Government of Andhra Pradesh in making the state prosperous.
- Nicole Girad, Canadian Consul General encouraged everyone to bring up constructive and innovative ideas during the summit.
- Andrew Fleming, British Deputy High Commissioner, appreciated the greater international participation in the second edition.
- Katherine Hadda, Consul General, USA offered to share best practices from her country in handling rapid urbanization challenge in India.
- Dr. Sreedhar Cherukuri, IAS, Commissioner, APCRDA, welcomed everyone and shared the progress of Amravati's development.
- Dr. P. Narayana, Minister MA & UD, Government of Andhra Pradesh informed happiness is final goal and cities across the globe are making numerous attempts to achieve this objective and summit was conceived to provide platform to cities to share this attempt in a collaborative manner.

- Ajay Jain, IAS, Pr. Secy., Energy, Infrastructure & Investments extended a heartiest welcome to everyone on behalf of Government of Andhra Pradesh and shared Amravati's development status.
- Honourable chief minister Sri Nara Chandrababu Naidu officially opened the summit by lighting the ceremonial lamp along with other dignitaries on the dais.
- Dr. Aisha Bin Bishr, Director General, Smart Dubai delivered the keynote address and shared live dashboard used by city managers for a sustainable environment including smart police stations and other civic facilities.

#### **Dignitaries on dais**

- 🖊 Sri Nara Chandrababu Naidu, Honourable Chief Minister, Andhra Pradesh
- 4 Dr. P. Narayana, Minister MA & UD, Govt. of Andhra Pradesh
- 4 Ajay Jain, IAS, Pr. Secy., Energy, Infrastructure & Investments
- 🖊 Dr. Sreedhar Cherukuri, IAS, Commissioner, APCRDA
- 🖊 Katherine Hadda, Consul General, USA
- 4 Andrew Fleming, British Deputy High Commissioner
- 🖊 Nicole Girad, Canadian Consul General
- 🖊 Dr. Adnan Alta Altinors, Turkey Consul General
- 🖊 Mr. Michael Costa, Australian Deputy Consul General
- 🖊 Dr. Aisha Bin Bishr, Director General, Smart Dubai
- 🖊 Kinlay Dorjee, Mayor of Thimphu, Bhutan
- 🖊 Dr. Prince Sodoke Amuzu, Mayor of Akatsi North, Ghana
- 🖊 Thushara Sanjeewa, Mayor of Kurunegala City Council, Sri Lanka
- 🖊 Francis Chong, Senior Director, Amaravati Partnership Office, MTI Singapore
- 🖊 Mr. Hazem Galal, Partner, Global Leader Cities, PwC Middle East
- 🖊 🛛 Vijay Naidu Galla, Vice Chairman, CII, Andhra Pradesh

#### **KEYNOTE ADDRESS HIGHLIGHTS**

The honourable chief minister of Andhra Pradesh delivered the keynote address and made following remarks.

The chief minister appreciated the global participation of over 30 countries at the summit and spoke about the fact that majority of the governments world over building cities which are not liveable; it is time we start building liveable cities based on happiness index.

We all are fortunate to witness both the third revolution of technology and fourth revolution of IoT. Earlier everyone was happy with the development of technology but now IoT has given it a different dimension and has made everything possible even to the

"Amravati is a test bed for innovation. Anyone having any innovative idea can come to us to prototype their innovation as long as it improves the life of the citizens." extent of measuring what type of air one breathes and food one eats.

India is a great country with abundant resources and if we can use those resources with persistence, can do wonders for the country.

The Government of Andhra Pradesh is determined to convert state bifurcation crisis into an opportunity and work on a mantra - VIADOCT (Vision – Innovation – Accountability – Digitzation – Overization – Convergence – Technology). Our team will develop a world class city based on happiness.

Amaravati is a test bed for innovation. Anyone having any innovative idea can come and prototype their solutions as long as it improves the life of citizens.

He concluded his address by making a commitment that Amaravati will be one of the top 5 liveable cities in the world and will be future for global smart cities.

#### PANEL DISCUSSIONS AND FOCUSSED WORKSHOPS

#### **Civic Innovation through Data and Technology**

Chair: Graham Colclough, Partner, Urban DNA Panellists,
1.Jane Wiseman, Institute for Excellence in Government
2. Dr. Ali al-Azzawi, Chief Experience Officer, Smart Dubai
3. T. Lee Luen Len, Chairman Green Building Council of Mauritius
4. Raghunath Babu, Vice President, Surbana Jurong
5. Shan Mohan, IAS, Additional Commissioner, APCRDA
6. Michael Jansen, Chairman and CEO, CityZenith

Over the last three decades, civic planning has focused on a "growthfirst" urbanization plan promoting growth by centering the economic wellbeing of a city above all else. A new approach is needed in urban planning through civic innovation. Technologies like data analytics and artificial intelligence can play a key role in this implementation.

The cities need to prioritize the challenges and can benefit from technical exploration and new approaches. There has to be an explicit focus on city data, which can benefit the cities in designing the policy and data driven governance framework along with deriving a suitable technology road map for the city. The city administration can leverage city data to make better decisions or change the way they interacted with residents. The cities can use data and technology to overcome long-standing civic problems. Additionally, since cities have access to a large amount of city data, there has to be a focus on data monetization to enhance the civic facilities and services.

When data and technology are used together, the administration can hear out the opinions of people and serve them better by accommodating them in their policies. Data collection allows the administration to gain real-time insights about which policies are working.

**Graham ColClough,** Partner-Urban DNA initiated the discussion by inviting audience to participate in the session. He highlighted the fact how this conference is different from other events by giving example of the event

objective 'To sharpen the focus on quality by actionable outputs and continuous engagement' and asked everyone to think about their individual actionable outputs. He further shared his view on Amravati having potential to be a leading example and model for India's future happy cities. Jane Institute Wiseman. For Excellence in Government, joined discussion the by sharing that technologies like data analytics and artificial intelligence can play a key role in civic innovations. She highlighted the fact that only 1 % of data is currently analysed in the world and stressed importance on value of sharing data with the public. Open data builds trust government increasing in by transparency. Dr Ali al-Azzawi, **Chief Experience Officer, Smart Dubai** echoed the view that technology can indeed play a critical role in bringing together different aspects of a 'Happy City'. He linked it with physics by giving example that we have got set of tools in form of technology to solve a problem existing in the city. But what is most important is how to optimize those tools in a way that they help solve problems and take forward the citizen first agenda. Raghunath Babu, Vice President, Surbana Jurong talked about the things citizens are missing at present and pointed out that single most basic things missing is the clean and honest data which is a building block for any city. Governments spend millions of dollars to make much more complex systems to collect data which can't be comprehended or used

properly. If we can use the data properly it will increase the quality of city services and push the happinex index by some notches. T Lee Luen Len, Chairman Green Building Council of Mauritius stressed on the importance of Blockchain technology. He informed Mauritius is probably the first country in the world to implement this technology which has helped centralized all of the information. Since every block of information needs to be approved, it can't be corrupted. He also shared a used case where in they have put all of the politicians information and government assets on blockchain which has helped them make out how much more money and assets they have at their disposal. Shan Mohan, IAS, Additional Commissioner, Amaravati **APCRDA** highlighted Corporation's emphasis on using IoT enabled devices to run the entire infrastructure and thanked partners like Surbana Jurong and CityZenith in building the backbone of the city system through which they would be able to make more liveable cities. Michael Jansen, Chairman and CEO, CityZenith, talked about 'Digital Twin' technology that helps bring data together on a common platform. He informed Amaravati is the first city in the world to use this technology and it will help optimize city operations, profitability and other functions.

The chair concluded the session by sharing that cities can have certain principles on what governments, businesses and societies can read, like or dislike. There is an implicit trust that sit in all of these sectors around the use of the data. This also can be one of the mechanism that can really help along with the use of tools.



Image 4: Panel Discussion – Civic Innovation through Data and Technology

#### **Q&A Session:**

#### Q1 How can digital technology and data help streamline decision making process so that there is an urban design awareness on the decision being made that can actually reflect in physical development of a city?

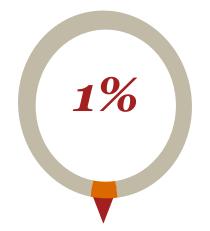
**Ans:** It is important that you make the stakeholders realise the importance of using the data. The main objective of the 'digital twin' technology is to break the data points down in simple visuals so that everyone can understand.

#### Q2 How do you address the fear of not sharing the data?

**Ans:** Governments around the world can adopt an open data program. There are institutions who can help you do that provided you give them the tools. Fear is quite

normal as inspite of introducing open data programs in some countries, data sharing is still a problem. Issues like data integrity and honesty can be addressed with verge and control.

#### **Synopsis**



<1%: Data Analysed in the world

'Civic innovation through Data and Technology' was the first panel discussion of Happy Cities Summit 2019. The seven-member panel discussed the importance of data repository in today's times. The panelists discussed that there is a tremendous opportunity to analyze the data being generated in today's world. Surprisingly, 90 % of world's total data since the beginning has been generated in the last two years, of which only 1 % is being analyzed. Every four out of five government leader think their decisions are somewhat or rarely data-driven.

The panel also emphasized that a technology like 'Digital Twin' is a bridge between the physical and digital world.

Data collected through this technology is uniquely analysed to improve city operations and profitability. *'Digital Twin'* is the future of city building and Amravati is the first city in the world, which has conceived and built on this platform.

The panelists unanimously agreed that data would help users forecast better decisions. For instance, building owners can make better decisions about which property to buy and what to build on it considering the social and environmental impact.

# **Inclusive cities for Women**

**Chair:** Cathy Hillman, Board Member, Women in Cities International

#### Panellists,

- 1. Anja Wyden Guelpa, CEO & Founder, Chez civicLab
- 2. Hajbouha Zoubeir, President, Phosboucraa Foundation
- 3. Francesca De Ferrari, Human Settlements Officer, UN-Habitat
- 4. Prof Geeta Mehta, Co-Founder, Asia Initiatives
- 5. Dr. Rashmi Singh, IAS, Secretary, NDMC
- 6. JSRK Sastry, Director (Strategy), APCRDA

Urban planning with a gender perspective not only benefits women, but also helps to improve the living conditions of people from different social groups living in cities. Creating inclusive cities for women, youth and girls helps strengthen social interaction in urban areas. It is estimated that by 2030, approximately 700 million girls will be making cities their homes. Women and girls experience multiple and various forms of violence and harassment in public spaces. In one study conducted in four cities across the globe, results showed that almost 60% of women feel unsafe in urban spaces.

Hillman, Board Cathy Member. Women in Cities International, opened up the discussion by highlighting women's needs for transportation and healthy public spaces. She then invited Francesca De Ferrari, Human Settlements Officer, UN-Habitat, who spoke about United Nations 17 Sustainable Development Goals. She informed these 17 goals -No poverty, Good health and wellbeing, Gender equality, Clean water and sanitation, etc are categorized under campaign 'The Future We Want', and opined that if we can't achieve gender equality all other goals can't be achieved either. Prof Geeta Mehta, Co-Founder, Asia **Initiatives**, highlighted the fact that there were more men in the room than women. It is indeed a big issue that why do we have to talk about Gender Inclusive Cities. She further spoke on

social justice and her two founded NGOs who are working to serve women and under-served people. She informed social justice is more easily accomplished because of social capital. If you build social capital, social justice will follow. Dr. Rashmi Singh, IAS, Secretary, NDMC, shared her different experiences meeting the girls in skill from development center who want to go school but parents won't send them since they are being teased there to bringing women in stream of affairs by giving her digital identity. She realized how difficult it is for a women to even keep her daily earnings at a safe place since she doesn't have any access to bank accounts. These experiences are very important in realizing different nature of vulnerability of women living in the urban spaces which often gets camouflaged when we treat women as a homogeneous category. She further shared what her current organization, NDMC, is doing in terms of interventions for inclusive infrastructure like inclusive education and creating safe schools, identifying sporting talents and nurturing girls, including children with special needs through special school, citizen engagement through digital apps for grievance redressal, student internship, Wi-Fi connect etc. Anja Wyden Guelpa, CEO & Founder, Chez civicLab, informed few backs 'Happiness' report was released where in Switzerland was once again featured in top 5 happy countries in the world. She shared why Swiss people were happier than other similar countries. It is not

because of economy, mountains, fresh air or chocolates. It is because of the political system like 'Direct Democracy'. She shared an example of implementing 'Direct Democracy' in a Geneva hospital where people were not happy with the food given to them. What authorities did was gave a choice to everyone of what they want to eat and people starting appreciating the food all the more, they recovered quickly and they were more happier too. Switzerland vote every 3 months, 4 times in a year so there is a constant dialogue between authorities and the citizens. Even if something has to be passed in the parliament, citizens' votes are taken into consideration. JSRK Sastry, Director (Strategy), **APCRDA**, talked about what authorities are doing and plan to do in Amaravati for gender inclusive society. He started of sharing that he was convinced that safety and security issues were under control in their state. Hence there was no need to discuss these issues in the first place and by creating awareness around them they were letting citizens think about it which might invoke unnecessary new ideas. He

shared an example from his son's school wherein a NGO came and talked about ill effects of drugs. His son was not aware about the drugs before but post NGO visit, he now knows everything about them including the ill effects. He further shared that Amravati's master plan takes care of women inclusivity by sharing example of connectivity between open spaces and women safety. In the open spaces there is a sense of community living which gives a safety net. Hajbouha President, Zoubeir, Phosboucraa Foundation, shared social development programs they are running in Morocco. The programs include 'Enhance education via counselling and reinforcement, Building capacities for better social youth integration, Learning centers with free access and Health campaigns to improve health access. The chair then concluded the session that 700 million girls will be making urban cities their homes in coming few years. Hence it is important that design thinking and planning processes must take these factors into consideration.

#### Q&A

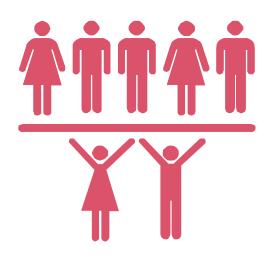
**Q1** How policy makers at Amaravati recognize the opportunity of subsidizing business who encourage more women participation in order to create a sustainable ecosystem?

**Ans:** About 21, 500 families in Amaravati are receiving pensions from the state government and the amount is being credited to women head of the families. Empowering women is the first agenda of the state government. In line with that, skill upgradation programs, entrepreneurial opportunities and subsidized loan programs are also there.



Image 5: Panel Discussion – Women Inclusive Cities

#### **Synopsis**



The panel on 'Inclusive cities for women' had a clear thought that everyone has a part to play - all the time, everywhere. It is just we need to create an opportunity and an environment for inclusive growth. The panelist's unanimously agreed on the fact that gender inclusive cities is a critical issue. Development of women is not only about the infrastructure development, it is about making the stakeholders' gender sensitive. Once stakeholders are gender sensitive, women can avail the services on offer.

During the discussion, a good example of *'Mahila Mitra'* (Be a friend for Woman) initiative launched by Andhra Pradesh government in Vijayawada was presented. Mahila Mitra is an initiative wherein police officials are triggering a change in the attitude and behaviours on how to be more sensitive and friendly towards women.

The main outcome of the discussion was that tools like 'Design Thinking' and 'Mapping' can help create happy and inclusive cities for all.

#### **Designing Human-Centered Greenfield Cities**

**Chair:** Michael Koh, Senior Fellow, Centre for Liveable Cities Panellists,

- 1. Liang Thow Ming, Chief Marketing Officer, CHEC Port City Colombo (Sri Lanka)
- 2. Simon Xie, Dy. CEO, Sino-Singapore Guangzhou Knowledge City Investment and Development Co.
- 3. Mahmoud El Burai, Chairman, Middle East Sustainable Development Institute and Senior Advisor at Dubai Real Estate Regulatory Authority
- 4. Hasna Boutzil, Managing Director, SADV, Mohamed VI Green City
- 5. Ahmed El Alakel, Senior Manager, Colliers International
- 6. Dr. Sreedhar Cherukuri, IAS, Commissioner, APCRDA

The Sustainable extract from Development Goal 11 states: "Making cities safe and sustainable means ensuring access to safe and affordable housing, and upgrading slum settlements. It involves investment in public transport, creating green public spaces, and improving urban planning and management in a way that is participatory and inclusive".

For Greenfield cities in particular, there is a chance for us to plan afresh with people at the forefront, incorporate new ideas, provide new infrastructure, apply latest technological advancements and engage our communities. We also need to consider the natural heritage and cultural aspects of each site. All of us aspire to build cities that have a competitive economy, sustainable environment and a high quality of life, founded on integrated master-planning and development and dynamic urban governance. These key factors can make our cities liveable, sustainable and happy places to be in.

The chair Michael Koh, Senior Fellow, Centre for Liveable Cities, initiated the discussion by sharing that all of us want high quality of life, sustainable environment but it has to be based on integrated master planning and design. He appreciated chief minister Sri Nara Chandrababu Naidu for his vision and dynamic governance. He further shared few ideas like drainage reimagined, storm-water canal

transformation, public transportation infrastructure as backbone and implementing bus provisions and parking policies.

Sreedhar Cherukuri, Dr. IAS. Commissioner, APCRDA. shared how people's aspirations were taken care of while planning Amaravati and thanked partners like Surbana Jurong. Things like being Vastu compliant, plot sizes meeting citizens economic planning and an opportunity to merge, demerge and join with different people while be in their communities at the sametime. Amaravati authorities considered all these requirements and discussed with planners to come up with a city plan and micro level plan upto the individual plot level. All the aspirations were captured and converted into the plan.

Liang Thow Ming, Chief Marketing Officer, CHEC Port City Colombo (Sri Lanka) stressed on the importance of cities must having the right mix of infrastructural designs, along with keeping in consideration the natural, heritage and cultural aspect of the city. He shared an example of major regional transformation The Port City Colombo, which is an upcoming brand new city development built as an extension of the existing central business district of Sri Lanka's vibrant commercial capital, Colombo.

Simon Xie, Dy. CEO, Sino-Singapore Guangzhou Knowledge City Investment and Development Co, opined that cities

should be made in such ways that can attract both talent and knowledge based industries. He also shared an example from his city development on how to do good design on human centered cities. How both China-Singapore Guangzhou welcomed the upgrading of the knowledge city to a state- level bilateral cooperation project and decided to deepen collaboration in its joint development, and expand cooperation in the fields of technology innovation, advanced manufacturing, intellectual property rights and talent development.

Hasna Boutzil, Managing Director, SADV, Mohamed VI Green City, thanked the organizers for conducting this event and shared that her organization was committed to sustainable development by adopting environmental policies. She further shared progress of the first green city of Morocco - Ben Guerir for which her organization is the subsidiary firm in charge of the development. She opined that initiatives like Bio Climatization, Water Management, Energy, Urban Mobility and Green Spaces are important to sustainability of the green city.

Ahmed El Alakel, Senior Manager, Colliers International, opined that urban planning is part of the wellbeing of the population. This was taken into consideration in Morocco long time ago and they have a good strategy based on European development which is upgraded every ten years. He further shared that all Moroccan cities are well designed. accommodation All and

construction buildings are environment friendly.

Mahmoud El Burai, Chairman-<br/>Middle East SustainableMiddle Development InstituteDubai lays lot of emphasis on happiness<br/>and has introduced new government<br/>roles - Ministers of Happiness and<br/>Tolerance to uphold this aspect. He<br/>further shared the importance of<br/>leadership impact on competitiveness<br/>and appreciated Amaravati's vision of<br/>being the happiest cities in the world.

The chair concluded the session by highlighting the importance of having a good master plan and also the layers of the detailed plan. He said that the master plan is only two dimensional and this where the panelists highlighted the importance of the third dimension 'detailed urban design'. He thanked the city of Dubai and Colombo for highlighting the importance of neighbourhood and social aspects. How do people perceive their cities and immediate sorroundings play an important role in designing cities

#### Q&A

**Q1:** While governments around the world focus on environmental aspects, they often neglect aspects of human-centered cities such as health aspect. What steps are being taken to improve those in Dubai?

**Ans:** Dubai government has tied up with Will Institute in USA and building up six communities to focus on internal environment. Since citizens spend close to 90 % of the time inside building, Dubai government has also decided to pay attention to internal environment along with external environment.

#### **Synopsis**



The third panel discussion on Day 1 of the Summit was 'Designing human centered greenfield cities'. Most of the panelists on the panel had a common view that while designing new cities, conservation of natural

heritage and cultural aspects must be taken into consideration. To add, a city should be founded on integrated master planning & development, and dynamic urban governance.

The panelists further stated that City Leaders should leverage the chance of building something new by keeping people at the forefront by applying latest technology and engaging different communities. This can result in sustainable environments, good quality of life and competitive economies.

The panel also highlighted the case of Amravati, which is one of the few cities that has engaged its citizens and considered their aspirations of making the city 100 % *Vastu* compliant. On the other hand, aspirations like plot sizes meeting the economic planning and an opportunity to merge, demerge and join different communities were also taken care of.

Lastly, the panel agreed upon that corporate vision should align with the government's vision of building world-class cities with long term planning. Cities that are built keeping happiness and wellbeing of citizens as paramount.

## Vibrant Ecosystem for Youth Entrepreneurs

**Chair:** Gopichand Katragadda, Founder & CEO - Myelin Foundry

Panellists,

- 1. Hugo Salomao, International Relations Advisor, Belo Horizonte, Brazil
- 2. Ms Stefania Costanza, Consul General of Italy in Mumbai
- 3. D Ramakrishna, CEO, Efftronics Systems
- 4. V.Rama. Manohara Rao, IRAS, Special Commissioner, APCRDA
- 5. Satish Kamat, CEO and President, Sri City
- 6. Parag Dhol MD, Inventus India

India is home to more than 48 million small businesses\_- which is over twice the number of small companies in the US (23 million). Surveys also show that entrepreneurial intent is constantly on the uptick – from 9% to 15% in the last one year alone. This combined with a decrease in failure rate (from 44% to 37.5%) bodes well for the community as a whole. As a primary cog in the economic engine, innovation through entrepreneurship plays a key role in development. These small businesses provide jobs, especially to less-advantaged people, and are responsible for supplying basic goods and services in low income or isolated communities. They often encourage philanthropy and giving back to their communities. Small business owners and their hustling attitude also sets an example of risk-taking and courage for the youth in their communities.

However, despite its large economic relevance. this sector faces encouragement challenges: there is a dearth of access to local talent, labour, markets and financial support. There is also a stigma associated with a failure that needs to be addressed. SME sector in the developing world faces enormous unleashing challenges to its full potential.

The chair Gopichand Katragadda, Founder & CEO - Myelin Foundry, initiated the session by sharing that his roots are from this part of the world and it is a privilege to be back home. He shared a poem written by his grandfather which says, 'I have brought the sandal paste to annoy the brave, tell me who the brave here are'. The entrepreneurs are referred to braves here. He further shared that in the journey of entrepreneurship, one will face guns and tanks, those who overcome these will get glory for themselves and the region. He appreciated the young panel and mentioned this discussion is about the future, people of the future, government of the future. He further went on to say that when we talk about cities, first thing the city should have is people and shared another poetry which says, 'The city is not about buildings and muds, it is about the people'. If you want to create a city which is vibrant, then you need to create more jobs.

He gave first opportunity to Ms Stefania Costanza, Consul General of Italy in Mumbai, to share her views. She started of mentioning that since she is a diplomat so her knowledge as compared to city planner might not be as deep. She shared that there is a very strong relation between cities as an environment people living in and economy & productive fabric of the city itself. Italy is a country which was genetically born with small towns and every other street ends with a square. The reason for this kind of model is that people are supposed to meet at a square, where some sort of activity or business is taking place. She further shared that there is a law in Italy from 1942, which tells you how the planning and master plan should be done at a city level. The model that Italy follows also include citizens' survey which focusses on their habits rather than on their needs. This is one of the best ways to understand how consumers consume. The chair asked a question 'How Italy is successful in promoting its culture and increasing tourism'?

Stefania replied, both India and Italy do share common language of beauty as people of both the countries are exposed to natural beauty and cultural heritage. When it comes to Italy, we have realized it is not a matter of what you have but how do you preserve it. Italy is a small country as compared to India and we don't even have land anymore so we reuse the space to make it more beautiful.

The chair then asked Hugo Salomao, International Relations Advisor, Belo Horizonte, Brazil to share his views. He started off sharing that his city Belo Horizonte is the third largest metropolitan city in Brazil. For betterment of everyone present in the room, he also mentioned this is the same city where Brazil lost Germany in football world cup by a big margin. He mentioned that after a UN conference on Housing and Sustainable Urban Development held at Brazil in 2016, they had come up with a new urban agenda. The current masterplan was more than 30 years old, so they realized to foster innovation and develop human focused cities, Brazil needed new guidelines and polices. The new masterplan will be launched soon now. He further shared that they are also focusing a lot on technology aspect as they have started teaching IT and things related to computer and science in schools to develop these kids into future entrepreneurs. The city also has an IoT lab opened for local and international entrepreneurs to prototype a solution that helps improve quality of life.

**D** Ramakrishna, CEO, Efftronics Systems then joined the discussion and shared that before 1750 both India and China were contributing almost 25 % of the world's GDP but after first, second and third revolution both countries didn't adapt to changes as rapidly as they should have. Post fourth revolution, China made some important changes and went past Indian GDP but still to date both countries only contribute 3 % of the world's overall GDP. He further highlighted the challenge faced by entrepreneurs like how to identify the value for stakeholders. Wealth creation is what signifies the real value for majority of the stakeholders in the world. Another big challenge is shrinking product lifecycles as stakeholders don't want to take much risks especially on unknown commodities.

Satish Kamat, CEO and President, Sri City shared the success story of his city Sri City by starting of appreciating the fact that they are discussing an issue like entrepreneurship and connecting it with subjective idea of happiness. He informed Sri City is a 10, 000 acre Greenfield manufacturing driven city more than industries with 170 operational at present. They realized that to make an integrated city they needed a permanent population and to attract that they had to create more jobs along with other facilities like schools, hospitals and malls. Sri City had created 50, 000 jobs (which is more than half of the Andhra Pradesh state industrial jobs) in just last three years. They did that with initiatives like building ready build factory sheds; in case someone doesn't have capital to build it from scratch, they can rent it. Other common facilities like training centers, testing centers. They also started calling office as business center or incubation center with a belief that any company whether well-established or newly incubated will be a start up in their city since they would be new to the surroundings and the environment.

The chair made a comment on Sri City's success story that creating jobs is not possible without having funds and invited **Parag Dhol MD, Inventus India,** to comment further on it.

Parag mentioned though he is a technologist and not a city expert but will try compare the city where he has worked (Bangalore) with other cities in India. He started off sharing that one of the great things going for Bangalore is its moderate weather as people gravitate towards good weather. Silicon Valley is a good example of that. From 1960's and 70's Bangalore had base for public sector undertakings and research labs like HAL. People came and established their startups and it took off from there. Institutions like IISC and IIMs help Bangalore to produce special talents. Another factor was software industry was based out of there - Infosys and Wipro for example started out of Bangalore. Now since it is the IT capital of India, majority of the IT professionals are based in the city and young crowd want to come to Bangalore to be with their friends and colleagues. Bangalore is also a testing bed for everything. For example. Bike sharing, given the weather and willingness of young crowd to experiment, Bangalore is the best place to try that out. All of these factors have helped Bangalore raced ahead of other cities. He concluded his comments by sharing that Bangalore grew organically, what might work in the favour of Andhra Pradesh and Amaravati is its dynamic government.

The chair then invited V.Rama. Manohara Rao, IRAS, **Special** Commissioner, APCRDA to share the challenges and pain areas Amaravati is facing. He highlighted the importance of this kind of a discussion for a Greenfield city like Amaravati. He shared that Amaravati's foundation was built on land pooling scheme which is a good example of looking into the future by participants. The first thing you need to build any foundation or infrastructure is the land. Most of the times, especially in a country like India, land matters get into legal hassles and project gets stagnated. But in Amaravati, all the stakeholders saw value in wealth creation and decided to support the initiative.

The chair concluded the session by appreciating Amaravati government's effort to encourage the risk taking appetite of people and hoped it is a perfect Segway for Amaravati and the entire state.

## Q&A

# Q1: What can the government do for start-ups who have not made up their minds whether to go for bootstrapping or venture capital?

**Ans**: Government can provide an ecosystem for start-ups by coming up with right policies and framework. For example, Government of Andhra Pradesh provides 3 year subsidy on rental for new start-ups within IT space.

There are some entities that provide funding to innovative start-ups however it is important to be well connected to the ecosystem. Finding resources is entrepreneur's job.



Image 6: Panel Discussion – Vibrant Ecosystem for Youth Entrepreneurs

#### **Synopsis**

Entrepreneurial ecosystems come in myriad forms. The panel on 'Vibrant ecosystem for



youth entrepreneurs' was focused to better understand what contributes to creating a vibrant entrepreneurial ecosystem in an emerging city. The panel discussed that, to create vibrant cities, more jobs should be created. City is not just about the physical infrastructure, it is about the people.

A panel which had speakers with entrepreneurial backgrounds and knowledge agreed that to attract

more people, we need more jobs however it can't be an old age economy. Cities cannot go on producing steel and expect youth to consider it as their future habitat. For youth, optimism for future is greater than the weight of the past. Optimism is a cognitive construct related to motivation hence factors like entertainment, wellness, quality education, government, police and courts all play an important role in making city a liveable city.

The panel also insisted that public policies are directly connected in creating vibrant ecosystem for youth entrepreneurs. Policies like facilitating seed funding for start-ups or covering their bootstrapping cost to make it easier for them to survive the initial period goes a long way in gaining trust of youth entrepreneurs.

During the panel discussion, it was stated that Amravati's foundation is built on a landpooling scheme, which is a great example of looking into the future by participants and exploring their risk taking appetite.

Farmers saw value preposition in land pooling scheme. They were convinced with the idea of 'the more the city grows, they will also grow along'.

This type of thinking is fundamental for any entrepreneurial attempt.

It is essential to have policies that minimizes the risks taken by youth entrepreneurs while starting up their own ventures backed by innovation and technology.

# Physical and Mental Wellbeing in the age of Digital

# **Chair:** Jagan Shah, Director NIUA Panellists,

- 1. Kinlay Dorjee; Mayor, Thimphu, Bhutan
- 2. Gift Kasamira; Head of City Development Strategy, Lilongwe, Malawi
- 3. Liz Zeidler; CEO and Founder, Happy City, UK
- 4. Guy Perry; Vice President Urban Planning & Design, McKinsey & Co.
- 5. Ramakrishna Rao; Advisor APDRI and Ex-Director (Planning), APCRDA
- 6. Shan Bannirchelvam, Managing Director at Global Strategy Partners
- 7. Bruno Moser; Head of Urban Design,

Today, about 34% of India's population lives in urban areas, and by 2050, it's expected that 68% of the world population will be urban. Because of this rapid growth, and the large number of people these areas accommodate, it is vital for us to understand how a city's environment affects mental health and happiness.

This is even more relevant in light of recent studies that have found how urban living impacts our mental and physical health. According to one Dutch study, urban residents are 21 percent more likely to be affected by an anxiety disorder, and also carry a 39 percent higher risk of mood disorders.

Another study suggests that the loud noises so prevalent in cities lead to twofold higher chances of depression and anxiety. Similarly, the "bright lights" that urban dwellers experience, about three to six times\_more acute than found in small towns, impacts sleep and increases stress and anxiety.

Simultaneously, there is a strong correlation between mental and physical wellbeing. If we have good physical health, we will eventually experience better mental and emotional wellbeing. However, with growing population one of the most difficult challenges that the world is facing today is about accommodating the huge number of people crowding into the urban space. The cities need to derive a mechanism to ensure long-term health and wellbeing of the citizens, and the opportunity to provide healthy life styles.

Cities have a notorious lack of open spaces and boast of densely packed homes that affect one's wellbeing. Research has concluded that being in the proximity to nature can improve mental wellbeing. Distance from families staying in home-towns or nuclear families in cities also contributes to loneliness and isolation. Today, we live in the digital age that also plays a key role in our physical and mental wellbeing.



Image 7: Panel Discussion – Physical and Mental wellbeing in the age of Digital

The chair Jagan Shah, Director, NIUA kicked off the discussion by sharing the importance of good physical health which provides essential balance to our physical and mental wellbeing. He shared that to be able to live longer and be more productive, physical and mental wellbeing is essential, and invited Kinlay Dorjee, Mayor, Thimphu, Bhutan to share this thoughts with everyone. Kinlay Dorjee, shared that Bhutan is a happy country as a result of the policies framed 45 years ago. The parliament passed policies like Tobacco control act and alcohol policy, while local authorities helped implementing those at the ground. Bhutan being a small country of less than 1 mn population can't afford to be complacent. Hence they have come up with a committee chaired by Kinlay Dorjee to review all the policies again and if any change is required. He also mentioned that they penalized everyone who don't follow the law.

The chair then invited **Liz Zeidler**, **CEO and Founder**, **Happy City**, **UK**, to share her views. She mentioned that 'Happy City' organization was set up in 2010 and back then no other such organization existed. She shared that today the main challenge exists for governments is to identify the right *compass* and linked that to having the right purpose. Most of the governments around the world are guided by magical GDP numbers which is wrong. She quoted an example of having a car and then measure its success with more usage of petrol. She also quoted one famous economist's observation, 'If we measure wrong things, we will strive for wrong things'. Hence having the right purpose is very important.

After this, Gift Kasamira, Head of City Development Strategy, Lilongwe, Malawi shared success story of his city. In 2008, the city authorities decided to shift all government offices and ministries from Blantyre to the city of Lilongwe. In 2005, Malawi's population was approximately 675, 000 and it increased significantly post 2008. The Malawi city started attracting lot of migrants with its economic increased activity. He concluded by talking about integrated approach to urban planning. What the Malawi authorities observed, sustainable livelihood can bring the desired change. It can bring about the happiness to people who were initially miserable if designed and executed well on the ground.

The chair then invited **Guy Perry**, **Vice President** – **Urban Planning & Design, McKinsey & Co** to make his presentation. He echoed the comments made by Liz Zeidler on focusing on the right purpose. He mentioned while technology is integrating with Indian society, the transformation is a double edge sword. On one hand, India has made amazing development and

progress with lot of leaders in Silicon Valley from South East Asia, at the same time chances of becoming diabetic for people moving from village to urban life has increased by six-fold. He took hours spent in traffic as an example and mentioned Indian authorities are focusing on traffic as a problem, where in I have seen same amount of traffic even on 16 lanes in India. The problem is not the traffic but the life pattern. In India, first thing you will notice in people when they start earning more is a change in their physical stature. He concluded his comments bv highlighting the importance of focusing on the right purpose.

Bruno Moser, Head of Urban Foster+Partners, Design, then shared his thoughts by talking about opportunities Vs risks that exists today in this digital age. He mentioned that speed of urbanization is happening at an unprecedented rate making it more difficult and challenging for everyone, and shared examples of opportunities Vs risks. While one can make health appointments online these days, there is extreme usage of internet amongst children. Similarly if we have access to digital infrastructure, there exists inequality of internet users.

Shan Bannirchelvam, Managing Director at Global Strategy Partners, who works in the area of impact investment, echoed Guy Perry's views that urbanization doesn't need to be multiplier of challenges, if done correctly it can be multiplier of smart health solutions. He shared a used case where in his organization is working with Stanford Medical School and Surbana Jurong in USA to integrate smart health into urbanization.

**Ramakrishna Rao, Advisor APDRI** and Ex-Director (Planning), APCRDA, then dwelled into the physical wellbeing and how APCRDA have imbibed this into city planning. He informed that 30 % of the land is earmarked as blue or green space which will help provide walking trails and bicycle tracks from one end to another end of the city. The authorities also gave lot of thrust on public transport to enable more than 50 % of the trips through them. The plan also contains 22 km long river front which would be accessible from any area within 10 mins and provide a chance to people to get rejuvenated. All this was possible after understanding the sensitivity of the during people the land pooling interactions with farmers. The chair concluded the session by highlighting the importance of purpose. Governments around the world should be mindful that one of the ways to define purpose is coming up with right policies which caters to every aspect of the city.

#### **Synopsis**



The panel discussion on 'Physical & mental wellbeing in the age of digital' started with a message that a well-defined meaningful purpose is important to measure the *compass*.

Most of the governments in the world are guided by measuring magical GDPs, which, according to the panel is not an ideal criteria. If we measure the wrong things, we will strive for the wrong things. A wrong purpose will always lead to wrong outcomes.

The panel hence suggested an integrated approach

to urban planning with a focus on sustainable environment of livelihoods is needed. Sustainable livelihoods can bring about the desired change, if designed and executed properly. It can bring better stability to people.

The panelist highlighted that new communities are designed in a way that children have no options but to get online and entertain themselves. So it is imperative that city planners should be shaping environments that are more engaging and create a stimulating environment that actually competes with the virtual world. Hence it is important that factors like physical and mental wellbeing should be kept at the forefront from the very beginning of the city planning.

#### **Natural Assets for Sustainable Economies**

**Chair:** Emani Kumar, Deputy Secretary General, ICLEI Panellists,

- 1. Piero Pelizzaro, Chief Resilience Officer, Milan
- 2. Tony Wong, CEO, CRC for Water Sensitive Cities
- 3. Amit Prothi, Head of National Strategy India, 100RC
- 4. Loh Ah Tuan, Expert, Centre for Liveable Cities
- 5. M Anand, Principal Counsellor, IGBC
- 6. Michelle Preen, Senior Manager Communications, Membership and Knowledge Management, ICLEI

Biodiversity and healthy, functioning ecosystems are essential for wellbeing of urban communities and economies. Biodiversity is also closely intertwined with other elements of sustainability. Human settlements are directly dependent on a variety of ecosystem services. Urban areas constitute only about 2% of the Earth's land surface area. but more than half of the world's population lives in cities and they utilize about 75% of the resources consumed globally. The majority of ecosystem services used in urban areas are therefore not produced within those areas. Biodiversity within and outside of urban areas provides many important ecosystem services. For instance,

purification of air and water; microclimate regulation; noise reduction; storm water attenuation and drainage; wastewater treatment; not to mention the recreational, cultural and social values that are most tangible to people.

Cities are also important in terms of biodiversity because in some cases, their administrative areas harbour or affect especially important ecosystems such as wetlands or may even be centers of endemism. With the urban population across the globe set to grow at an exponential rate, cities will need to find new ways of meeting the basic demands of its population in addition to ensuring that growth is inclusive and sustainable. Rapid urbanization has created tremendous pressure existing on resources, thereby, calling for an innovative and integrated nature based solutions approach to efficiently manage the limited resources.

Emani The chair Kumar, Deputy Secretary General, ICLEI, started off the discussion appreciating by the development in Andhra Pradesh over the last 15 years and expressed his happiness in participating the summit. He asked the panel to dwell more on how they are addressing the issue like rapid urbanization impacting different services in the world and opened up the discussion by sharing that cities are growth engines for any country so unless or until we discuss issues like natural disasters, we can't discuss economy either.

He invited Loh Ah Tuan, Expert, Centre for Liveable Cities first on the dais. Loh Ah Tuan shared how Singapore deals with climate change. Climate change leads to high temperatures, rising sea levels, changes in weather patterns and damage to people, businesses and communities. Singapore formulated a series of guidelines with an objective of balancing the economic development with environment protection and social progress. He quoted an example of floods. To reduce the number of flood prone areas in Singapore, they decided to make the city carbon efficient and draw a master plan accordingly. Singapore also inculcate the culture of being energy and carbon efficient amongst its citizens.

The chair acknowledged and appreciated Singapore's efforts in growing as a Greenfield city and invited Piero Pelizzaro, Chief Resilience Officer, Milan to share his thoughts. He shared a story of a city which was a Greenfield city 100 vears ago and then industrialization happened, buildings came up. This was followed by climate change which led to economic crisis and city wanted to go back to Greenfield route but could not. He further shared the steps such as urban forestation Milan has taken to fight pollution.

Tony Wong, CEO, CRC for Water Sensitive Cities, then talked about the whole notion of making a sustainable green city. He referred to a report by United Nations released in 2018 which puts in context the whole concept of nature based solutions of water in practice and highlighted the importance of incorporating nature back into the way we operate our cities. He also highlighted the danger of getting caught into this whole scheme of developing green cities without realizing what we want this green ecosystem to do for us. He concluded his comments by sharing four basic activities of nature based solutions - Nature Conservation, Restoration, Rehabilitation and Biomimicry.

The chair then invited **Amit Prothi**, **Head of National Strategy - India**, **100RC**, who spoke about convergence of three major that are transforming our cities -urbanization, globalization and climate change. These trends are really going to influence the cities of 21st century. He also encouraged everyone to consider nature as a part of infrastructure and use it to reduce problems arising out of natural disasters. He also shared an example of Chennai restoring bio diversity in one of the rivers.

#### Michelle Preen, Senior Manager Communications, Membership and Knowledge Management,

**ICLEI**, then came on the dais and expressed her gratitude for being part of such positive and enriching event. She shared that ICLEI had launched a global initiative in 2018 'Cities with Nature' which provides a digital platform for cities to connect, to share and to learn by harnessing the power of partnership. She finished her presentation by inviting all cities to participate in this initiative and make a commitment towards creating sustainable cities.

The chair then invited the last speaker **M Anand, Principal Counsellor, IGBC** on the dais who shared an example of world's greenest building located in Hyderabad. He shared how IGBC used Indian tradition with architect elements and modern technology to preserve the natural assets of this building. He closed his remarks by sharing that IGBC wants India to be one of the global leaders in the sustainable built environment by 2025.

The chair concluded the session by thanking all the panelists for sharing their insights.



Image 8: Panel Discussion – Natural Assets for Sustainable Economics

#### **Synopsis**



The last panel discussion for this year's summit was 'Natural assets for sustainable economies'. It is a fact that cities are growth engines for any country and it is crucial to protect their natural assets for sustainable economies. The panel discussed the need for a strategy to improve energy and carbon efficiency for industries, transport, building, household, water and wastewater sectors. A strategy that takes a holistic view of reducing carbon emissions from power generation besides develop and deploy low-carbon technologies results in achieving the

real objective.

During the discussion, another important factor that was highlighted was that while conceptualizing a strategy, collective climate change actions must be encouraged. The panel insisted the need to inculcate a culture of being energy and carbon efficient. We

should include nature based solutions and embed ecosystem services which includes nature conservation, nature restoration, nature rehabilitation and biomimicry.

The panelists recommended that both cities and its habitats should use cleaner fuels and low carbon emission equipments in order to preserve the city's natural assets.

# 5.2) Focused Workshops

# 1. Nudging Private Sector Led Development

1.1 Moderator: Michael Koh, Senior Fellow, Centre for Liveable Cities

**1.2 Summary:** The workshop highlighted how wholesale innovation underpins our ability to resolve the world's greatest challenges and how cities can play an important role to stimulate & convene innovation locally. That can provide a better environment for local entrepreneurs and other businesses to delivery transformed outcomes. It offered a framework to help participating cities to improve their process of innovation planning, discuss opportunities and priorities for collaboration between cities to deliver local and network-wide scale.



Image 9: Workshop – Nudging Private Sector Led Development

#### 1.3 Key Messages:

- Key interventions needed to transcend challenges in sectors like Planning & Development, Environment Infrastructure and Construction & Green Buildings.
- Threats posed by challenges such construction approval without clear development plan.
- Unaffordability of new technology as businesses grapples with quality, cost and time.
- Lack of skilled workforce availability and insufficient knowledge around new technology.
- Opportunities for private sector participation in Amaravati's Environmental Infrastructure Plan roadmap.

#### **1.4 Outcome:**

There is a need of clear and transparent processes one that adheres to development approval processes. Awareness around new technology and construction techniques while providing incentives for companies who try out new innovations.

2) Scaling Enterprise-Led Innovation

2.1 Moderator: Graham Colclough Partner, Urban DNA

**2.2 Summary**: The workshop discussed the critical role of private sector in the development of a city, from designing spaces where citizens will stay, work and play to their working environment and social benefits. How private sector can align their business goals with a city's broader goals of wellbeing, sustainability and ease of doing business?



*Image 10: Workshop – Scaling Enterprise- Led Innovation* 

#### 2.3 Key Messages:

- Specific early city ideas should be brought into action in cities like Delhi Bangalore, Chennai, Hyderabad and Amaravati.
- Capture Land Pooling Scheme as Amaravati's Commitment to disseminating innovation.
- Work together with other Indian cities to create a world-wide leading practice for urban innovation.
- Invite cities internationally through the 'Happy Cities Forum' for meaningful collaboration.
- Work with national / International Standards organizations to capture guidance & tools for city leaders & managers to help new cities around the world to improve how they innovate to deliver happier cities.

#### 2.4 Outcome:

A framework derived from model cities around the world was introduced to help design happy cities of tomorrow.

### 3) Happiness Index

**3.1 Moderator**: Sreeram Ananthasayanam, Partner- Government & Public Services, PwC



Image 11: Workshop – Happiness Index

**1.2 Summary**: The workshop was aimed at exploring sentiments around if in this digital age, where GDP is taken as a major benchmark for a country's development, we should place human happiness and wellbeing at the heart of governance, development and growth of a city. To generate more insights from the participants through deliberations and to identify enablers for happy cities, the experts were asked to adopt one of the personas out of six given. They were asked five important questions from the point of view of the persona and asked to plot

the identified enablers against ease of implementation and level of impact of the enablers to categorise the enablers.

#### Persona 1 Persona 2 Persona 3 Persona 4 Krithika Lakshman Indira Mukesh Female | 25 years | Salaried Male | 35 years | Salaried Male | 30 years | Daily wager Female | 70 years | Retired · Works in a NGO that works in Culture Retired Government Servant • Works in a Multi National Company · A migrant labour in the city and Heritage Widowed for the last 5 years · Happily married and has one son who · He works in the construction industry She is also a practitioner of the city's Has been living in an old age home for is 6 years old · Remits most of his income to family traditional dance form the last 5 years · His family lives in a gated community. Persona 5 Persona 6 Prabhas Laxmi Male | 8 years | Student Female | 35 years | Police • Both the parents are informal · Lakshmi joined the Police Services to workers and daily wage earners serve the people · Goes to Government Public School She is an honest & approachable officer

### Personas in a Typical City in India....

#### 1.3 Key Messages:

- Stakeholders must define what happiness means for them by engaging through the eyes of future citizens.
- ↓ Happiness quotient is far more important than GDP.
- 4 Equal importance must be given to non-economic aspects of wellbeing.
- Measures should be taken to include sustainable urban development by taking a holistic approach towards notions of progress.

#### 1.4 Outcome:

The ranking of the enablers helped providing insights into not only the indicators of happiness but also an understanding on how to achieve them.

#### AMARAVATI DESIGN CHALLENGE

Amaravati Design Challenge, since its inception, has adopted an inclusive, participatory and transparent approach to planning and design of the city. The land pooling scheme which is a partnership with 27,000 land owners in Amaravati has emerged as an innovative mechanism to procure land in a democratic framework. Through the land pooling scheme, the land pooling scheme owners have been provided reconstituted urban plots – residential and commercial, in the neighbourhoods of Amaravati. In time with this endeavor, APCRDA initiated the "Amaravati Design Challenge 2019", as a way to capture concepts from students of Architecture, Design, Planning and Urbanism to add value to the development of their plots in Amaravati.



Recognizing residential as a key factor in affecting livability and happiness for the current citizens of Amaravati, the design challenge will make available the best designs for the land owners of Amaravati for their use. This provides the land owners a great start to developing their new houses in Amaravati's neighborhoods in line with its vision of happiness.

The students from various academic institutions and parts of the country were provided with the most common plot sizes, and the top 3 designs were awarded cash prizes along with 9 other designs which got special mention during the summit. The participating cities appreciated the initiatives taken by Amaravati to become a role model for the cities of the future.

## Winners of Design Challenge

### 1<sup>ST</sup> PRIZE

PROJECT TITLE	PARTICIPANTS	COLLEGE
Nee Naa Illu	• Kavya Shankar • Sahana R • Pavan • Gavini Lakshmi Sravya	Dayananda Sagar College of Engineering, Bengaluru

#### 2<sup>ND</sup> PRIZE

PROJECT TITLE	PARTICIPANTS	COLLEGE
Ananthamaya	<ul><li>Vardan Soi</li><li>Anmol Mathur</li><li>Shubham Solanki</li></ul>	CEPT University, Ahmedabad

### **3RD PRIZE**

PROJECT TITLE	PARTICIPANTS	COLLEGE
The Breathing Paradise	<ul> <li>Shivani Dolas</li> <li>Prashansa Parashar</li> <li>Sajal Patidar</li> <li>Lisha Patel</li> </ul>	Madhav Institute Of Technology And Science, Gwalior

#### FINALISTS

PROJECT TITLE	PARTICIPANTS	COLLEGE
Amragram	• Amlan Kumar Sahu • Tanmay Sadhu • Hariharan M	IIT Kharagpur

PROJECT TITLE	PARTICIPANTS	COLLEGE
Astaka	• Abhirup Dey • Ankana Sinha	Indian Institute of Engineering Design and Technology, Shibpur

PROJECT TITLE	PARTICIPANTS	COLLEGE
Nirvana Homes	<ul> <li>Anushka Dutta</li> <li>Kushi Gautam</li> <li>Shubham Meena</li> <li>Divisha Vadhera</li> </ul>	School of Planning & Architecture, Bhopal

PROJECT TITLE	PARTICIPANTS	COLLEGE
Substantial Residential Plot Design	<ul> <li>Prabhat Yadav</li> <li>Tanmay Karan</li> <li>Wahaj Akhtar Abedeen</li> <li>Sarvesh Kumar Maura</li> </ul>	School of Planning & Architecture, New Delhi

#### SPECIAL MENTION & JURY COMMENDATION

PROJECT TITLE	PARTICIPANTS	COLLEGE
Home for the countryman	<ul> <li>Ayan Kar</li> <li>Shivansh Singh</li> <li>Aditya Kumar</li> <li>Nidhin Joseph</li> </ul>	School of Planning & Architecture, Vijayawada

PROJECT TITLE	PARTICIPANTS	COLLEGE
Estilar	<ul> <li>Santosh Kumar Reddy</li> <li>Karanam Hari Prasad</li> <li>Juhi Bhowal</li> <li>RSS Prabhakar</li> </ul>	School of Planning & Architecture, Vijayawada

PROJECT TITLE	PARTICIPANTS	COLLEGE
Re-covering the skyline B.I.Y homes (Build it yourself)	<ul> <li>Rajesh Khanna</li> <li>Niyandha S</li> <li>Aishwarya</li> <li>Francina Ferno</li> </ul>	Jawahar School Architecture Planning & Designing, Chennai

PROJECT TITLE	PARTICIPANTS	COLLEGE
Vastu Ja (Its good to be home)	<ul> <li>Amrita Das</li> <li>Nilakash Dutta</li> <li>Soumyadeep Dutta</li> <li>Nidhin Joseph</li> </ul>	Jadavpur University, Kolkata

#### Amaravati Design Challenge – Stage 1 Jurors



#### AR. Ravi Sarangan, Director, Edifice

Architect Ravi Sarangan is a recipient of numerous awards and recognitions from within the fraternity. Ar. Ravi has intimately worked on several landmark projects like JSW, Cap Gemini, Amaraja industries, Reliance ADAG and the headquarters for The Ministry of Renewable Energy at New Delhi. Ar. Ravi also delivers lectures and serves on the jury at various eminent colleges across India.



# AR.Tanuja Kanvinde, Partner Kanvinde Rai and Chowdury (KRC)

With over 35 years of work experience and as a partner at Kanvinde Rai & Chowdhury, with Sanjay Kanvinde, Ar. Tanuja has been involved in the design & execution of a number of Institutions and third generation Dairy Complexes with the underlying concern of creating a sustainable built environment. As Chairperson of Institute of Indian Interior Designers (IIID), Delhi Regional Chapter from 2012-15 and a member of IIID National Executive Council of 2015-17, she has played a key role in



**Vijay Sai Meka, Chairman Amaravati Chapter, IGBC** Vijay Sai Meka is the Managing Director at S&S Green Projects Pvt Ltd., which is known for promoting green initiatives with an innovative approach. Mr. Vijay has an engineering background and over 15 years of experience in construction and real estate. He is also the chairmen of IGBC, Amaravati Chapter which has been playing an active role in translating Amaravati as a platinum rated green city in India.



AR. Aditya Vipparti, Assistant Planner (Urban Design) APCRDA Aditya Vipparti is an architect and urban designer, working as an assistant planner (urban design) at Andhra Pradesh Capital Region Development Authority (APCRDA), Vijayawada. He was actively involved in conceptualisation of the master plan of Amaravati capital city, Amaravati government complex (AGC), High court of justice, judicial complex and many other projects taken up by the CRDA.

#### Amaravati Design Challenge – Stage 2 Final Jurors



#### AR. Ravi Sarangan, Director, Edifice

Architect Ravi Sarangan is a recipient of numerous awards and recognitions from within the fraternity. Ar. Ravi has intimately worked on several landmark projects like JSW, Cap Gemini, Amaraja industries, Reliance ADAG and the headquarters for The Ministry of Renewable Energy at New Delhi. Ar. Ravi also delivers lectures and serves on the jury at various eminent colleges across India.



Dr. Sreedhar Cherukuri, I.A.S. Commissioner APCRDA

Dr.Sreedhar Cherukuri, is an Indian Administrative Service (IAS) officer, currently working as Commissioner, Andhra Pradesh Capital Region Development Authority and Capital Area. As head of the organization, he leads a team of over 300 for the development of the greenfield capital city and its adjacent region, across physical, social and economic development. Dr. Sreedhar played an instrumental role in the well know "Land Pooling Scheme", in mobilising and convincing about 27,000 farmer families to part their land for the construction of Amaravati.



#### Satyam Anumolu, Representative – Farmer community, Amaravati

Satyam Anumolu is a farmer and an active representative of the farmer community at Amaravti. Satyam garu is one of the first citizens of the city and has contributed greatly in conveying the aspirations of the farmers from several villages across the new born capital to the authorities during the conceptualisation of the city.



**AR.Tanuja Kanvinde, Partner Kanvinde Rai and Chowdury (KRC):** With over 35 years of work experience and as a partner at Kanvinde Rai & Chowdhury, with Sanjay Kanvinde, Ar. Tanuja has been involved in the design & execution of a number of Institutions and third generation Dairy Complexes with the underlying concern of creating a sustainable built environment. As Chairperson of Institute of Indian Interior Designers (IIID), Delhi Regional Chapter from 2012-15 and a member of IIID National Executive Council of 2015-17, she has played a key role in promoting the profession by organizing several seminars/lectures.



Harsh Thapar, Associate Foster + Partners Harsh Thapar , an architect and environmentalist, is an associate at Foster+Partners whose expertise ranges from Innovation , Research , Environmental Design, Building Performance Simulation for Human Thermal Comfort ( Radtherm ), Energy ( IES ) , Natural Ventilation ( Fluent ). Thermal Imaging. Urban Form & Microclimate Design. Sustainability Business. Ar. Harsh is an occasional design critic and guest lecturer and has presented at leading International conferences.

#### MAYOYS AND CITY LEADERS' ROUNDTABLE

Cities are economic powerhouses for nations with over 80 per cent of global economic activity now concentrated in cities. Well-managed urbanisation can help improve citizen welfare and spur prosperity within these economic agglomerates. Cities are now widely considered to be in the business of improving "public good", and such development should follow a holistic approach towards notions of progress and give equal importance to non-economic aspects of wellbeing as well.



Image 12: Mayors and City Leaders' Roundtable Participants

The Mayors' and City Leaders' roundtable discussed the developing integrated urban solutions, building economic and environmental resilience, engaging with communities and sustaining a high quality of life in cities. The objective of the roundtable was to enable cross-learning and initiating collective action among the most distinguished city leaders and decision makers. The Mayors' and City Leaders' roundtable provided a forum to discuss and explore the most innovative ways to advance sustainable growth and development across the global cities.

The session also had the Mayors discuss on innovation and initiatives they are implementing in their cities, and how these are managed. With a prime focus on sharing ideas, experiences, and solutions with fellow Mayors, the session promoted the culture of collective and shared learning.

The Mayors' and City Leaders' roundtable session was moderated by Hazem Galal, Partner and Global Leader, PwC Cities and Local Government Sector. Hazem with the global mayors discussed on suggestions and ideas on the importance of smart regulations, human capital, and inclusive integration in economy. Jagan Shah, Director, NIUA and Tony Wong, Chief Executive, CRC for Water Sensitive Cities were the keynote speakers for the session.

#### VALEDICTORY ADDRESS BY CHARLES MONTGOMERY, AUTHOR, 'HAPPY CITY'

The valedictory remarks were given by noted Canadian author Charles Montgomery, author of award-winning book 'Happy City'. He creates transformative experiments, conversations and stories about cities, science and human wellbeing.



#### Charles Montgomery, Author, Happy Cities

"We need happy cities to understand and improve our own communities and neighborhoods. By retrofitting our cities for happiness, we can tackle the pressing urban challenges of our age, there has to a place

*Image 13: Charles Montgomery delivering Valedictory Address* 

In his valedictory address, Charles illustrated the image of a happy city by giving examples of people's pursuit of wellbeing in everyday life and the importance of transforming citizens' lives through urban design. He shared, "We need happy cities to understand and improve our own communities and neighborhoods. By retrofitting our cities for happiness, we can tackle the pressing urban challenges of our age, there has to a place for everyone in the built environment"

Charles highlighted that government that intend to make 'Happy Cities' should ensure that priority is given to building public infrastructure for the people rather cars and other private vehicles. He also emphasized the need for abundant focus on infrastructure for people of all walks of life and how available public spaces must be aptly utilized, which currently is missing in cities.

Charles during his address further derived the mechanism for urban wellbeing including sociability, joy, health, equity, ease, resilience, meaning and belonging. Additionally, elements such as positive social relationship, trust, a strong community that gives people a longer life than the people who are lonely. He further opined that most of the residents in crowded high-rise residential towers feel lonely while those in colonies are

much happier. He said walking to workplaces; schools make people happier than riding motor vehicles.

#### **Q&A Session:**

#### Q What is your view on cultural differences as in a city like Copenhagen, even a 60-year old will ride a bicycle but it is hard to imagine that in India? How do we change that in India?

**Ans:** When Copenhagen began to redesign the city, people complained about pedestrians and cycle tracks. However, the authorities went ahead and build the infrastructure which eventually helped changed the culture. Design and infrastructure help change culture and behaviours. In Amaravati, we have the opportunity to do that right from the beginning.

#### Q How do you see integration of farm with the community? Give your view on Agritopia, in Phoenix, Arizona?

**Ans:** It is great what they have done at Phoenix, Arizona by building a small community of 200 houses and 700 acre farm land right adjacent to that community which can be used for agriculture and dairy farm. In emerging economies, car is seen as status symbol while once economy is developed it is seen as a mark of low status, so it flips. It is the case with agriculture and urbanization as well. When economy advances and people start to lose contact with nature and farming, they yearn for it.

**Q** Should not we fix the number of people allowed to stay in a particular area instead of focusing on factors like greenery, public transportation, etc? Ans: Lot of cities have majority of public spaces devoted to private automobiles when majority of people don't' drive. It is a very philosophical and political decision. We need authorities who will invest in strong public mobility and build the wellbeing objectives right from budgeting and other things.

#### **OUTCOMES OF THE SUMMIT**

The Happy Cities Summit 2019, was a huge success with participation from more than 30 countries coming together and brainstorming over a course of three-days.



Image 14: Inauguration and Launch of Various Projects by Honourable CM, Andhra Pradesh

The key outcomes from the summit were:

- I. Launch of *key projects at Amaravati worth Rs 8000 crore* including hotels, schools and development of nature park.
- II. Launch of *Amravati Citizen Card* to provide all public services under single window.
- III. Launch of **'Happy Cities Forum & Long-Term Strategic Collaboration'** to give a platform to global leaders and policy makers for driving discussions across multiple dimensions.
- IV. **Memorandums of Understanding (MoUs)** Andhra Pradesh Capital Region Development Authority (APCRDA) and Amaravati Planning and Design Research Institute (APDRI) signed 10 memorandums of understanding (MoUs) with following:

#### 1) ICLEI –

- 1.1 Building capacity and supporting Amravati and other Urban areas/cities in Andhra Pradesh state to adopt a *Low Emissions Development Pathway*.
- 1.2 To establish an operational understanding for Sustainability to organize
   4<sup>th</sup> Eco Mobility Festival 2019 at Amravati, Andhra Pradesh.
- 1.3 *Knowledge Accelerator for Climate Compatible Development* Project to undertake gender inclusive climate adaptive measures at city level in Andhra Pradesh state.

#### 2) Happy City Institution (represented by Charles Montgomery)

To explore and ensure the development of built environment to highest standards of happiness

#### 3) National Institute of Urban Affairs (NIUA)

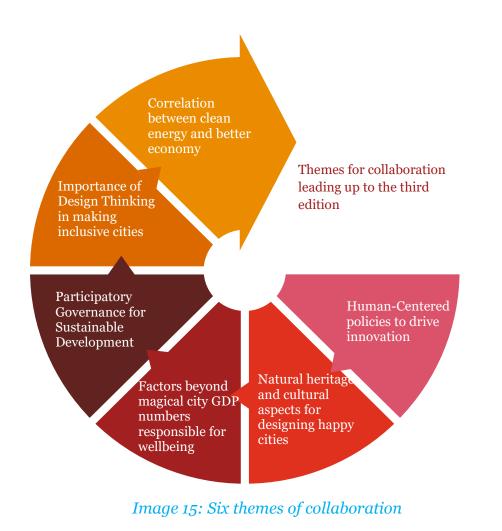
This agreement will ensure Knowledge/Resource Sharing, and Wider Collaboration between the two institutes

#### 4) Other MoUs were signed with below organizations:

- o <u>100 Resilient Cities</u>
- o <u>New Cities Foundation</u>
- o <u>Women in Cities International</u>
- <u>Civic Lab</u>

#### V. Launch of Amravati Project Status Report.

- VI. *Launch of Knowledge Portal* which is aimed at ensuring continuous engagement on the 'Happy Cities Initiative' till next edition and to provide platform to all partners & members for publishing their thought leaderships and allied literature.
- VII. Launch of the '*Six themes for collaboration*' leading up to the next edition.



#### FEEDBACK FROM SUMMIT PARTICIPANTS

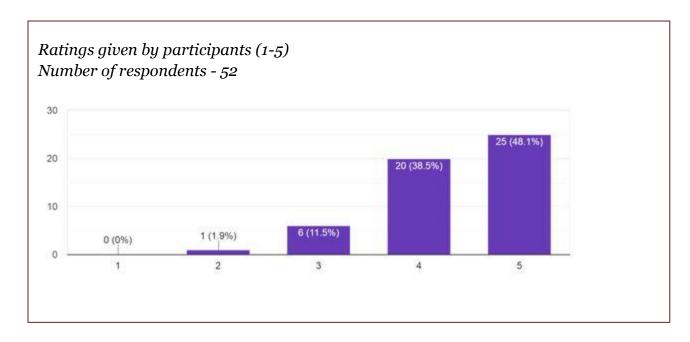
Feedback from attendees at the Happy Cities Summit 2019 was collected through Google Forms that were shared via SMS and emails.



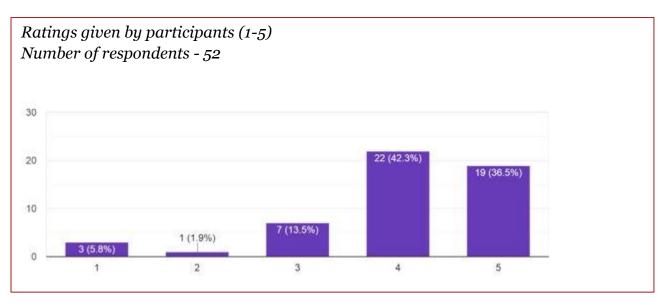
Image 16: Feedback from the Participants

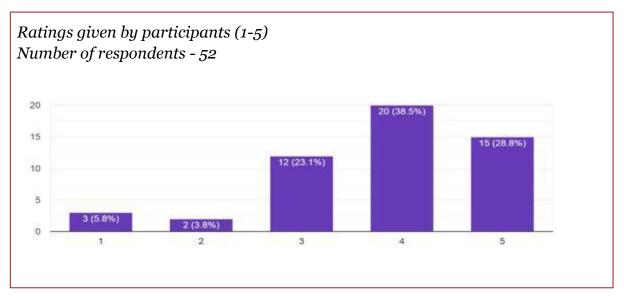
#### Below are the questions asked and responses received.

How do you rate your overall experience at the Happy Cities Summit?



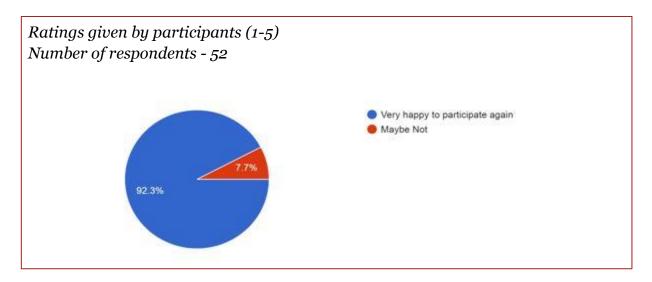
#### How satisfied were you with the venue arrangements?





#### How satisfied were you with the food arrangements?

#### Would you participate in the next edition of Happy Cities Summit?



#### **KEYNOTE SPEAKERS**

N. Chandrababu Naidu, Hon'ble Chief Minister of Andhra Pradesh



Sri Nara Chandrababu Naidu (born 20 April 1950) is an Indian politician who has been the Chief Minister of Andhra Pradesh since 2014. Previously he served as Chief Minister of Andhra Pradesh from 1995 to 2004, before the state was bifurcated, and as the Leader of Opposition from 2004 to 2014. Sri Nara Chandrababu Naidu is the pioneer in implementing technology-intensive administrative measures to optimise

efficiency. The Real Time Governance system leverages e-governance to handle all the important events on a real time basis embracing all activities and governance, bringing transparency, quick decision making and providing sustainable solutions for improvement of lives of citizens, besides bringing appreciable measures in various areas including agriculture, social security, education, public health and law and order. Hon'ble Chief Minister Shri N Chandrababu Naidu has long since held the dream of a state which is governed smoothly and efficiently, benefiting all its stakeholders—the people and the industry with a focus on uplifting marginalized communities. He has championed the cause for an efficient Industry-Government connect and has been rightly called the "CEO of Andhra Pradesh". He is the recipient of various International and National awards including the Business Person of the Year by Economic Times.



**Dr. Aisha Bin Bishr**, Director General, Smart Dubai Office Dr. Aisha Bin Bishr is the Director General of Smart Dubai Office. With more than 20 years of experience in information, communication and technology (ICT) development in public and government sectors, she possesses analytical, coordination, communication and advocacy skills relating to ICT, public reform trends and strategies. Dr. Aisha Bin Bishr represents the Smart Dubai Initiative in many communities and conferences

such as City Protocol Society, smart Cities Expo as well as at the GSMA.



**Charles Montgomery**, Author, 'Happy City' Charles Montgomery is the author of the award-winning book 'Happy City'. He is also the founder of a consultancy by the same name. Montgomery creates transformative experiments, conversations and stories about cities, science and human wellbeing. Montgomery has won multiple awards for his writing on urban planning, psychology, culture and history in magazines

and journals on three continents. His first book, 'The Last Heathen' (published internationally as 'The Shark God') won the 2005 Charles Taylor Prize for literary non-

fiction and the Hubert Evans prize for non-fiction and was shortlisted for two Writers' Trust of Canada awards.

### Speakers:



**Hazem Galal**, PwC Partner and the global Leader for PwC's Cities and Local Government Sector. Hazem Galal is a PwC Partner and the global Leader for PwC's Cities and Local Government Sector. With 25 years of consulting experience, Hazem has expertise in strategy formulation and implementation for cities and local government entities. He supported several city projects in the United States, Middle East,

Latin America, Asia, Africa and Europe, which gives him an edge of expertise in both developed and developing countries conditions. Hazem worked with cities around the world such as New York, Amsterdam, Abu Dhabi, Dubai, Doha, Rio de Janeiro, Singapore, Astana, Kuala Lumpur, Beijing, Moscow and Sochi. He is currently the cochair for the World Business Council for Sustainable Development group that is contributing to the ISO standard for cities and smart infrastructure.



**Jane Wiseman**, CEO, Institute for Excellence in Government Jane Wiseman leads the Institute for Excellence in Government, a non-profit consulting firm dedicated to improving government performance. She has served as an appointed official in government and as a financial advisor and consultant to government. Her current consulting, research, and writing focus on government innovation, data-driven decision-making and

operational efficiency in government.



**Kinlay Dorjee**, Mayor of Thimphu, Bhutan Serving his second term, Kinlay Dorjee is the first elected mayor of Thimphu, and has embarked on various urban planning projects. Prior to this, Mayor Dorjee was formerly the General Manager of the Bhutan Power Corporation. As Mayor, Mayor Dorjee has planned to outline development initiatives; in February 2013, he endorsed a Behaviour Change Communication (BCC) Strategy to improve urban sanitation and hygiene for Thimphu City. Dorjee is also the co-chair of the Subnational Integration Working Group (SNI WG).



#### Jagan Shah, Director, NIUA

Jagan Shah is Director of India's apex urban thinktank, the National Institute of Urban Affairs, which supports the Ministry of Housing & Urban Affairs with policy formulation, implementation and monitoring of urban programs. NIUA executes a diverse portfolio of projects, conducts new research, produces proof-of-concept and promotes ecosystems for enabling urban innovation. Shah is recognized as a thoughtleader for the Smart Cities Mission. He is a professional architect

and historian & theorist trained at the School of Planning & Architecture, New Delhi, the University of Cincinnati and Columbia University. He has been a teacher and writer and has advised a number of corporate and development sector clients.



**Piero Pelizzaro**, Chief Resilience Officer, Milan Piero has 10 years of experience in climate change policies and urban resilience planning. Currently he is the Milan Chief Resilience Officer and the City Lead for the H2020 Lighthouse project Sharing Cities at the Municipality of Milan. He is an advisor of the Italian Ministry of Environment Land and Sea on Urban Adaptation Policy to Climate Change. Piero is a member

of the European Commission Mayors Adapt Practitioners Work Group and Member of FiRe 2016 Implementation Working Group at Climate Policy Initiative.



**Tony Wong**, Chief Executive Officer, CRC for Water Sensitive Cities Professor

Tony Wong is Chief Executive Officer of the Cooperative Research Centre for Water Sensitive Cities, an Australian Government \$120million inter-disciplinary research centre with research hubs in Brisbane, Melbourne, Perth and Singapore. He is internationally recognised for his research and practice in the sustainable urban water management, particularly in Water Sensitive Urban Design. Professor Wong was elected Fellow of

the Australian Academy of Technological Sciences and Engineering in 2012. He was presented by the Institution of Engineers, Australia with the prestigious Sir John Holland Award as Australia's 2010 Civil Engineer of the Year.



**Michael Koh**, Senior Fellow, Centre for Liveable Cities Michael is an experienced master planner and urban designer leading the team for Singapore's Marina Bay master plan and Central Area as Director at the Urban Redevelopment Authority. Former CEO of the National Heritage Board and concurrent founding CEO of the National Gallery Singapore. Responsible for overseeing the administration of the statutory board, design and renovations of museum extensions and the design conception

and planning of the National Gallery Singapore.



#### Parag Dhol, MD, Inventus India

Parag has been an institutional venture investor in India for most of his 18 year career. He has invested in 27 companies across India, resulting in 14 exits including three IPOs to date, most notably Geometric Software, Powertel Boca, vEngines, Vertex India, and TV Today. Parag is a Charter Member of TiE Bangalore and has an MBA from Indian Institute of Management (IIM), Bangalore and a BSME from Indian

Institute of Technology (IIT), Delhi.



**Liz Zeidler**, Chief Executive, Happy City, UK Liz Zeidler, Chief Executive of the Happy City Initiative is an international facilitator with 20 years' experience in designing and delivering transformative learning experiences. She is passionate about social and environmental justice and supporting the change in mindsets that can really bring both about. She believes in the idea that the world is not about endless communication and GDP growth. She believes in developing

local alternative measures to GDP and campaigning for a fairer economy.



library work.

**Cathy Hillman**, Board Member, Women in Cities International Cathy Hillman has over 10 years' experience in the built environment. Her cross training ranges from design, space planning, detailing, ethnography, urban research and documentation to field assessment and construction in disaster recovery. She has designed, managed, planned and/or permitted a multitude of program types from single-family residences and sound studios to civic spaces including transportation and



**Liang Thow Ming**, Chief Marketing Officer, CHEC Port City Colombo (Sri Lanka)

Liang Thow Ming is the Chief Sales and Marketing Officer of Port City, Colombo a 269 hectares brand new city right next to Colombo, Sri Lanka. This is a USD 1.4 billion investment project by China Communications Construction Company (CCCC). When completed, Port City Colombo will provide some 5.6

million square meters of build-up area and aims to function as a hub to South Asia with plans to incorporate an International Financial Center, Luxury Residences, Retail Destination, Marina, International School, Medical Facilities, Convention & Exhibition Center, Theme Park and other various Lifestyle Concepts. Development timeframe is expected to be 25 years with an eventual total investment estimated at USD 15 million.



**Simon Xie**, Dy. CEO, Sino-Singapore Guangzhou Knowledge City Investment and Development Co. Simon has 25 years of working experience in the property industry. He had worked at several senior positions for several established companies in China. He was previously the Regional Director and GM of Henderson Land Group and Surbana Corporation in China. He has strong expertise and experience in full cycle of development from planning and design till

completion and handover.



Mahmoud Hesham El Burai, Chairman, Middle East Sustainable Development Institute and Senior Advisor at Dubai Real Estate Regulatory Authority Mahmoud Hesham El Burai is currently serving as Managing Director of the Dubai Real Estate Institute. In addition to his government position in Dubai, Mahmoud has been the Vice President of the International Real Estate Federation, FIABCI

UK, since January 2011 and sits on the Board of the Association of Real Estate License Law Officials (ARELLO), the International Real Estate Society (IRES) and the Middle East North Africa Real Estate Society (MENARES). Mahmoud has served as the FIABCI representative to the United Nations Economic Commission for West Asia (UNESCWA) since January 2012.

### Emani Kumar, Deputy Secretary General, ICLEI

Emani Kumar has been the Executive Director of ICLEI South Asia since its founding in



2005. He was also appointed as Deputy Secretary General of ICLEI in the year 2013. With degrees in Environmental Management, Environmental Planning and Civil Engineering, Emani has more than eighteen years of professional experience on issues related to climate change policy and planning, local governance, renewable energy and energy efficiency, social

accountability, systems management and auditing.



**Amit Prothi**, Head of National Strategy – India, 100RC Amit is trained in urban planning, landscape architecture and architecture, and has practiced in North America, Asia and Africa on projects and studies funded by the World Bank, Asian Development Bank, Rockefeller Foundation, US Government, and numerous municipalities and private sector clients. For nearly 20 years, he has led or worked with multidisciplinary

teams on thematic areas that relate directly to urban resilience, including environmental planning, urban policy, land use planning, natural resource management, flood management, disaster risk reduction, housing, and community development.



Bruno Moser, Partner-Head of Urban Design,

Foster+Partners

Bruno Moser is a partner and head of the practice's Urban Design Group, which focuses on all aspects of urban design and planning. His project experience includes initiatives for new cities, such as Blue City in Oman and Masdar City in Abu Dhabi; urban developments in Beijing and Riyadh; a regional development plan in the Middle East; and a study of

infrastructure development in the UK. He has worked on regeneration-driven schemes in Singapore, West Kowloon and Shanghai, and schemes with a residential focus in Lisbon, Toronto, Latin America and the Middle East. He is also involved in architectural projects with a focus on people interaction and movement, such as the New York Public Library.



#### Graham Colclough, Partner, Urban DNA

An international leader with a wealth of cities experience and who is driving the global smart cities agenda through positions within the EC Smart Cities and Communities Innovation Partnership (EIP). He is a forum member for the UK Ministerial Smart Cities Forum Member, Moderator for the '6 Nations' Smart Cities Forum, City Protocol Society, chair of the ISO Smart City Strategic Advisory Group; and an active member of the BSI

Smart Cities Advisory Group (steering board of Planning Guide; Smart Cities Overview) and brings considerable international city-specific experience.



**Guy Perry**, Vice President – Urban Planning & Design, McKinsey & Co.

Guy is an architect, urban designer, and developer with global experience in creating economically viable, environmentally sustainable, human-centered environments. He applies this expertise to McKinsey's work on some of the Middle East's largest and most complex multidisciplinary projects. For over 30 years, Guy has spearheaded development and design in a wide

range of urban settings around the globe, receiving accolades from the International Academy of Health and Design, ISOCARP, the SOM Foundation, and the Urban Land Institute.



**De Ferrari**, Human Settlements Officer, UN-Habitat Francesca is a Programme Management Officer in the New York Liason Office of UN-HABITAT and focal of gender for the Americas. She has been working in the Development and Humanitarian world for almost 2 decade. She is Civil Engineer as background, with Masters in Hydrology and Hydrogeology and International Development. She started her career in Colombia

managing a recovery programme after a devastating earthquake. She worked with international NGOs, with OXFAM as Public Health Officer in Philippines in emergency response after typhoon and landslide.



**Dr. Ali al-Azzawi**, Chief Experience Officer, Smart Dubai Dr. Ali al-Azzawi is responsible for the Happiness Agenda at Smart Dubai Office based in Dubai. He is trained as a researcher in psychology and HCI, where he now undertakes and leads user experience research and design projects. The above roles have taken him to various locations around the world, working on a variety of technological products and services. His specialties include CX, Arabic UX, Customer Experience, User Experience,

User Research, HCI, Mobile, Usability, Design, Government, Smart Services, and PRINCE2.



**Hugo Salomão**, International Relations Advisor, Belo Horizonte, Brazil

Hugo Salomão has a postgraduate degree in International Law from CEDIN, Center for International Law and Business; he studied Social Sciences at the Federal University of Minas Gerais (UFMG), and International Relations at IBMEC, with studies in politics and international law at the University of Barcelona

(UB). In his career, he worked at the Department of International Relations of Belo Horizonte City Hall, at the United Nations Development Programme (UNDP) and at the International Relations Office of Government of the State of Minas Gerais.



**Dr. Gopichand Katragadda**, Founder & CEO - Myelin Foundry

Dr. Gopichand Katragadda is the Founder and CEO of Myelin Foundry, an AI company with a vision to transform human experiences and outcomes in healthcare and media & entertainment. He is also an Independent Director of Bosch India Limited. Gopi is the Chairman of the CII National Technology Committee and the CII Western Region Innovation

Taskforce. He is a Fellow of the Institute of Engineering and Technology. He is a GE Certified Six Sigma Master Black Belt. Gopi helped establish the Advanced Materials CoE at IIT-Madras and the Advanced Manufacturing CoE at IIT-Kharagpur.



**Rama Manohara Rao**, IRAS, Special Commissioner, APCRDA Rama Manohara Rao, a 1998 batch Civil Servant, GOI, has 20 years of vast experience in infrastructure finance & accounting, PPP, policy and administration. In the current leadership role in APCRDA, he is focusing on Greenfield city Amaravati development strategy, Financing the project, investment promotion, PPPs, multilateral agencies like World Bank, AIIB, JICA and global partnerships with Singapore, Japan, UK etc.



**Ramakrishna Rao**, Advisor, APDRI and Ex-Director (Planning), APCRDA

Ramakrishna Rao is the Advisor of Amaravati Planning Design Research Institute, a specialized wing under APCRDA set up for driving innovation and research in the field of well-being and happiness in Amaravati. Previously, Mr. Rao was the Director of Planning Division at Andhra Pradesh Capital Region Development Authority (APCRDA). During this term, he was

responsible for the overall Master Planning of Amaravati and the design of the iconic buildings in the Government complex. The local by-laws and Zonal Regulations for Amaravati has been framed under his guidance. With vast knowledge & experience in the Urban Planning, he has been an expert advisor in shaping the Greenfield city.



**Tony Lee Luen Len**, Chairman, Green Building Council of Mauritius

His expertise lies in the field of sustainability, the built environment and multi-sector collaboration. He is a chartered quantity surveyor, project manager and an accredited partnership broker. He is equally an accredited professional/ assessor in several green building/sustainable communities rating systems. Tony regularly contributes on regulatory, policy

and strategy work locally and internationally for UN-Habitat, World GBC, UNEP, UNECE, ITU, IOC and the Government of Mauritius on energy efficiency, smart cities, circular economy, innovative finance and digital transformation.



**Anja Wyden Guelpa**, CEO & Founder, Chez civicLab As a legendary optimist and a person of action and reflection, with civicLab Anja Wyden Guelpa helps companies or organizations to become more competitive and attractive through the evolution of their corporate culture. She successfully motivates teams in difficult times; by using collective intelligence she comes up with creative solutions and in a very short time use them to map out new paths and optimal solutions. Her

experience and a certain natural authority allows her to lead and steer creative processes and help executives and employees to excel. She analyzes situations and complex contexts very quickly. She explains them in simple words, synthesizes with ease and debates them with pleasure and conviction.



**Hajbouha Zoubeir**, President, Phosboucraa Foundation Hajbouha Zoubeir is the President of the Phosboucraa Foundation – OCP Group. Born and raised in Laayoune, the largest city in the southern regions of Morocco, the Sahrawi heritage made her a proud and determined woman fully engaged in the social and human development work. After pursuing her Business Administration and Cultural Management (BSc) at the University of Rabat, Mrs Zoubeir started her career in the

education field where she founded several educational institutions in her hometown holding various positions as a managing director and professor.



**Dr. Sreedhar Cherukuri**, IAS, Commissioner, APCRDA Dr.Sreedhar Cherukuri, is an Indian Administrative Service (IAS) officer, currently working as Commissioner, Andhra Pradesh Capital Region Development Authority and Capital Area. As head of the organization, he leads a team of over 300 for the development of the greenfield capital city and its adjacent region, across physical, social and economic development. Prior

to this position, he was the Joint Collector of Guntur District where he was instrumental in the implementation of the widely acclaimed "Land Pooling Scheme", in mobilising and convincing about 27,000 farmer families to part their land for the construction of Amaravati.



#### SRK Sastry, Director (Strategy), APCRDA

As Director -Strategy at APCRDA, Sastry is responsible for challenging and multi-faceted assignments including obtaining green nod from apex agencies, successfully addressing legal challenge, GoI Smart City Challenge, Fund Mobilization through Bonds etc. His professional areas of expertise comprise environment, urban management including reforms, social inclusiveness, environmental conflicts and regulatory

compliance. 23 years of professional experience across government, multilateral agencies, corporate sector, consultancy. Gender, Livelihoods, Resettlement, social development, project structuring, information centers, consultations, are among the key focus areas of Sastry.



**Stefania Costanza**, Consul General of Italy in Mumbai Stefania Costanza started her mission as Consul General of Italy in Mumbai last 13 of October 2017. Until September 2017, Ms. Costanza was the Head of the Consular Protection Division in the Consular Affairs and Migration Policies Department of the Italian Ministry of Foreign Affairs and International Cooperation. Before this, she was Deputy Head of the UN Division at the Political Affairs and Security Department of the Ministry and also served as Deputy Head of Mission at the

Embassy of Italy in Kabul, Afghanistan.



#### M Anand, Principal Counsellor, IGBC

M Anand is a Green Building Professional, at the CII-Sohrabji Godrej Green Business Centre, Hyderabad, India. He is a Principal Counsellor and a team member of Indian Green Building Council (IGBC) of CII. He is a Indian Green Building Council Accredited Green Building Professional. He is a member working on the green building rating system for India, IGBC Green Homes, Factory Buildings, Core & Shell programmes. He

is also closely associated the World Green Building Council (World GBC) activities.



**Dr. Geeta Mehta**, Co-Founder, Asia Initiatives Dr. Geeta Mehta is an adjunct professor of architecture and urban design at Columbia University and the founder/president of Asia Initiatives (AI), a non-profit organization with a mission to help communities help themselves. Geeta is the innovator of Social Capital Credits (SoCCs), a community currency for social good that is being used in USA, India, Ghana, Kenya to incentivize communities to improve their neighborhoods and

wellbeing. She was recognized as one of the 21 Leaders of the 21st Century by Women's eNews in 2015, and by HSBC Bank as the Social Entrepreneur of the year in 2017. She also serves on New York Mayor De Blasio's Advisory Board for Waterfront Development.



Hasna Boutzil, Managing Director, SADV Mohamed VI Green City

Hasna has diverse experience ranging from - field engineer, from production to quality management to logistics management to project management in Morocco and Africa. Her forte lies in negotiations, commercial strategy, and teamwork. She has proven experience across multiple positions. Her interest areas include female leadership, innovation, creativity and managerial

courage. She is a staunch believer in the spirit of entrepreneurship.



#### D Ramakrishna, CEO, Efftronics Systems

D Ramakrishna did his M.TECH (Electrical engineering) from IIT Madras, and is the founding CEO of Efftronics Systems Pvt. Ltd., established in 1985. He is the architect of one of India's largest IoT network built for Indian railways with more than 6 million things connected across 9000 locations. For Efftronics' outstanding work in IoT, it was recognised with CIO Choice 2017

award which is democratically chosen by more than 400 CIOs and CTOs from Indian Industry.



**Michael Jansen**, Chairman and CEO, CityZenith An impassioned architect, urbanist, and entrepreneur, Michael has founded and led high-growth companies in the US and Asia for more than two decades. He studied architecture at Yale and Cambridge, and earned a Fulbright Scholarship. Michael has been featured on CNN, CNBC, and in several major business, government, and AEC publications worldwide. He has also

received several awards for his work, including Building Design and Construction's "40 Under 40" award.



#### Dr. Rashmi Singh, IAS, Secretary, NDMC

Dr. Rashmi Singh is posted as Secretary of New Delhi Municipal Council since April, 2018. Prior to this, she was posted as Secretary (Gen. Admin./ Industry/Social Welfare and Admin. Reforms) in the Andaman Administration and as Executive Director, National Mission for Empowerment of Women at the Ministry of WCD amongst other portfolios handled by her. She was the founder Director of Mission Convergence programme

and Samajik Suvidha Sangam laying the foundations, structures and processes which define this unique programme that received notable international acclaims (Such as

CAPAM Award, UN Public Service Award) for civic engagement and public service delivery.



Loh Ah Tuan, Expert, Centre for Liveable Cities Loh Ah Tuan has over three decades of professional experience. He joined the Singapore Ministry of the Environment and Water Resources about 35 years ago, retiring in 2007. Loh served as the Director-General for Environmental Protection and Deputy Chief Executive Officer of the National Environment Agency (NEA), and held portfolios in environmental planning, environmental pollution control, integrated solid waste management and environmental public health.

As an expert for Centre for Liveable Cities, his focus is on providing urban leaders and practitioners with the knowledge and support needed to make our cities better.

#### **SUMMIT PARTNERS**

#### **Government of Andhra Pradesh - Host**



Andhra Pradesh, the eight largest state in India, is endowed with rich natural resources & mineral wealth and boasts of the second longest coastline in the country. With visionary political leadership, strong government mandate and proactive administration, the State is poised to capitalize on its business

friendly policies and robust physical, social and industrial infrastructure. Andhra Pradesh is poised to be among India's three best states by 2022 and a developed state by 2029. The Government of Andhra Pradesh has accorded top priority to industrial and infrastructure growth and intends to position the State as the most preferred destination for investors by providing favourable business climate, excellent infrastructure, good law and order and cordial industrial relations. Andhra Pradesh has already made an impact through its investor-friendly initiatives by being ranked as the 2nd best state in the country on Ease of Doing Business as per a report by World Bank. The State has put in place a Single Desk Portal to provide all clearances/approvals within 21 working days to set up an industry in the state.



Andhra Pradesh Capital Region Development Authority - Host

The Andhra Pradesh Capital Region Development Authority is an urban planning agency of the capital of Andhra Pradesh, Amaravati. Amaravati is envisioned to be 'India's happiest city' -

an inclusive people's capital which is economically vibrant and sustaining, equipped with world class social and physical infrastructure to create unparalleled opportunities. It will meet the world class standards of livability, inclusive growth, economic opportunities and environmental sustainability. It would be the first purpose built city in the World with Urban Design derived from the 'Happy City Principles'. Amaravati would be the most green-and-blue city in the country with over 30% area dedicated for water and landscape features designed to give the utmost livable ambience to its residents. It is also aspired to be the first city with navigable canals for intra-city commute (light public and tourist transit). With an estimated population of about 3.5Mn by year 2050 and a projected resident family population of about 0.9Mn through creation of 1.5Mn jobs. APCRDA has adopted some of the world's best urban planning practices for Amaravati and fused them with local needs.



#### **PWC-Knowledge Partner**

At PwC, our purpose is to build trust in society and solve important problems.

We're a network of firms in 158 countries with over 250,000 people who are

committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by

visiting us at www.pwc.com. In India, PwC has offices in these cities: Ahmedabad, Bengaluru, Chennai, Delhi NCR, Hyderabad, Kolkata, Mumbai and Pune. For more information about PwC India's service offerings, visit www.pwc.in PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity.



The Confederation of Indian Industry (CII) is a non-government, Confederation of Indian Industry not-for-profit, industry-led and industry-managed organization, playing a proactive role in India's development process. Founded in 1895, India's premier business association as over 8,500 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 200,000 enterprises from around 250 national and regional sectoral industry bodies. CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues. Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, healthcare, education, livelihood, diversity management, skill development, empowerment of women, and water, to name a few.

#### **NewCities Foundation**

NewCities is a global non-profit committed to shaping a better **newcities** urban future. NewCities seeks the most progressive and innovative ideas to drive positive changes in cities large and small through events, research and urban innovation projects. NewCities creates a global dialogue and curates cutting-edge knowledge on the world's most progressive urban issues to generate and scale ideas and

solutions. The organization works with leaders from business, government, academia, civil society, the media and the arts. For more information visit www.Newcities.org.

•I.C.E.F.I ICLEI- Local Governments for Sustainability is the leading global network of 1,750+ cities, towns and regions, committed to Local building a sustainable future. Through our collective efforts, we Governments impact more than 25 per cent of the global

- for Sustainability urban population. ICLEI – Local Governments for Sustainability, South Asia (ICLEI South Asia) - the South Asian arm of ICLEI - is a not for profit organization registered under the Indian Trusts Act. ICLEI South Asia's head office, located in Delhi, is operational in India since 2005. With over 40 professional staff including urban planners, energy managers, environmental planners, transportation engineers, ecologists and environmental engineers, ICLEI South Asia offers a wide range of technical services to help local governments achieve their sustainable development goals. Customized and specific methodologies and tools are designed to support planning and implementation of actions related to urban biodiversity, environmental resource management, nature based solutions, integrated resource planning, climate change adaptation and mitigation, municipal service delivery, sustainable urban transport, green building design, urban governance, sustainable procurement and other allied fields. Training and capacity building programmes in these areas are a regular feature of our engagement with cities. Nature based development is one of the five pathways of development, followed at ICLEI. This pathway emphasizes on the significance of biodiversity and ecosystem services provided by the same. The pathway highlights the need to integrate nature based solutions in urban planning in order to build climate resilience and promote overall city well-being.

#### **CENTRE** for Liveable**Cities** SINGAPORE

#### **Centre for Liveable Cities**

Set up in 2008 by the Ministry of National Development and the Ministry of the Environment and Water Resources, the Centre for Liveable Cities (CLC)'s mission is to distil, create and share

knowledge on liveable and sustainable cities. CLC's work spans four main areas— Research, Capability Development, Knowledge Platforms, and Advisory. Through these activities, CLC hopes to provide urban leaders and practitioners with the knowledge and support needed to make our cities better.



#### Andhra Pradesh Economic Development Board

The Economic Development Board has been conceived under the leadership of the Honourable Chief Minister to accelerate the inclusive economic growth of Andhra Pradesh. The board acts as

a catalyst to facilitate economic growth, investment climate, reforms, and competitiveness in Andhra Pradesh. It is the single point of contact for all investments in the Indian state of Andhra Pradesh as per the Andhra Pradesh Economic

Development Board Act, 2018. The Andhra Pradesh Economic Development Board Act, 2018 (Act no. 21 of 2018) has been in force since June 7, 2018.



#### **Building and Construction Authority**

The Building and Construction Authority (BCA) is an agency under the Ministry of National Development, championing the development of an excellent built environment for Singapore. "Built environment" refers to buildings, structures and infrastructure in our surroundings that provide the setting for the community's activities.

#### National Institute of Urban Affairs

National Institute of Urban Affairs (NIUA) is a premier institute National Institute of Urban Affairs for research, capacity building and dissemination of knowledge for the urban sector in India. It conducts research on urbanization, urban policy and planning, municipal finance and governance, land economics, transit oriented development, urban livelihoods, environment & climate change and smart cities. The institute was set up to bridge the gap between research and practice, and to provide critical and objective analyses of trends and prospects for urban development. NIUA has assisted in policy formulation and programme appraisal and monitoring for the Ministry of Urban Development, state governments, multilateral agencies and other private organizations.

#### **Enterprise Singapore**

Enterprise Singapore Enterprise Singapore is the government agency championing enterprise

development. They work with committed companies to build capabilities, innovate and internationalise. They also support the growth of Singapore as a hub for global trading and startups. As the national standards and accreditation body, they continue to

build trust in Singapore's products and services through quality and standards.

#### Department for International Development, Government of UK

Department for International Development

The Department for International Development (DFID) leads the UK's work to end extreme poverty. We are tackling the global challenges of our time including poverty and disease, mass migration, insecurity and conflict. Our work is building a safer, healthier, more prosperous world for people in developing countries and in the UK too.



#### Ministry of Trade and Industry, Singapore

Our vision is for Singapore to be a leading global city with a dynamic economy, world-class and innovative enterprises, a conducive environment for entrepreneurs and enterprises to tap

its diverse opportunities and good jobs for all Singaporeans. Our Mission: To promote economic growth and create good jobs, to enable

Singaporeans to improve their lives. Together with our statutory boards, we will ensure that Singapore's economy continues to be competitive, is able to attract investments, and nurture a deeper base of global Singapore enterprises.

UK Government Government of the United Kingdom

#### **BUILDING MOMENTUM FOR 2020**



Image 17: Building Momentum for 2020

With the launch of 'Happy Cities Forum' and 'Six themes for collaboration' the countdown to 2020 summit has already begun.

While the forum will ensure continuous engagement of all key stakeholders over the period and provide a platform to partners & members to contribute to various initiatives under Happy Cities Index, it would also give an opportunity to publish thought leaderships and allied literature on the portal.

The six themes will ensure the discussions are focused at issues faced by communities and policy makers around the world.