

National Level Events on Urban Development

K.K. PANDEY*

The last quarter of 2021 ended with an important event covering change of guard in the Ministry of Housing and Urban Affairs (MoHUA). Senior bureaucrat Shri Manoj Joshi, IAS, 1989, Kerala Cadre took over the charge from Shri Durga Shanker Mishra (1984 batch, Uttar Pradesh Cadre) as Secretary, MoHUA on 30th December 2021. Nagarlok, Centre for Urban Studies and all IIPA family welcome the new Secretary, during this year of Amrit Mahotsav. Shri Joshi has assumed the responsibility at a crucial time when for the first time union budget has made special reference to the role of urbanisation in the growth story of India during next 25 years. We are sure that Government of India will evolve due strategy for structural adjustment (the expansion of manufacturing and services) and competitive edge which involves cities and towns as enabler of economies of scale, environment friendly, pro-poor, productive and sustainable development.



Shri Manoj Joshi, IAS
Secretary
Ministry of Housing and
Urban Affairs
Government of India

The period of October -December 2021 included (i) Azadi@75- New Urban India: Transforming Urban Landscape' held at Indira Gandhi Pratishthan, Lucknow, Uttar Pradesh (ii) Participation in the Dubai Expo 2020 (began on October 2021) (iii) Major DMRC (Delhi Metro Rail Corporation) initiative on Make in India along with Bharat Electronics Ltd (A Public Sector Enterprise) (iv) Progress on Central Vista Project (V) launch of the national level Association of Water Supply and Sanitation Organization (AWSSAR) (vi) Swachhta APP (VII) Knowledge Sharing. The information compiled below is drawn from MoHUA, its facebook page and twitter.

Azadi@75- New Urban India: Transforming Urban Landscape

Azadi@75- New Urban India: Transforming Urban Landscape was held during first week of October at Indira Gandhi Pratishthan, Lucknow,

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Uttar Pradesh (UP). The MoHUA and Government of Uttar Pradesh anchored the Mahotsav which held exhibitions, seminars, Round Table Discussions on Government of India Missions and state government schemes different states, urban agencies and cities participated in the land mark event which sensitised the urban sector including its role in the covid protocol. Two important events need special mention:

- MoU- between #SECI_Ltd and #MoHUA_India in Lucknow on October 6 2021 with regards to the promotion of Solar Energy Cooperation, waste disposal, reuse and Urban Mobility in the state of Uttar Pradesh at Azadi@75, New Urban India (#TransformingUrbanLand scape).
- Consultative Workshop on Deen Dayal Upadhyay Antyodaya National Urban Livelihood Mission (NULM-2.0)- Way Forward at Azadi@75- New Urban India: Transforming Urban Landscape'.

Participation in the Dubai Expo 2020 (began on October 2021)

Besides other delegates, officials of ministry of Housing and Urban Affairs participated in the international trade affair which is scheduled during October 2021 to March 2022). Three important visits by GoI delegates deserve a mention:

- MoHUA officials met CEO and Co-Founder Virgin Hyperloop, USA on November 03, 2021 in the Expo2020 Dubai and discussed on concept & future of Hyperloop Technology as mode of public transport, its status of transportation in various countries, Social-Economic benefits, etc.
- They also discussed Hyperloop Technology's adoption of GoI's Make In India initiative in the procurement of Hyperloop components, its cost of construction, operation and maintenance and status of various MoUs/Sanctioned Studies/Projects in India.#IndiaAtDubaiExpo
- MoHUA team also visited the DP World Pavilion, a Premier Global Trade Partner of Expo 2020 Dubai, that is being developed in line with the sub-themes of the event- Opportunity, Mobility, and Sustainability. The Pavilion is designed around the theme of 'Making Trade Flow' featuring augmented and virtual reality that will allow visitors to see the real-time movement of cargo across the world and learn how global trade happens and its impact on every aspect of everyone's life every day.

Major DMRC (Delhi Metro Rail Corporation) initiative on Make in India along with Bharat Electronics Ltd)

DMRC to use first indigenously developed 'Universal Train Driving Simulator' and 'Super SCADA' systems from BEL. In pursuance of the Government of India's 'Make in India' policy, Delhi Metro Rail Corporation (DMRC) and Navratna Defence PSU Bharat Electronics Limited (BEL) had signed a MoU last year to develop jointly a 'Rolling Stock Driver Training System (RSDTS)', which will be useful for training drivers of metro/ railway trains.

The first prototype model of the indigenously developed Universal Driver Training Simulator for Rolling Stock (i-UDTS) was inaugurated by Shri. Durga Shanker Mishra, Secretary, Ministry of Housing and Urban Affairs (MoHUA), Government of India, at a ceremony held in BEL's Ghaziabad Unit. i-UDTS is designed as a Line Independent System, easily configurable and scalable for any current and future lines to meet the city metro requirements. The main features of system as per GoI facebook and twitter are:

- Universal Driver Training Simulator for Rolling Stock system is useful for training metro and railway train drivers and also evaluating the driving skills of a working Train Operator, usually done periodically for safety considerations.
- This will be the first indigenously developed universal train driving simulator that can be suitably modified for any metro system or railways. So far, DMRC has been importing this product from foreign OEMs, at a high cost.
- Also, the designs available with DMRC are suitable for use with a single type of rolling stock, signalling and track systems. It is extremely difficult and costly to make any changes at a later date.
- The i-UDTS being developed by BEL for DMRC has the provision for the same core software to be utilized for creating different combinations of rolling stock, signalling and line profiles, by merely changing the input data files, along with minor hardware changes in the driving desk, if required.
- This will enhance the flexibility of the training system and would result in major cost savings for DMRC, as the same system can be used for multiple stocks and different routes.

Progress on Central Vista Project

Central Vista will bring all 51 Central Govt Ministries to 10 Common

Central Secretariat buildings offering proximity & ease of inter-departmental movement to enable more efficient & productive functioning. With a team of 6,944 workers onsite and 3,855 people offsite, the ongoing works at Central Vista Project have already generated 9,08,826 man days of employment so far. Please visit www.centralvista.gov.in to know more about this iconic project.

Launch of the national level Association of Water Supply and Sanitation Organisation

Launch of the national level Association of Water Supply and Sanitation Organization (AWSSAR) by the Ministry of Housing and Urban Affairs, GoI, at a national event in #Bhubaneswar on 27th November, 2021. The launch included:

- More than 60 senior officers from several states and UTs participated in the event. Secretary, MoHUA will be the President of the Association and Principal Secretary, H&UDD Odisha was unanimously elected as its Vice President-cum-CEO.
- #AWSSAR is envisaged to be a co-creation platform for knowledge sharing between public sector water supply and sanitation organisations, parastatal agencies and ULBs engaged in service delivery of water supply and sanitation.
- Later in the day, all dignitaries from various states also visited Puri where Drink from Tap 24x7 water supply is functional and interacted with the citizens and Jal Sathis as part of a learning session to implement in their respective states

Swachhta App

The Swachhta-MoHUA is the official app of Ministry of Housing and Urban Affairs (MoHUA), GOI. The app enables a citizen to post a civic-related issue (e.g.; a garbage dump) which is then forwarded to the city corporation concerned and thereafter assigned to the sanitary inspector of the particular ward.

The app has been built by IChangeMyCity - a division of Janaagraha, a Bengaluru based non-profit organisation.

How does it work? Take a picture of the Civic-related issue using your smart phone, and post it in one of the twelve categories. These are Garbage dump, Garbage, vehicle not arrived, Dustbins not cleaned, Sweeping not done, Dead animals, Public toilet(s) cleaning, Public

toilet(s) blockage, No water supply in public toilet(s) and No electricity in public toilet(s)

The app captures the location while the picture is being taken. Just type in the landmark of the complaint location. The complaint will then be assigned to the concerned sanitary inspector/engineer.

Knowledge Sharing

Important events on dissemination of knowledge and information during the last quarter cover:

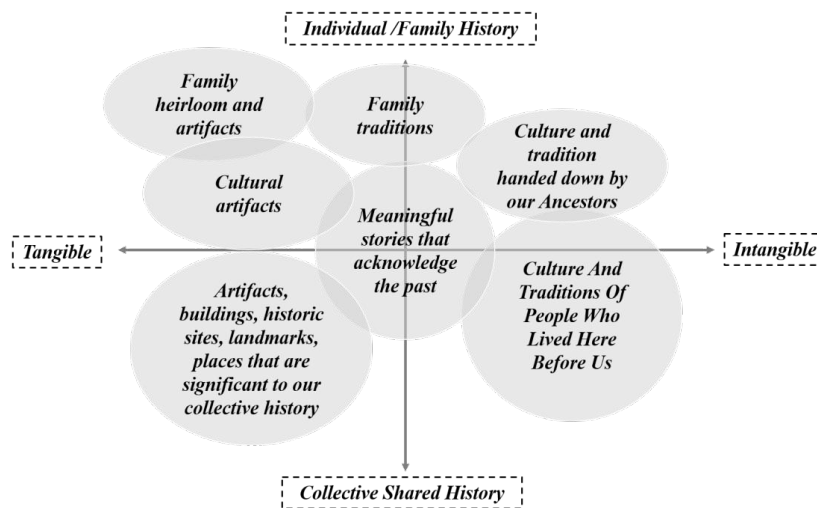
- The River Cities Alliance an initiative by #NamamiGange and national Institute of Urban Affairs to sensitise people towards rivers across 30 cities in India was shown in the media on November 2021.
- On the occasion of Divyangjan on the International Day of Persons with Disability Day – December 04 2021, an event to Mainstream Disability Inclusion, the ‘Harmonised Guidelines and Standards for Universal Accessibility in India 2021’ were released.
- National Urban Digital Fellowship programme was launched to have digital transformation in governance in cities (December 10, 2021).
- A book on Nurturing Neighbourhoods –Stories in the Field was launched highlighting success stories from 25 cities in the phase 1 of the streets for city challenge on 11 December, 2021.
- ‘Swachh Technology Challenge’ 2021 was launched on to encourage citizen engagement in waste management and promote tech innovations. 6th India.
- Water Impact Summit 2021 on River Resources Allocation “Planning and Management at the Regional Level” was organised on December 05, 2021.

Urban Heritage Management Scenario in India

KUSUM LATA*

Heritage is full range of our inherited tradition, monuments, objects and a culture. Most important it is a range of contemporary activities and behavior that we draw from them. Dimensions of heritage are summarised in the Fig. 1. Heritage is a broad and a dynamic concept which includes the cultural as well as natural environment. It encompasses built environment, historic places sites, landscapes as well as biodiversity, knowledge collection of past and different cultural practices and living experiences. It is a point of concern and positive tool for growth and change. Heritage is a collective memory of each locality and community. Heritage provides emotional and intellectual platforms on which individuals and communities establish their identity.

Fig. 1: Dimensions of Heritage



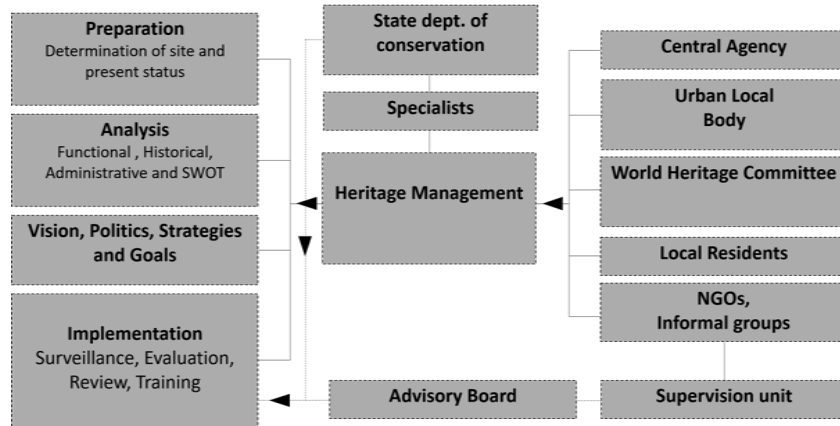
Heritage Management

An effective management system depends on the type, characteristics and needs of the heritage city and its cultural and natural context. Management systems may vary according to different cultural perspectives, the resources available and other factors. They may incorporate traditional

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practices, existing urban or regional planning instruments, and other planning control mechanisms, both formal and informal.

Fig. 2: Heritage Management Process, UNESCO

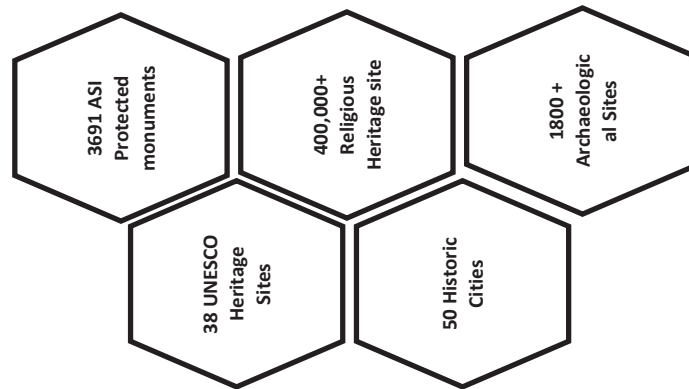


Heritage Management is an important tool for proper preservation of heritage resources. The purpose of an appropriate heritage management mechanism is to ensure effective protection of cultural and heritage properties for the benefit of present and future generations and also to maintain the authenticity and integrity of the properties to the maximum possible extent.

Urban Heritage

India’s heritage assets are unmatched in the world with 5,000 years of history, 22 official and 1,000+ minor languages, around 200 million craftsperson’s, countless traditional skills, cultural practices and performing arts, 30 World Heritage Sites, and tens of thousands of

Fig. 3: Snapshot of Heritage in India



monuments, historic areas and sacred sites spread over highly diverse natural and built landscapes. Among India's rich repository of heritage sites and monuments, of the protected ones include 30 (of 38) cultural edifices declared as World Heritage Sites by United Nations Educational, Scientific and Cultural Organization (UNESCO), and approximately 3,691 monuments in the custody of Archaeological Survey of India (ASI) declared as monuments of national importance.

Despite the efforts, a number of heritage structures do not come under any formal system due to lack of infrastructure and funds. These unprotected monuments and heritage structures are brought to public notice and listed mainly due to the intervention of Non-Governmental Organisations. Between the demarcation of Protected and Unprotected, this heritage of India is facing serious conservation, preservation, maintenance and management challenges.

Key Efforts and Organisation of Heritage Management in India

TABLE 1: KEY EFFORTS AND ORGANISATION OF HERITAGE MANAGEMENT

<i>S no.</i>	<i>Acts</i>	<i>Year</i>	<i>Rationale</i>
1	Ancient Monuments Preservation Act	1904	<ul style="list-style-type: none"> • Expedient to provide for the preservation of ancient monuments, for the exercise of control over traffic in antiquities and over excavation in certain places.
2	Ancient Monuments and Archaeological sites and Remains Act	1958	<ul style="list-style-type: none"> • All the ancient and historical monuments and archaeological sites and remains protected earlier under 'AMPA, 1904' (Act No. VII of 1904) were re-declared as monuments and archaeological sites of national importance under this Act. • Another four hundred and fifty monuments and sites of Part 'B' States were also added
3	The Antiquities and Art Treasures Act	1972	<ul style="list-style-type: none"> • The Act is to regulate the export trade in antiquities and art treasures, to provide for the prevention of smuggling of, and fraudulent dealings in, antiquities, to provide for the compulsory acquisition of antiquities.

(contd.)

4	The Ancient Monuments and Archaeological Sites and Remains (Amendment and Validation) Act	2010	<ul style="list-style-type: none"> • Establishment of National Monuments Authority on 11th Nov 2011 • Redefinition of 100m as prohibited zone & 100-300m as regulated area around the monument. • Categorisation of monuments into 8 categories • Framing of heritage bye-laws for each of the centrally protected monument
<i>S no.</i>	<i>Organisations</i>	<i>Year</i>	<i>Rationale</i>
1	Archaeological Survey of India	1861	<ul style="list-style-type: none"> • Preservation, conservation and environmental development of centrally protected monuments and sites, including world heritage monuments and antiquities.
2	National Monuments Authority	2010	<ul style="list-style-type: none"> • Has been setup under AMASR (Amendment and Validation) Act, 2010. • One of the major functions are to protection and preservation of monuments and sites through management of the prohibited and regulated area around the centrally protected monuments.
<i>S no.</i>	<i>NGOs</i>	<i>Year</i>	<i>Rationale</i>
1	Indian National Trust for Art and Cultural Heritage	1984	<ul style="list-style-type: none"> • Instill a sense of social responsibility towards preserving India's common heritage and to protect and preserve India's living, built, and natural heritage
<i>S no.</i>	<i>Schemes</i>	<i>Year</i>	<i>Rationale</i>
1	JNNURM - CDP formulation for heritage cities	2005	<ul style="list-style-type: none"> • Listing of heritage, Identification of heritage zones and assessment of heritage, Legal and statutory framework, Infrastructure and financial arrangement
2	Heritage City Development and Augmentation Yojana - HRIDAY	2015	<ul style="list-style-type: none"> • Preserve character of the soul of heritage city and facilitate inclusive heritage linked urban development by exploring various avenues including involving private sector.

Among these Urban Schemes, HRIDAY was the first ever Urban Development Scheme completely focused on Heritage in 12 cities and 100 per cent centrally funded. SMART Cities is another Scheme that covers major funding for urban heritage across India including surroundings of several centrally protected and State level monuments. One of the major issues in the following above mentioned act/ policy/ scheme lacks an efficient institutional arrangement to support sustainable management of Heritage.

Key Issues in Urban Heritage Management

TABLE 2: ISSUES IN URBAN HERITAGE MANAGEMENT

1. Planning and Toolkit	Heritage Projects need to be synced with the planning of the city and merge with typical historic character in different areas of the city. This was successfully achieved to a large extent in HRIDAY with preparation of a City HRIDAY Plan and a special HRIDAY Toolkit for street furniture design in different historic parts of these 12 cities. However, this aspect is missing in a number of historic city areas being undertaken via Smart City Scheme.
2. Sustainability	Final success of urban projects is dependent on their long term sustainability in all aspects- environmental, socio-cultural and economic. It needs to be ensured that no proposed project is impacting the natural or cultural heritage of the city, rather it should be enhancing these aspects.
3. Stakeholder Consultation	Community inclusion and ownership is essential for their use and maintenance and inclusion of all the local and national stakeholder is must for protection and efficient management of heritage.
4. Lack of Heritage Cell	Local bodies involved in urban heritage projects are often not equipped enough to handle heritage conservation. Formation of a Heritage Cell, Model Bye laws by MoHUA and regular Heritage training programs are essential to remove this gap.
5. Community Participation	One of the major challenges in heritage conservation is to win the trust of local communities so that they come forward and cooperate as many a time it has been observed that many conservation processes have been stopped due to local resistance and such kind of challenge can only be overcome if the conservation plans and policies can benefit the local community people and it is not happening often in India.

(contd.)

6. Improper Heritage Management and lack of basic Tourists' Facilities	Another problem that is affecting many of the heritage sites in India is the absence of the proper solid waste disposal mechanism. Moreover, the basic tourists' facilities such as proper sitting arrangements, availability of drinking water, clean and eco-friendly toilets, trained professional guides, interpretation centers are also absent in many places. If more and more heritage resources can be connected with good infrastructure and tourism, these sites can even earn more revenue that will facilitate the local community and can be spent on overall destination development.
7. Lack of Comprehensive Development Planning	Heritage monuments like Jagannath Temple in Odisha and cluster of monuments in Hampi, Karnataka are facing continuous negligence from the host community and local administrations while adopting a comprehensive development plan. Many consider that if the ancient heritage monuments were being surrounded with landscaped grassed flowered parks, its beauty might have enhanced several times. However, many of the recently renovated heritage monuments like Somnath Temple in Gujarat are being ruined by the uncontrolled and haphazard growth of shops, restaurants, human residences, illegal constructions etc. in its periphery.
8. Encroachment	As a record in CAG report, there are 249 encroachments within the protected monuments and there are approximately 955 living monument. May it be the (a) land encroachment by immigrants or by local authorities, or the (b) residential or commercial encroachment and encroachment of monuments; the Indian Government and ASI both have failed abjectly in both cases to control the proliferation of encroachment cases in heritage sites.
9. Pollution	Pollution is gradually increasing at different heritage sites and maximum pollutions are created by visitors and locals, who due to their apathy, negligence and lack of civic sense throw several types of biodegradable and non-biodegradable materials everywhere and unfortunately, many a time the authorities or the monitoring bodies also do not care proper disposal due to lack of interest, fund or priority.

From the States: Engaging Citizens for Leveraging Socio-cultural Life in City Development Programmes

SACHIN CHOWDHRY*

In India, urban areas started receiving focused attention starting this century with the realisation that cities contribute significantly to the economic growth. However, the interventions initially were response to lack of basic infrastructure across the country. It was understandable because a large population in the cities did not have access to even basic services like drinking water, sewerage, solid waste management, etc. As the population in the cities grew and estimates showed that it would grow even further with the economic development, both the Central Government and the various state governments prepared road-maps for meeting all concomitant challenges. The city governments were also given and assumed important role in the endeavour.

While the focus of the above such efforts was on creations of large infrastructure and provision of various services to citizens by leveraging technology, some municipalities have taken initiatives in engaging citizens with their programmes. Such efforts also saw reviving of socio-cultural aspect of city life. Some of the initiatives are given below.

Raahgiri in Gurgaon

Raahgiri Day- 'Apni Rahen, Apni Azadi', completed one year in November, 2014 in Gurgaon. This was a non-municipal initiative conceived by Raahgiri foundation consisting of local habitants from five organisations EMBARQ-India, I AM Gurgaon, Heritage School Gurgaon and Duplays Gurgaon encouraging citizens to cycle. The success of the event got authorities of Gurgaon to initiate plans of installing cycle tracks in the city covering an area of eight km. from HUDA city Centre to Golf Course Road Extension. The organisers aimed at having pedestrian and cycling friendly infrastructure laid over the entire city and to have safer roads for all.

During the events, a lot of cultural events like rock concerts, shows by different entities and groups, etc. were organised. Corporates also chipped in with their contributions. Some of them sponsored some events and some organised them on their own.

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Raahgiri Days in Delhi

Success of Raahgiri in Gurgaon enthused the organisers to bring this initiative to New Delhi Municipal Council (NDMC) area. It closed streets to cars to convey the message of sustainable and active transport. In Delhi the NDMC together with Delhi Police Department took the lead in hosting car free Sundays in the inner circle of Connaught place each week beginning 13th July, 2014.

The event was very successful, which can be gauged from the fact that starting with a turn out of 5000 people on first Raahgiri day, it grew to 20000 people a year after. Moreover, the event expanded to Dwarka, Rohini and East Delhi areas as well. The important aspect was that municipal bodies and the Police Department, became the face of the events.

Sunday for Srinagar

According to a 2015 survey conducted by London-based City Mayors Foundation, Srinagar figured at 92nd place in the global ranking of fastest growing cities. Besides that it is an important tourist destination. The city faced acute problem in managing its Solid Waste (MSW). While the rate of waste generation was increasing, the municipality was finding it difficult to find a proper landfill site. *Kashmir Observer* (April 24, 2021) noted that due to massive urbanisation and population growth, during the last 10-15 years the Srinagar Municipal Corporation (SMC) was not been able to acquire 10 to 15 hectares of land for creating an alternate landfill site as the existing site at Achan had already been overflowing.

Unlike in Gurgaon and Delhi, where the plan for encouraging people to cycle to contribute their bit to combat the problem of pollution was conceived by a non-governmental agency, Srinagar Municipal corporation (SMC) launched 'Sunday for Srinagar' Campaign in March 2021 on its own. It started with raising awareness among people about the importance of managing the wastes appropriately. The SMC started carrying out special cleanliness drive on Sundays besides implementing the SWM Plan of the SMC on a regular basis.

This municipality driven initiative now focuses on several aspects of city life like plantation, awareness, cleaning bad spots, water bodies, embankments and litter free spots at different places in the city. The campaign saw participation of senior officials of the SMC including the Mayor and the Commissioner. The aim of Sundays for Srinagar is to create awareness about managing solid waste plus undertaking cleanliness drives on every Sunday in different parts of Srinagar city. The sanitation staff of SMC, volunteers from NGOs, public spirited

individuals are part of the campaign. This has gained media and public attention after the Mayor and Commissioner SMC have been actively participating in these programmes.

Gradually, it started getting the participation of senior most officials of other departments as well which had a stake in the city, like the Department of Tourism. People from various walks also joined the initiative.

CONCLUSION

Citizens can be mobilised by all authorities which want them and which, in fact, may reduce the cost of implementation of various programmes. This people buy-in strategy has proven to be successful in many other countries. It would be particularly easy in areas where people can enjoy togetherness. As found out by the United Nations Sustainable Development Solutions Network, India ranks 136th among 150 countries that were ranked on the World Happiness Report. India's position has marginally improved by three notches from last year's 139th rank. The above three cases saw participation from people living outside the area as well, indicating the social value of the strategy. The cultural events organised during the period attracted people and motivated them to participate.

Enrique Penalosa, the former mayor of Bogota, Colombia, who participated in the first anniversary of the Raahgiri Day in Gurgaon, while listing the most important amenities that help improve the quality of life in a city, said that the prime focus should be on developing parks, cycle tracks, footpaths, facilities for the elderly, differently abled and poor. He said, "The poor who use the non-motorised transport, are contributing to the environment. However, the rich are making it worse by using their vehicles. Thus, those who use non-motorised transport should feel proud and not inferior".

Covid affected the organising of such events but now it seems to be receding. The cities may plan now for further leveraging the citizens' engagement in many other for their developmental programmes.

Green Urban Mobility Initiatives in India

AMIT KUMAR SINGH*

The future of India's vibrant and rapidly growing cities largely depends on an efficient, reliable and safe transport system. In the last few decades our cities have witnessed tremendous growth in private vehicles. Unfortunately it has turned into increased vehicle population, congestion on city roads, and lack of public space along the road side. In fact the rapid growth in vehicle numbers needs to be supported by an efficient, reliable, safe and green transport system in the long term. At present cities of India are amongst the worst affected in terms of air pollution. As per World Air Quality Report, 2019 six out of ten most polluted cities worldwide are located in India including Delhi, which is ranked as the world's most polluted city. It is thus necessary to focus on mass public transport systems, non-polluting modes, and pedestrian friendly transport network to achieve safer and healthy cities.

The Government of India had accepted the magnitude of the urban transport problems and led out the National Urban Transport Policy (NUTP), in 2006 to regulate the transportation planning in Indian cities. It was further revised in 2017. The NUTP along with AMRUT as well as Smart Cities Mission aimed to fund urban infrastructure projects towards advancing equitable urban mobility, smart mobility and reducing congestion. In lieu of that this column presents three good practices that have been implemented by different ULBs in the recent times. Each good practice highlights how that particular urban green projects helps cities to achieve the vision of Green Urban Mobility.

Ministry of Heavy Industries (MHI) supports 2,31,257 Electric Vehicles under Phase-II of FAME India Scheme till 1st February, 2022

To promote the production of green fuel based vehicles in India, the Ministry of Heavy Industries, GoI implemented its flagship scheme 'Faster Adoption and Manufacturing of Hybrid and EV (FAME)' scheme in 2015. This scheme provides subsidies for electric based two and three wheelers, hybrid, e-cars and buses. The scheme has 4 focus areas i.e. (i) Technology development, (ii) Demand Creation, (iii) Pilot Projects and (iv) Charging Infrastructure. The phase-I of the scheme commenced in 2015 and implemented for a period of two years i.e. FY 2015-16 and FY

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2016-17 commencing from 1st April 2015. In the 1st phase of the scheme, about 2.8 lakh EVs were supported with total demand incentives of Rs. 359 crore. Through this scheme 425 electric and hybrid buses were sanctioned and deployed across various cities in the country under first phase of the scheme. The Ministry of Heavy Industries had also sanctioned about 520 Charging Stations/ Infrastructure for Rs. 43 crore (approx.) under Phase-I of FAME-India Scheme.

Recently MHI has implemented FAME-II for a period of 3 years, effective 1st April 2019 with a budget allocation of 10,000 Cr which includes a spillover from FAME-I of Rs 366 croer. Under this Phase-II of FAME India scheme, 2,31,257 Electric Vehicles have been supported till December, 2021. Further, MHI has sanctioned 6315 e-buses to 65 cities/ STUs/CTUs/ State Govt. entities for intracity and intercity operations across 26 states/UT under the Scheme. The Ministry has also sanctioned 2877 charging stations in 68 cities across 25 states/UTs under FAME India (Faster Adoption and Manufacturing of Hybrid & Electric Vehicles in India) Scheme Phase II. A Large number of Original Equipment Manufacturers (both starts up and established manufacturers) have been registered and revalidated their 106 electric vehicle models under the scheme. This scheme has helped the sale of electric two wheeler vehicles in the country as their number has increased manifolds during the current year as compared to the previous year.

Another benefit of this scheme is that it has created a large number of employment opportunities in the country. As per the Society of Indian Automobile Manufacturers (SIAM) Report, the Auto Industry generates employment of 13 persons for each truck, 6 persons for each car and four persons for each three wheelers and one person for each two-wheeler, which is quite remarkable.

Boost up to the Go green Mission as South Delhi MC and New Delhi Municipal Council decided to get 40 and 100 solar-powered cycle points in their zone by March 31, 2022

Since the rising fuel price is a major concern for India thus there is an urgent need to search for alternative fuel resources. Our policy makers are now focusing on solar bicycle which is an electric vehicle run on solar energy and provides an easy mode of communication to our city dwellers. Since India is blessed with nine months of sunny climate thus scope of solar bicycle is very bright in India. Thus solar hybrid bicycle can become a very vital alternative to the fueled automobile thus its manufacturing is essential.

Looking at the great opportunities of solar energy based bicycles,

South Delhi Municipal Corporation (SDMC) as well as North Delhi Municipal Corporation (NDMC) have launched a project to install hi-tech cycle stations in its areas. They are now encouraging and motivating people to use this eco-friendly mode of transport for last-mile connectivity. South Delhi Municipal Corporation (SDMC) has launched a project to install 82 hi-tech cycle stations in its areas. Of these, 40 will be established by March 31, said officials. The hi-tech cycle stands will be completely powered by solar energy. "Lighting and other facilities will operate with the help of solar panels," said an official. These e-cycles will have state-of-the-art facilities like GPS, integrated lock, RFID tag and a real-time monitoring system. Now people can use and book these e-cycles easily. All they need to do is to download SDMC app and submit the details, pay minimum security fee (returnable after use) and minimum fees per hour to use the cycles. Once the payment is made and details are submitted, people can easily unlock them using QR code. It can be of maximum use for a day. These stations are being established mostly near solar e-charging stations or markets.

On the other hand New Delhi Municipal Corporation (NDMC) is also setting up over 100 e-charging stations in its area. NDMC has already established more than 60 e-charging stations in its area and is augmenting by more than 100 in this year itself. They have also launched a common payment portal for all its services and smart bus queue shelters in its budget for 2022-23. They have also aimed for an ambitious plan of shifting to a 100 per cent renewable energy municipal body of the country. Interestingly NDMC has also not renewed its power purchase agreement with thermal power generating stations after its expiry. The civic body has also announced that it is taking up fresh purchase agreements with only renewable power providers, including hydel and solar energy.

BMC plans to construct Safe School Zones to make roads and footpaths in Mumbai children-friendly

School going children constitutes more than 20 per cent of Indian population. Each day they have to walk through the congested roads of the city to reach their school or home. As per various report, India loses 31 children every day owing to road traffic crashes. Basically children are among the most vulnerable road users because they are more prone to risks compared to adults given their smaller size, cognitive development and perception of risk. Therefore, apart from providing access to quality education, it is imperative to enable safer access to schools.

Recognising the problem different cities across the world are creating safe walking zones for children to walk home. In India, similar

kind of model was introduced in Mumbai in October 2021. A trial run was conducted at Mirza Galib Road in Byculla. This road is home to two schools. Between 2017-'19, the 500-meter stretch of the road around Christ Church School recorded 23 crashes and three fatalities. To overcome this problem, the Brihanmumbai Municipal Corporation (BMC) in partnership with Mumbai Traffic Police (MTP) and World Resources Institute (WRI) launched a plan to create a Safe School Zone in the city, to make roads and footpaths outside schools safe for children.

This Safe School Zone trial project includes the demarcation of the school zone using signages, road markings, providing designated areas for walking and waiting, multi-utility zones including pick-up and drop-off zones, children-friendly spaces with playful elements and a vibrant pedestrian crossing. The pilot project is initially using low-cost material and planned to take feedback from the neighborhood, before making it permanent on-ground. The successful implementation of this pilot project will help BMC to create children-friendly and walkable school zones in other parts of Mumbai.

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