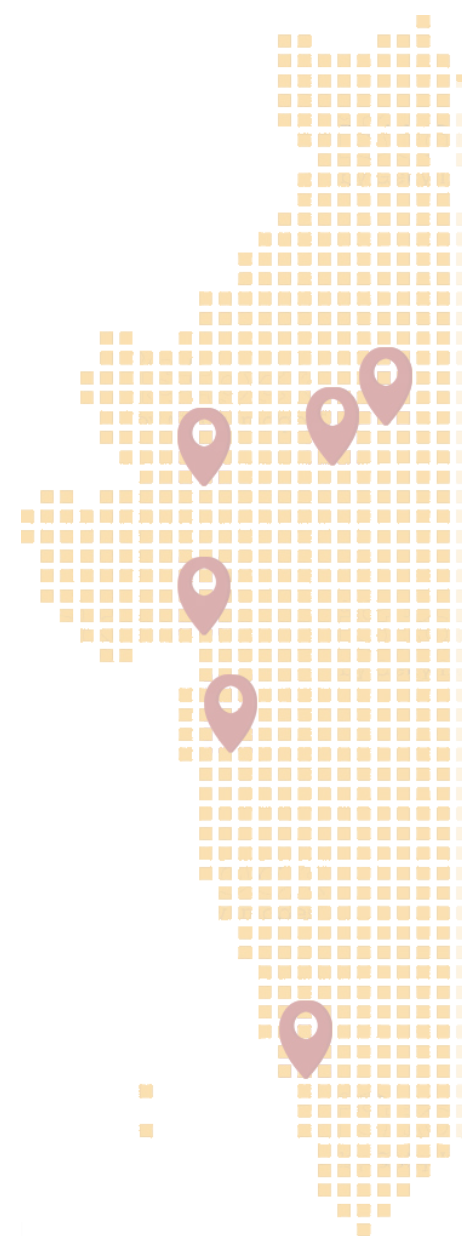


# ISCF DIGEST

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India Smart Cities Fellowship Program



# Introduction



Lorem Ipsum is the name given to the Latin text that is usually used as a test in graphic design projects and drafts to check the result of designs, spellings, colors or the distribution of space.

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*“What Google doesn’t show you” “What Google doesn’t show you” “What Google doesn’t show you”*

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That being the case, the road to gender equality remains long and ever-shifting—particularly regarding the nuanced ways gender intersects with race, class, and sexuality. This series of work subsequently investigates “Gender and the Indian City”. Lorem Ipsum is the name given to the Latin text that is usually used as a test in graphic design projects and drafts to check the result of designs, spellings, colors or the distribution of space.

# The Team

## Editorial Team



**Nabamalika Joardar**  
India Smart Cities Fellowship Manager



**Monika Thakur**  
Advisor



**Nikhil Sanjay Shah**



**Prasanna Bhangdia**



**Rashi Jain**



**Shonit Nayan**



**Tarini Gupta**

## Design Team



**Abhishek Chatterjee**



**Akruti Murhekar**



**Roshni Gera**



**Sarayu Madhiyazhagan**

# Table of Contents

## What Google doesnt show you!

### 01

#### Indore: Beyond the Street-Food Capital of India

**Team Activate:** Kaustubh Mirajkar, Ojaswini Bansal, Tarini Gupta and Vasudha Sharma Page 01

### 03

#### The Land of Future: Pimpri-Chinchwad

**Team Aspire:** Akruti Murhekar, Anshul Rathore, Satarupa Roy and- Vignesvar Jagades Page 09

### 05

#### Seeds of Digital Revolution in Surat

**Team Connect:** Anna John, Nikhil Sanjay Shah and Shaurya Chauhan Page 19

### 07

#### Streets that Celebrate - Nagpur

**Team Enroute:** Lipi Ghosh, Prakriti Saha and Rashi Jain Page 29

### 09

#### Kochi - A town with enormous Charm

**Team Asset:** Irene Anna Shaji, Nishant Raj Tonk, Shonit Nayan and Soumya Shrivastava Page 39

### 02

#### Means or End: What is Smart Cities Mission Striving for?

**Team Adapt:** Ritika Rajput, Prasanna Bhangdia and Manoranjan Ghosh Page 06

### 04

#### (Re)searching Raipur: The wisdom of the Smart city's lakes

**Team Biome :** Divya Chand, Harsha Arya, Oviya Thangaraj and Upama Ghosh Page 12

### 06

#### The Good Citizen: Pune's enduring culture of civic engagement

**Team Empower:** Rahul Saikia, Roshni Gera, Swati Pradhan, and Yateen D Page 24

### 08

#### Biased - Bhopal - By Us !

**Team IMPROV:** Akanksha Singh, Divya Bharti, Kastury Biswas and Sarayu Madhiyazhagan Page 33

### 10

#### Ahmedabad -What Google doesn't show you

**Team Switch:** Abhishek Chatterjee and Shivam Dave Page 43

## Testimonials

**India Smart Cities fellows** Page 46  
(by program fellows of Cohort 2021-2022)



## 1 Indore: Beyond the Street-Food Capital of India

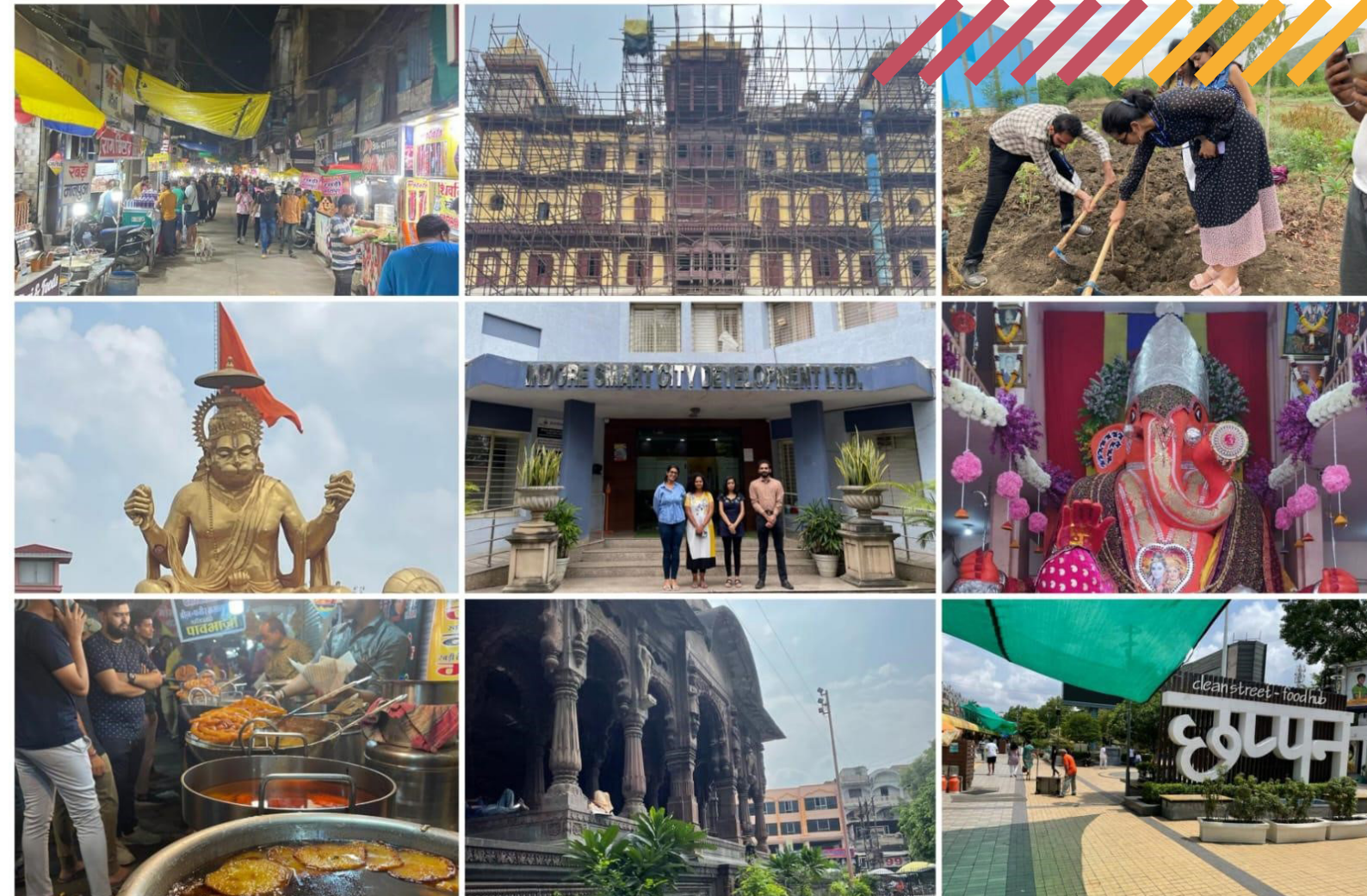
“Situated on the Malwa plateau on the banks of rivers Saraswati and Khan, the city of Indore is named after a small 18th-century temple in the city centre called Indreshwar. Historically famous for the cotton mills, Indore is now known for its mouth-watering poha jalebi, iconic Rajwada Palace, and the gare on Rang Panchami, which is one of a kind.

The metropolitan yet traditional vibe of the city attracted us; the city mastered the art of co-creation by creating commercial public spaces around majestic structures. For instance, the neighbouring precinct to the Rajwada Palace is the “Sarafa Bazaar”, an astonishing example of the multifunctionality of the area, temporal in nature which transitions from a jewellery market in the daytime to a food street at night. For our project on public spaces, we had to visit more than a hundred gardens, interact with a diverse group of stakeholders and conduct events to promote it. Apart from the scrumptious food and magnificent

structures, the people in Indore touched our hearts. Their sense of belongingness and the resultant magnitude of citizen participation made our first outreach event a significant success, so much so that citizens came forward and gave their ideas which motivated us to work harder.

Additionally, every wall in Indore tells a story owing to the exemplary street art across the city. The wall art ensures minimal yellow spots and awareness regarding the “Indore 311” app. The icon/logo of the app is often painted on the walls to ensure citizens know about the app, which essentially exists to connect the former with officials from the ULB. We, too, are creating a plugin titled “Activate Public Spaces” in the city’s app to transform underutilised spaces through their identification, submitting ideas and supporting the transformation through financial and non-financial ways.

Most of us knew Indore as the cleanest city in India. However, several innovative initiatives under



Iconic Indore Source: Author (2022)

the Smart Cities Mission (SCM) were initiated here. The city conducts massive awareness campaigns each weekend, attended by citizens who have a positive outlook on the development and have understood their importance and role in the city’s progress. The information, education and communication (IEC) strategies of the officials for its citizens are exceptionally well thought of, contributing to Indore’s massive success under the SCM. Considerably planned and executed initiatives like annually creating a city song to generate

awareness among citizens leading to behaviour change in terms of cleanliness is appreciable and the music being used in television series shows its impact on the citizens.

Furthermore, like the SWM sector,



Indore has revolutionised the transportation sector. Videos of the “dancing cop” who moonwalks like Micheal Jackson while managing the chaotic roads of Indore are all over social media. His attempt to combine work and passion has earned him popularity amongst citizens. Another intriguing element is the “Robocop”, a 14 feet tall robot directing traffic at a junction named after it. The Robocop sends a live feed to the police control room from where officials send e-challans to the violators. Similarly, “traffic park” built on a behavioural change model is another attempt to manage the worsening city traffic. The place is well-designed with road signs, zebra crossings and working signals, giving the visitor a real-life experience, and aims to inculcate a sense of traffic and the importance of rules and regulations for children and automobile learners right from the start. Although these innovations have successfully nudged the citizens, Indore still has a long way to go to achieve safe and pedestrian-friendly roads.

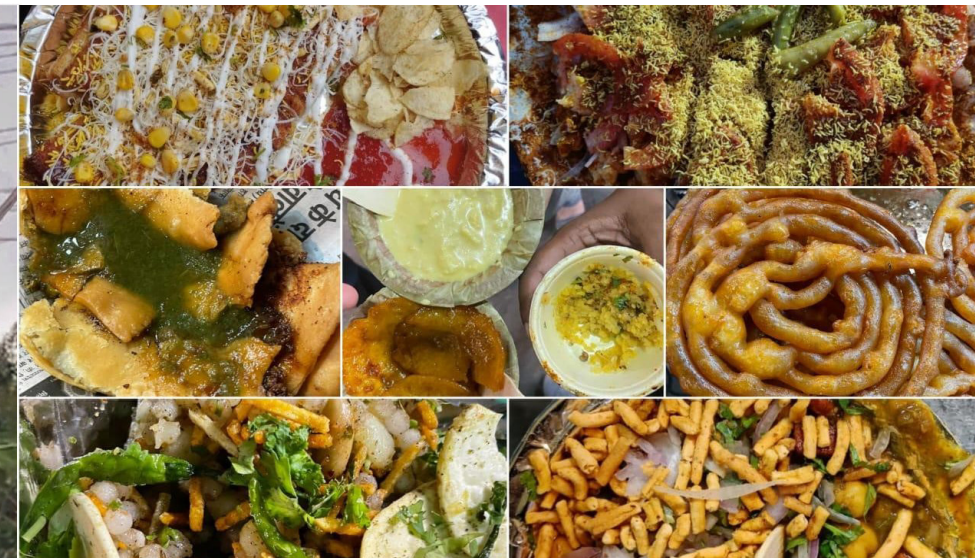
“Waste to Wow”, based on the concept of converting waste into art, is another thought-provoking initiative by the Indore Municipal Corporation. The entire



Conducting outreach activities at Aranya Nagar, Indore Source: Author (2022)



Revolutionising traffic management Source: Author (2022)



Supremacy of Sev Source: Author (2022)

conceptualisation is purely out of discarded waste such as tyres, bottle caps, plastic bottles, worn-out bicycles, window frames, sweeper scrap etc. The 4R garden, as the Indoris call it, has come out of the box garden elements, such as a wall art featuring Mahatma Gandhi made out of plastic bottle caps and a coconut tree made out of sweeper scrap. Over and above that, Indore boasts of vertical gardens developed alongside the nullahs and river crossings serving a dual purpose. On the one hand, they contribute to the beautification of the city. On the other hand, they prevent people from throwing trash in the river/nullah, thus, bringing about a behavioural change in the citizens. Concerning digitisation, Indore is the first Indian city to have a digital address system. The city signed an MoU with pata.com, through which every house will have its unique identification code geotagged to ease navigation in the city. Additionally, such innovation will aid government, and private agencies to deliver their services seamlessly. For instance, services like ambulance, fire brigade, couriers, food delivery agents etc., could leverage this technology as it would also assist in proper navigation.



Besides being India's cleanest city, Indore is well known for its street food. Ojaswini being from Indore, left no stone unturned and took us to a plethora of places to eat. So much so that Kaustubh ended up at a clinic within the second week because he overate. Coming from Delhi, Tarini and Vasudha were bowled over to find eight pani puris in just ten rupees from a renowned chaat shop in Indore. Another famous food item here is "sev"; everywhere we went, we found it as a topping in a new dish, for example, sev paratha, sev and laddu, poha sev and gathiya chat etc. Furthermore, Indori's obsession with namkeen is unparalleled. The city has an unlimited variety, and each of them tastes heavenly. Other delectable edibles include- cheese chutney sandwich, jaleba, bhutte ka kees, and dal bafla.

To sum up, four months in Indore were nothing less than a rollercoaster ride- surviving in non-stop rain, running after the developers and managing life away from home. However, we made the most of it together and will always remember Indore as a home away from home.



4R garden at Sangam Nagar, Indore Source: Author (2022)



## 2 Means or End: What is Smart Cities Mission Striving for?

'Digital India as a way of life' or 'By using internet we have been able to identify applications that would make governance faster and better'. Narendra Modi, Prime Minister of India keeps reiterating such statements to underscore the success stories of digitalisation in India. However, there is more to the digital narrative. During our city deployment to Nashik Smart City, we got the chance to closely observe the working of city administration. We noted how the city administration maintains the data and found that there exists a parallel mechanism of maintaining the data via traditional (files with handwritten entries) and digital methods (filling information on portals and in excels). Even after immense expenditures on digitalisation, especially when smart cities are getting dedicated funds for it, the issue of data security, digital divide and infrastructure fragility remain unaddressed. Furthermore, the contemporary concerns of cities, per se basic infrastructure are majorly

ignored, as Varsha Vidya Vilas put it, "WiFi or CCTV cameras are not what we need, we ask for basics, i.e. gutter, water and metre (sewerage, water and electricity)... (in a speech in Nashik on July 20, 2022).

India's digitalisation drive began more than fifteen years ago with National e-Governance Plan (NeGP), 2006 with an element of, 'e-municipality', specific to the cities. Under the Jawaharlal Nehru Mission for Urban Renewal Mission (JNNURM), concepts of Government to Citizen (G2C) and Government to Government (G2G) were delineated for implementation which includes basic citizen services; revenue earning services; development services; and efficiency improvement services among others. Following the league, the Smart Cities Mission (SCM) has conceptualised to improve the physical, social and economic infrastructure through 'Smart Solutions'. Real-time data monitoring and application of 'digital technologies' are central to the SCM.

### Digitalisation of Governance

Digitalisation of governance is majorly limited to data gathering and storage. The 'datafication' narratives of having empowered citizens and reducing the work burden of employees while making governance mechanisms more efficient and transparent have been used to push for digitalisation. However, none of them have yet been realised. As digital services can only be availed by a certain section of the society who have access to the digital and believe in 'being digital'. Furthermore, in everyday lived experience, the

digitalisation turned out to increase the workload of employees as the cities have to maintain data in digital and register entries. Furthermore, digitalisation comes at the risk of abusing the data in one click. As Datta (2015) argues how 'big data' remains in the hands of the elite class (upper caste and class) and facilitates data-monopolisation for favour of political lobbying and vested interests. Also, Odendaal (2011) noted in the case of South Africa how spatially digital access has been deeply rooted into the availability of the existing networked infrastructure which by default is penetrated into coloniality and already 'splintered' (Odendaal, 2011; Datta, 2015). Hence, built on information infrastructures with a deep colonial lineage, the digitalization turns out to reinforce the socio-economic and spatial inequalities through 'new power-knowledge networks of ubiquitous connectivity' (Datta, 2015). Therefore, the peripheries that Shah (2015: 9) redefined as 'networked margins' (i.e., networked digitally but grid-off in terms of basic urban infrastructure) are the space of new marginality and exclusion. The peripheries are reproduced not only at the margin of networked or digital

infrastructure, but also new forms of centralisation and parallel governance mechanisms worsen the existing weak urban governance. For example, under the Smart Cities Mission, rather than strengthening city governance, the cities are stuck in the vicious circle of a parallel governance system (Special Purpose Vehicles), extra-territorial consultancies (PMCs), and centralised reporting and fundings. Specifically, the SCM coming with the parallel administrative organisation without people's representation also revealed the 'failed' urban governance in India. Furthermore, the extra-constitutional 'upscaling' is also fundamentally associated with the SCM, as the cities are reporting directly to the central government, therefore, each mechanism is necessarily following a 'top-down' approach. Following it, we ask how Indian urbanisation is proceeding through digitalisation and at what cost. We emphasise that 'how' is being done (the process or means) is as important as 'what' is being done (digitalisation of governance). Digitalisation has been (re)producing new forms of urban governance structures and mechanisms, citizenship and contestations which so far remained majorly unexplored in both academics and policy domain. Furthermore, neither the citizens nor the administrators of cities have figured out yet how to handle the technocratic mechanism of governance with the bureaucracy which is further aggravated due to semi-skilled or virtually unskilled citizenry and workforce. In the name of e-governance, the centralisation and techno-cratism of urban governance has been simultaneously flaunted with the colonially-rooted bureaucracy. Hence, a new form of 'splintered' urbanism is getting (re)produced through 'digital' agenda.

#### Precarities of Information Infrastructure

The digital infrastructure can be assessed at the citizen and governance front. The digital divide (i.e., inequality to access Information and Communication Technology) graves the digitalisation aspirations at both ends. The affordability and accessibility layered with the socio-spatial (gender, caste, class and rural-urban or peripheries) discrimination explicitly point towards who have/have not or can/ cannot be digitalised. This can also be explicit that under SCM, a significant chunk of the budget has been allocated for surveillance infrastructure or the creation of control centres (Indian Express, 2022). Specifically, at the governance front, the information infrastructure is majorly outsourced, off-site

and remarkably vulnerable (per se, cybersecurity or privacy concerns). As the introduction shows, such fragile infrastructure reinforces the lack of faith in different governance hierarchies. As Kitchin (2014) says, control and command systems can centralise power and decision-making into a select set of offices armed with giant screens and cutting-edge algorithms. It will further outsource the local governance (already weak and fragile) and eliminate the possibility of citizen participation (which is already very weak) (Kitchin, 2014; Chatterji, 2017). Again, citing the example of the SCM, the ambitious and celebrated Integrated Command and Control Centre (ICCC) has been envisioned as a 'penance' of all urban problems. ICCC is considered a "nerve of city governance" that facilitates connecting, integrating and analysing the information streamed by the digitally instrumented devices plotted across the city (Indian Express, 2022). It is pushed as a means to leverage the 'big and real time' data. Beyond all these narratives, we ask: 1. How can Indian cities use ICCC or such command-and-control mechanism without jeopardising already compromised decentralisation? 2. How can the ICCC (majorly outsourced and

mostly managed by private entities) bring all the departments and level of governance under one umbrella? 3. Why do such entities not lead to marketisation or commercialisation with a corporate monopoly over cities and citizens' data? Highly pushed top-to-bottom, ICCC is a techno-governance stunt for assimilating data that may or may not be useful in city-level decision-making. Hence, the 'black-box' of digitalisation within urban governance needs to be opened and analysed for better understanding of what is happening and how it is happening. We believe that SCM has opened a new debate on 'how' digitalisation should be implemented at grassroot level. And we believe 'how' is important because, "means are as important as the end".

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Prasanna Bhangdia



Manoranjan Ghosh



Ritika Rajput



### 3 The Land of Future: Pimpri-Chinchwad



PCSCL Source: Author (2022)



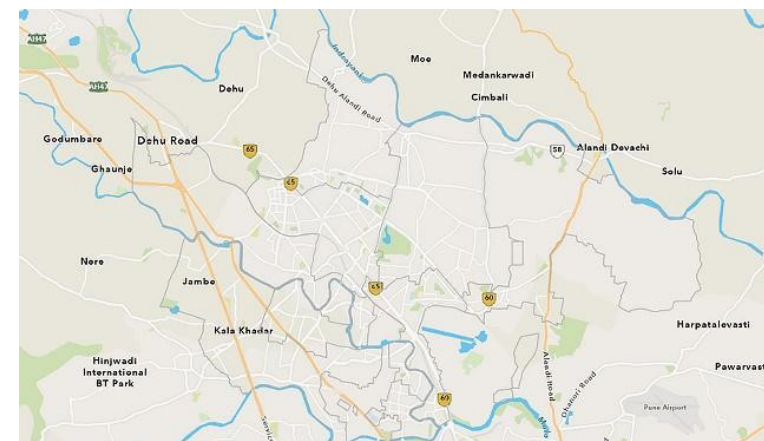
PCMC Start-Up Incubation Centre Source: Author (2022)

Cities host the economic opportunities for the millions who thrive. It not only acts as a place of work and accommodation but also has a character based on its history and sequel of its development. Geographically sandwiched between two mega cities of Maharashtra i.e., Mumbai and Pune, a city with rich religious and cultural heritage and a history associated with India's freedom struggle is Pimpri-Chinchwad. Pimpri-Chinchwad is often known as Pune's sister city. Despite being in proximity to one of the mega cities, it holds its own unique identity, particularly recognised as "The Detroit of East ". The city is widely known for its abundance of many national and multinational automotive companies, IT, and other manufacturing industries.

The people and the systems are what makes a city whole and vibrant, apart from the infrastructure, services and facilities it offers. The people of Pimpri-Chinchwad are inclusive, kind in nature and excitingly passionate about their city by staying as responsible citizens. Since its origin, the city has strived to be at par with the other metropolis.

By taking advantage of the major learnings of the nearby metropolis, Pimpri-Chinchwad rightly aligns itself into developing as a sustainable and inclusive city, and mark its presence at the national scale.

The innovative ideas from the youths are encouraged and aspiring entrepreneurs are welcomed by the city officials in assisting them to bring meaningful development to the city. By this, the city intends not only to retain their local talent pool, but also act as a magnet of opportunities for the nearby settlements. The Pimpri Chinchwad Smart City Start-up Incubation centre pilots these activities, helping the budding professionals and entrepreneurs. This is especially showcased by their belief in keeping inclusivity at the fore-front and offering a good standard of living to their citizens. As a result of this, the city developed its advanced security system with surveillance cameras into all geographical corners ensuring the safety and security of its residents. With the motive of providing the inclusive and critical infrastructure for



Pimpri Chinchwad Source: Author (2022)



Aerial Imagery of PCMC Source: Author (2022)



Museum of Chafekar Brothers, Freedom fighters Source: Author (2022)

all, the city has planned and developed numerous safe and walkable neighbourhoods.

The city always believes in rational innovations to boost their infrastructure services. One such example is the use of two-wheeler-based fire fighting vehicles which enhances their reachability to narrow lanes and crowded areas of the city. The medical facilities are in abundance providing better health facilities.

With the existence of famous colleges like DY Patil, IIT, the city has a multicultural crowd from all over the country which has led to establishment of various food junctions at affordable prices. Talking about the recreational and open areas, the city is providing access to all the major sport facilities which could be booked online and the neighbourhoods having access to parks with open gym facilities and playgrounds nearby. Being a melting pot of various cultures, the city celebrates festivals like Diwali, Navratri and the grand Ganesh Chaturthi when the city lights up the whole night and the people gather for pandal hopping.

Using the Smart Cities Mission as an opportunity, Pimpri-Chinchwad capitalised in achieving their goal of making the city inclusive and sustainable. The Pan City projects ensured creation of a robust, reliable and sustainable ICT infrastructure for safety, inclusivity, and public engagement; and also widely used for the citizen and civil-welfare services. This has strengthened the city's digital ecosystem and digital literacy.

The focus of the PCMC's ABD Pimple Saudagar and Pimple Gaurav, is to demonstrate the principles of liveability applicable to its context, and become



a blueprint to expand these principles in the rest of the city.

The evolution of the digital infrastructure in the cities complements the physical entities of the city and strategizes to provide better services and amenities to the people as the demands rise. The smartphone application Smart SARATHI - The “System of Assisting Residents and Tourist through Helpline Information” (SARATHI), has been one of the pioneers in public engagement and enhancing municipal services in the city. There is a presence of active citizen groups that enthusiastically take interest in the governance of their city. Efficient integration of the municipal services into this application, have made the citizens’ lives easier and municipal services accessible on the go. As a result, the city has developed a robust data ecosystem with the smart technologies employed, the city ensures data driven decision making from these technologies.

Like any city in the state of Maharashtra, the city comprises two branches: the executive branch headed by the Municipal Commissioner, an IAS officer appointed by the government of Maharashtra, and an elected



PCMC ABD Area - I Source: Author (2022)



PCMC ABD Area - II Source: Author (2022)



PCMC ABD Area - III Source: Author (2022)

deliberative branch, the general body, headed by the mayor. Despite having a divisive system of governance, the work is carried forward with utmost efficiency and accountability. It is fascinating to note that the city officials utilise the existing networking applications such as WhatsApp to communicate with on-site teams and departments to monitor the progress of infrastructure and services.

In recent decades, cities with better amenities have grown faster. Agglomeration economies and human capital, liveability are important drivers of a city’s growth, and have proven to be the case with Pimpri-Chinchwad as well. With its agility and ability to do better in terms of the liveability, sustainability, inclusivity and services it offers, makes Pimpri-Chinchwad a city of today and tomorrow.



Akruti Murhekar



Anshul Rathore



Satarupa Roy



Vignesvar J.

## 4 (Re)searching Raipur: The wisdom of the Smart city’s lakes

Over a weekend back in June 2022, our team was deputed to Raipur with the agenda of creating a platform to evaluate the impacts of smart city projects on ecosystem services, and to pilot it on the lakes of the city. The idea was for a platform that helps ULBs to assess the role of different kinds of interventions conducted around lakes, and the trade-offs in bio-physical, socio-cultural, and monetary values. For this we created a long list of indicators and data points which over many weeks we narrowed down. With the limited time we had and data scarce nature of Indian cities, to standardize such a solution would be a herculean task. And while my teammates diligently shuttled between multiple government offices and departments, to gather what they could share, I decided to venture into the city to see what it can offer. Along the way, experiencing the city on ground demanded us to tweak what we sought from it, and also rethink why. While the venture of filling up the idealistic spreadsheet began to seem unfeasible, there were many instances on ground that highlighted the city’s peculiar connection to its lakes. Along the way the limitations of data were expectedly reiterated

by many, and qualitative observations filled up my notes. They reinforced the need to study these urban lakes, more importantly, to rethink ways of doing it.

Following are insights from around Raipur that may not translate into data points, and it’s the wisdom of this lake city that runs the risk of going unnoticed.

### The Marine Drive drivers

Marine Drive at Telibandha lake is the city’s most hip and successful urban lake rejuvenation project. While little floating islands clean the lake, a row of restaurants and shops, walking paths with glitzy lights, new lakefront cafes, food courts and a BSUP project flank the lake. After many recreational evenings, we returned to the lake to conduct surveys to compensate for our lack of quantitative datasets. On a Sunday afternoon we walked along the promenade talking to whoever was willing to spare a few minutes. I approached a bunch of men in red t-shirts, yawning under the trees, who seemed excited to speak. I asked them the listed question of how much time they spend at the lake and was already flustered when they informed me it was more than 10 hours daily, 8 more than





The Marine Drive drivers - Source: Author (2022)

the scale in my computerised survey form allowed me to enter. The commercial development in the street caused by the lake rejuvenation has led to them sitting there, always on alert on their phones for whenever someone craves ice cream, dosa, momos or dominoes. Then they pick up the package, rush for delivery on their scooters and come right back. In spending most of their days at these benches, they could effortlessly map the lake's edges for me. They informed me of street vendors who shift location when the 5pm traffic police rounds happen, of the push of informality to one corner of the lake where people still bathe, feed ducks and perform rites, of how the female presence in the area has gone up since the lights were put up, how policing increase manifolds on occasions like Friendship's day, of how people have committed suicide from where they sit, despite the high surveillance, and how this is the first time all this information they have is coming in handy in a conversation. I learnt a lot from them but not much went into the survey form.

Whose lake is it anyway?

The quest for lake enthusiasts led us to the Talaab committee of Raipur's Green Army. They were the most



Whose lake is it anyway?- Source: Author (2022)

delighted to receive my call, to hear someone repeat what they believe and have been constantly working on for a decade. With an evolving manifesto and a devoted group of volunteers they work with all types of stakeholders, their narrative about their work changes depending on where and to whom they speak. With a militaristic focus on environmental preservation, they work on tree plantation drives with the government, awareness creation in schools, cleaning lakes with fishermen and more. On hearing the scope of our project, they were insistent we come visit Gajraj Bandh Lake with them. Upon first mentioned, I was embarrassed I hadn't heard of the lake. It was named differently in the maps, the Smart City had not yet worked on it, and it was suburban enough for the locals around us to not have it in their radar. Yet, at 130 acres, it is the biggest lake of the city which "could still be saved". They protest alongside the local community, farmers who are still dependent on it for irrigation and the environmentally conscious who are against the forces of development. The city development plan envisions commercial plotting and a recreation zone. The many lakes within the city completely surrounded,



Birds and the bees - Source: Author (2022)

Gajraj Bandh presents the scope and need for a green lung for the city. It makes me dwell on the quantification of citizen perception we were engaged in. A collective envisioning of healthier phytoplankton, cleaner air and environmental justice proves to be more difficult than production of flashy renders of shopping plazas. Although the city's recent history proves its capacity of collective action as the citizen drives of cleaning the major lake of the city (Budha Talab) is what had catalysed government investment and action. Another difficult indicator to quantify.

Birds and the bees

Biodiversity preservation is one the most important ecosystem services offered by lakes of the city, but with urban and development backgrounds, we were starting from scratch to study and quantify it. A series of phone calls landed us in the delightful living room of the Birdman of Chhattisgarh, also a retired service man. An enthusiast and scientist for decades, he has maintained physical diaries of the birds he sees from his terrace each day and the lizards that crawl the walls of his welcoming home. The range of species has gone down to half in the past 15 years, he told us, as we were introduced to the many wildlife enthusiasts of the city. They spoke of butterflies, rodents, fishes and foul as one of them excitedly reported on a cobra sighting in the neighbourhood, delighting



Unpublished books- Source: Author (2022)

everyone. We learnt that one can't analyse birds and reptiles for a single lake or neighbourhood, and wisdom to observe and map insect species is built over years. A 15-inch-thick thesis on the still comparatively natural lakes of Naya Raipur was handed to us for reference by its proud author, 9 years of work. Data doesn't exist, it needs to be created. But the first step is to learn to pause, then observe, note, and repeat. In our following field trips, we observed and clumsily attempted to photograph some, but much remains to be done.

Unpublished books

Someone told us the office we were heading to each day used to be a wetland too. They asked us whether the ones designing the city within these walls bothered to tell us this? While we acquired current maps and GIS layers with the city's data centre, what was left to be found was the change the city has already witnessed. We began our hunt for old maps in the city's public libraries, only finding lots of young kids preparing for entrance exams and a profound lack of written accounts and



archives, particularly in English. People directed us to a man, the keeper of the city's histories. Circling the city on the ring road, we went to his home. In his small study room, with pinned up yellowing paper and dusty notebooks, he told us of his work and deep attachment to the city and its environments, but mostly of the pain of change. He told us how his family would head to the neighbourhood lake for occasions big and small, happy and sad, for rites, rituals, and for groups of 50 relatives during a wedding to bathe. He told us of the many food crops that used to grow in the lakes and surrounding wetlands, and how the cuisine at home is

still the same but sourcing the raw ingredients gets tougher each passing year. He spoke of the changing taste of water, high water table of yesteryear, mango orchards that used to be where the road we took that day now is, and how the street he grew up in is unrecognizable today with an influx of migrants. He has written a book on Raipur that he struggles to get published, and he struggles to relate to people running and using the city today. He has retired from his beloved public libraries into his study at home, but the work continues. We had realised that the secrets of Raipur are kept with a few nostalgic old men, who despite their laments are most amused to meet us and witness our interest in their stories. A few weeks after we left the city, he dug up his research and sent me many maps of the city ranging from the early 1800s that he had collected. I digitally restored them and hope someone else finds them as interesting as us.



The keeper of lost perspectives Source: Author (2022)

## The keeper of lost perspectives

Jaunting through libraries and a contact at INTACH led us to the Deshbandhu Complex of Raipur on a rainy afternoon. A foundation set up in 1995 in the memory of Mayaram Surjan – veteran Journalist, litterateur, and activist, maintains a gem hidden here. One room with a library of his personal collection, and another small windowless room has shelves full of brown paper bags. The librarian here takes every newspaper issue each day, and diligently with a black ball point pen goes through every written article and marks them. Then carefully with a pair of scissors these are snipped up and deposited into respective yellow envelopes of subcategories and from there to brown bags of categories and shelved up into different themes. In these bags we found a decade's worth of thoughts about water issues, the river, the lakes, and the temples next to the lakes of Raipur that we were studying. In



Promises I couldn't make Source: Author (2022)

Hindi and English, from the pens of many journalists on ground, we learnt of the protests that happened against the now dynamic food courts, the areas of water bodies now under 6 lane roads, how the slums looked before the evictions, the carved pillar discovered when a lake was drained for cleaning, countless articles about religious beliefs and faith, snakes, temples and of wish granting lakes that help clear exams that this city, like most in India, is obsessed with.

## Promises I couldn't make

Another lake we studied which saw a major investment by the Smart City was



Kari talab. The field surveyors helping me didn't show up to the right lake as we had planned, and most locals didn't immediately realise which lake we spoke of every time I mentioned it. This lake used to be dirty, surrounded by self-constructed housing, and lined on the roadside by a bustling market. The Nigam relocated people, dredged and cleaned the lake, developed pathways surrounding it, gated it and put up smart streetlights all around. The evening I spent there, I met people who fished recreationally with their friends, a grandmother out on a stroll with two toddlers, I saw dragonflies and butterflies and a dead snake. All good signs. As the sun began to set, I realised that

the branded streetlights had been tampered with, and a corner of the lakefront was claimed by a bunch of young lads, gambling, getting drunk and high. Taking my cue to stay away, I walked around to the market on the other side of the bright blue railing and tarpaulin put up by the city. This is where the housing used to be. As soon as we mentioned we were from the local government, a whole lot of the vendors arrived to speak to us. They needed us to listen to what they had been struggling to make heard since weeks. The market used to be on the main road for many years. The city, while developing the lake, built a dungy space, without consulting with the vendors. Those living in houses were relocated to the suburbs, but the fruit, vegetable and meat market carried on. Bustling on the main road, with the major clientele being the ones who drive by. Suddenly, they were asked to vacate the road and move back to this space created, with little notice. The rejuvenation of the lake demanded all to be clean and empty out front. The

vendors had many complaints they insisted I note and take to my office. There weren't enough stalls, the visual access for customers was gone, there was no parking, the area stank which repulsed customers, the meat and fish was pushed to the way back and it felt like religious segregation to a few. They demanded a redesign, fair compensation, or permission to go back to their original spots. It was difficult to explain the fractured nature of governance and the fact that even though at that moment I led a team of three surveyors who were here to ask their opinions on the recent development, I probably won't be able to help them. They had been trying to raise concerns unsuccessfully for weeks, and a listening ear is all I could give them.

Lakeside conversations to look forward to

On our last weekend in Raipur, we had the privilege of hosting a small event. Graciously organised and set up by the Smart City offices on our will, it was conducted at the Vivekanand Sarovar. One of the city's favourite projects. This evening, the musical fountains of the lake were paused so that they could be discussed by an imminent panel. We invited enthusiasts to attend and stakeholders to speak about the history, biodiversity, culture, ecology, and the governance of Raipur's lakes. The greatest achievement of that day was introducing the panel members to each other. For each, the water bodies held great importance in their personal life and in their work, in different ways, but they hadn't ever found reason or opportunity to connect. The lakes have yet been imagined in silos, something we hoped our project could move past. Not many people attended the public open event, but amongst those who did were parents of an enthusiastic urban planner. Now based in Bangalore, she found out about the event online and sent them to investigate, find out who was organising, what was happening, and how she could be involved. Interested and driven, she had been looking for ways to work in the

city the past few years, but eventually for the lack of avenues ended up leaving the city for a bigger one: with a more established industry, and a market for her talent and education. The parents were eager to know how we as young professionals, much like their daughter, managed to find means to work on this topic, in this city. We informed them of how we were leaving in the next two days, and how technically, sadly, our work is city-agnostic, not centric to Raipur. I ended my stay in Raipur wondering what remains to be done, how can those interested meet each other on the lake fronts, and how can passionate locals contribute without having to leave for bigger cities.

A sense of belonging and responsibility for the lakes of Raipur, I found lying within the wisdom of the older generations and hidden deep in dusty bookshelves. But their culture and ownership also now lie in the food courts built for renting and revenue generation, musical fountains that can be videoed for Instagram. Between all this are the fishes and fishermen, fruit bats and lizards, algal blooms and attempts of phyto-remediation, women who bathe, children who swim, couples who sneakily hold hands, vendors who sell them ice-cream and the few who just need a moment to look at the sunset and feel the breeze next to the lakes.



Lakeside conversations to look forward to Source: Author (2022)



Divya Chand Harsha Arya Upama Ghosh Oviya T



## 5 Seeds of Digital Revolution in Surat

The Smart City Mission has unfolded a wide array of civic engagements, such as heritage conservation, low-cost housing, mobility, solid waste management, and public space making, addressing the urban challenges in the city of Surat. There

have been pan-city projects structurally transforming the city with inclusive mobility, pedestrianisation, and service delivery- Area-based Development projects directly impacting 3% of the city by area, 10% of the city population, and contributing towards 16% of the city GDP. At present, the unregulated suburban urban sprawl has been a significant challenge for the city, where the existing planning mechanisms of Land Use Planning and Town Planning Scheme have been inadequate to meet the rapid pace of urbanisation. This



Solid waste management, SMAC Centre, Surat - Source: Author (2022)



ITMS system, SMAC centre, Surat - Source: Author (2022)

has led to fragmented infrastructure planning, a lack of nature-based solutions, and disasters are being created such as urban flooding by design or inadequacy of it in the planning process. In the domain of economic development and livelihoods, there needs to be an emphasis on the local small-scale manufacturing industries such as Jari work, weaving, and handloom, which are rapidly disappearing. On the institutional front, there is still the need for a strategic framework for the skill development of migrant

communities and the establishment of a heritage network to develop a holistic conservation plan for the built and natural heritage of the city.

Nearly 75% of the projects under the Smart City Mission have been completed. Impactful convergence schemes have been implemented, such as affordable housing, heritage development, and 24x7 water supply, to name a few. However, there is little or no acknowledgment of the mission's contribution to the fulfilment of these schemes. Some projects focus on superficial beautification of the city, such as paving canals and painting cycle tracks, leading to poor public perception of such tasks. Impactful convergence schemes have been implemented such as affordable housing, heritage development, and 24x7 water supply to name a few. However, there is little or no acknowledgment of the mission's contribution to the fulfilment of these schemes. Exploring the potential of data captured in this centre is leading to smart solutions to address the everyday problems of the



city. Concerning these complex interconnected challenges and the capacity to address them through the latest technological interventions, the city envisaged an Integrated Command and Control Centre (ICCC) to engage with data analytics, mapping and efficient management. Since 2016, the citizens of Surat have seen a massive improvement in their quality of life with the Social Mobile Analytics Cloud Centre (ICCC Surat) established by the Surat Municipal Corporation & the Smart Cities Mission. The Mobility sector has seen the maximum benefit of digitalization- the Integrated Transport Management System has created a platform that ensures second-by-second tracking & management of bus services which has improved schedule adherence from 81% in 2016 to 97% in 2021.

In conjunction, the Automatic Fare Collection

has allowed optimization of shared transport frequency, not only ensuring seats to every passenger but also saving approximately three crores INR annually. Beyond motorised transport, the scale of the city makes cycle use a viable option- now being encouraged through Scan & Ride options available at a large number of Smart City Bicycle Rental stands across the city. The solid waste management sector- which would face issues of low accountability in garbage collection, efficiency, and unavailability of zone-wise KPIs for the same- the end-to-end automated system has produced enormous benefits. Through the metal-label mounted RFID system for collection vehicles, monitored in real-time through GPS, the scope for human error has been reduced drastically and thereafter lessened the number of citizen grievances.



Flood management, SMAC Centre, Surat - Source: Author (2022)



Furthermore, citizen grievances are being monitored through a 2-layer system; layer one operates through the 4000+ CCTV cameras across the city that automatically identify civic issues such as damaged footpaths and water leakages.

Layer two allows the remaining grievances to be easily reported by citizens through the City App as well as by workers through the Night Round App. These complaints are addressed within the specific response-times set for levels of criticality, ensuring fast & transparent addressal of all citizen grievances.

As is evident, Surat has been the flag bearer for digitization initiatives across Indian cities. Acclaimed as the best performing city across western India in Data Maturity Assessment

Framework, published by India Smart Cities Mission- it also ranked number one in three of the five categories across India. Surat Smart City's comprehensive approach towards digitalization is evident from outcomes already achieved- sensors for data collection across urban sectors, more than 30 datasets published on the Smart Cities Open Data Portal, more than 60 data stories & blogs on the Smart Cities Open Data Portal as well as multiple city-specific use cases harnessing all this data for Operations, Maintenance and upcoming development. In addition, technical capacity building of employees has been a key initiative- online training, video conferencing, and hands-on workshops for various departments under the Municipal Corporation.

In 2022, Surat Smart City will launch the IT-



IT-MAC Centre, Surat- Source: Author (2022)



## 6 The Good Citizen

### Pune's enduring culture of civic engagement

MAC Centre, which will be an advanced version of the existing SMAC Centre. With additional capabilities such as Data Centre & War room to be integrated, the benefits of digitalization to citizens of Surat are envisioned to increase even further. As a critical part of the initiative to create long-required water resilience for the city of Surat, Project ICCC Connect will also be a part of the proposed Disaster Recovery Centre at the IT-MAC Centre.

Through ICCC Connect, Surat Smart City will move from individual digital systems to holistic integration allowing for solutions to complex urban challenges such as active flood prevention & response, that remain under-addressed in most Indian cities. In 2022, many cities across India, such as Bangalore, Pune, Mumbai, Guwahati, and more faced severe impact on human life, infrastructure of the city, and disruption of ecological systems of the city due to flooding. The ICCC Connect platform will develop a robust system to manage such scenarios working on citizen and cross-departmental collaboration while spatializing it such that historical data analysis can be facilitated and holistic decision making can be undertaken.



Anna John Nikhil Sanjay Shah Shaurya Chauhan



Variable Messaging Display (VMD) that is spread across 161 locations in the Pune city displayed bilingual PB+ awareness messages: Author (2022)

Located on the outskirts of Pune, the 'Baner-Pashan Tekdi' is a series of semi-forested hills with a hiking trail that offers panoramic views of the city's suburban skyline. During our time in Pune, we were fortunate to have lived in a neighbourhood close to these scenic hills, which we would regularly visit on weekends. On our first hike there, we came across the wonderful sight of numerous children planting tree saplings along these hill slopes under the supervision of several adult volunteers. We later learned that these volunteers were from a citizen's organization called 'Vasundhara Abhiyan Baner'. Since its inception in 2006, this organization has planted thousands of trees to transform the once barren 'Baner hill' into its current semi-forested ecosystem. Of course, this was not our only instance of experiencing Pune's vibrant culture of citizen participation. During our four months in the city, we worked with the city's administration to develop a digital platform for their unique Participatory Budgeting mechanism. Pune is the only city in India to have a formal mechanism for

participatory budgeting wherein the Pune Municipal Corporation sets aside a specific portion of its annual budget to implement civic works suggested directly by the city's residents. Started in 2006, this innovative mechanism of citizen-based urban governance was driven by the sustained efforts of the city's civil society organizations (such as Janwani and Suprabhat Mahila Mandal) working in close collaboration with a progressive city administration. It soon became clear to us these participatory initiatives reflected a much larger culture of civic engagement in the city – which we sought to better understand by speaking to several local activists and journalists. Through these interviews, we identified several contributing factors to this trend including the city's status as an important centre for education, and its long history of social and political activism. As one activist explained, "The culture of Pune has always been participative. Education levels have always been higher, people are more aware of their rights and responsibilities, and there is a focus on giving back to society and helping the



less fortunate.”

According to a prominent local journalist, the active nature of Pune’s citizens becomes evident from the sheer number of RTIs which city residents file. The journalist further asserted that “such a culture of awareness and participation cannot come out of nowhere, and it has been several decades, and possibly even centuries in the making”. This leads us to the more prominent historical factors that might have contributed to the city’s contemporary civic culture. Pune’s citizens, or Pune-kars as they

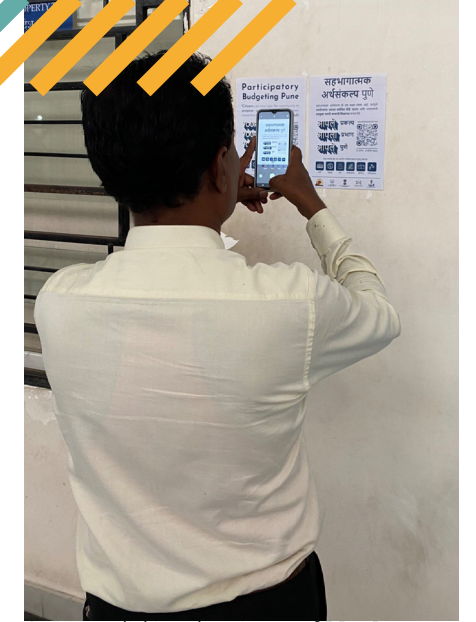
refer to themselves, are incredibly proud of their city since it is associated with the birthplace of Chhatrapati Shivaji Maharaj. Given the local reverence for Shivaji as a brave and just ruler, it might be common for Pune-kars to trace back the city’s civic ethos to the rulership of their much-beloved king. In this regard, it would be important for scholars to ask how Pune’s history as a critical pre-colonial urban centre might have imbibed the city with a unique civic duty and participation ethos – which has been reinvented across the centuries and into the present. Coming into the colonial era, Pune emerged as a focal point for education, social reforms, and the freedom struggle. Mahatma Gandhi was imprisoned by the British authorities in Pune, and the city also lent its name to the ‘Poona Sarvajanik Sabha’ – a precursor to the Indian National Congress. During this time, the city was a melting pot for a dizzying variety of social reformers and political activists, including Jyotirao Govindrao Phule, Bal Gangadhar Tilak, BR Ambedkar, and VD Savarkar. These personalities enlivened the city with various social debates and political movements related to religious reforms, women’s education, caste



PB+ awareness by team Empower at a tree plantation drive organised by Balewadi Resident Welfare Association. Source: Author (2022)



A senior citizen reading the information from the flyer of PB+ platform Source: Author (2022)



A citizen clicking the picture of PB+ Poster and scanning the QR code

abolition, and Indian nationalism.

Signs of this vibrant political history continue to inform and inspire the administrative and cultural landscape of 21st-century Pune. One of the entrances to the Pune Municipal Corporation is commemorated with a bust of BR Ambedkar along with a list of his scholarly and political achievements. The portrait of Shivaji on his horse is the official logo for the Pune Municipal Corporation. Several other departments of the Pune Municipal Corporation are housed in ‘Savarkar Bhawan.’ To better understand the city’s enduring civic ethos, we interviewed Mr. Dhairyashi Vandekar, chairman of the Vithalrao Vandekar Foundation, an NGO that works closely with the PMC on civic issues such as solid waste management and traffic problems. Established in 2016, the foundation is named after Mr. Vandekar’s great grandfather – Vithalrao Krishnaji Vandekar – the notable 19th century social activist who worked for the education, health, and general upliftment of weaker social groups. Not only was Vithalrao Vandekar the 1st Marathi corporator in the Bombay Municipal Corporation (in 1922), but he also worked alongside many of the great social and political reformers of his era towards the empowerment of the citizenry.

Mr. Vandekar’s family history is a testament to the historical connection between Pune’s vibrant socio-political past and the city’s present culture of civic engagement. Even as he agrees with this assessment, Mr. Vandekar nonetheless points out that

the city’s current challenges are just as daunting as those faced by his great-grandfather’s generation.

Pune’s population has grown manifold in recent decades to include over 6 million residents by some estimates. Such phenomenal population growth has put an evident strain on the city’s administration and urban infrastructure, both of which would benefit from the city’s enduring culture of civic engagement based on citizen participation, social activism, applied research, and involvement in urban governance. Finally, these models of citizen centric governance could provide a useful blueprint or reference point for other Indian cities facing similar issues and challenges.





PB+ Communication and Awareness session for the students and faculties of Symbiosis Institute of Technology Source: Author (2022)



Workshop with 40 women from Suprabhat Mahila Mandal to provide insights on the PB mechanism and further distribute the physical PB forms within their basti's - enabling inclusive participation in the PB process. Source: Author (2022)

### Conclusion

Although mainstream society is far behind in accepting transgender people as “regular” people, the article brings to light several initiatives undertaken across different parts of India to make the unheard voices heard. A smart city requires more than smart infrastructure to achieve its goals; it also requires a social infrastructure that promotes freedom of movement and work. Gender mainstreaming is the process of taking into consideration the consequences of any planned actions for its citizens, whether they are legislative, policy, or program decisions. As part of the smart cities mission, steps could be taken to make cities friendly for all genders, where people can travel freely, express their ideologies freely, and feed their mouths freely. Without having a proper gender-based framework of development, a city cannot transform into a safe and smart city. The road to living free and equal in a vibrant, equitable and inclusive society is long, but it’s better late than never.

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Rahul Saikia



Roshni Gera



Swati Pradhan



Yateen D



## 7 Streets that Celebrate



Ganesh Chaturthi festival Source: Author (2022)

### Walker's Street

Nagpur, the geographical centre point of India marked by the Zero Milestone, also known as the city of Oranges, is the winter capital of the state of Maharashtra. Though the city lacks a distinct visual character, it hosts intriguing events and activities that bring vibrance and helps create an association of oneself with the city. One such place is 'The Walkers Street'. A stretch of 1km located in a prime location of Seminary hills adjacent

to the Chief Minister's residence. People of all age groups and gender are seen walking, jogging, and running on the street between 6 am to 11 am and 5 pm to 9 pm. The vehicular traffic is cordoned off during these hours, making it safe for pedestrians, cyclists, and skaters to spend their hours in the canopy of lush greenery. Over the years, many carnivals, events, and competitions have been organised on Walkers street to encourage and motivate the locals,



Kali Pili and Badgya Marbat Source: Author (2022)

rewarding them for unrecognised achievements and attempts they are putting in for their well-being. The enthusiasm of the pedestrians makes it evident that even to stay fit, people love to stay outdoors and exercise in the open air rather than going to the gym and practicing indoor workouts. Spending evenings walking on Walkers Street makes one curious whether more such initiatives dedicated to pedestrians at odd times of the day can be included in city planning processes, making the city more inclusive and more livable, thus making the cities of India more healthy.

### Kali Pili and Badgya Marbat

On a usual day, the streets of Itwari in old Nagpur, a busy wholesale market, are lined with vibrant street hawker culture. Pola, a local festival devoted to cattle, is followed by the "Kali Pili and Badgya Marbat". On the second



day of the Pola festival, the streets transform into an ensemble of cultural heritage where history and divinity seamlessly merge.

The local communities gather to celebrate the Kali Pili marbat festivals that connect the local communities to their roots in history. Giant clay effigies or marbats are built and brought out onto the streets to represent society's evil spirit or darkness. The festival commemorates the victory of the good over the evils by burning these effigies.

During the early eighteenth century, the British Empire gradually found its foothold in Nagpur and spread its trade. The burning of marbats was considered by many to be an icon of the freedom struggle against Britishers rule. Kali (Black) Marbat is believed to have started way

back in 1881, and Pili (Yellow) Marbat began in 1885. The "Kali Marbat" represented Bhonsale Rani Banikabi, who surrendered to British power, and the "Pili Marbat" symbolised the British empire's atrocities.

The procession of Kali and Pili marbats is carried through the streets of the Itwari market area from Gandhi chowk and Shahid chowk, respectively. Finally, these two marbats meet at Nehru Putla Square, where they burnt together. At present day corruption and epidemics are considered the evil of society. During the procession, the devotees chant "Eeda peeda gheun ja age", which means "take away all the evils", and "Rograi gheun ja ge marbat",





Ganesha on the way to the waters Source: Author (2022)



Ganesha on the way to the waters Source: Author (2022)



Lipi Ghosh      Prakriti Saha      Rashi Jain



Ganesh Chaturthi festival Source: Author (2022)



Ganesha on the way to the waters Source: Author (2022)

“rid us of diseases”. This year (2022), the devotees created Badgya (effigy) to protest against the government’s policies regarding the judiciary system for family disputes. The festival is celebrated with the playing of folk music and dances. During the event, the divides of class, religion and ethnicities collapse as crowds of spectators walk around to admire the procession.

**Ganesha on the way to the waters**  
Witnessing the Ganesh Chaturthi festival in a Maharashtrian city is a one-of-a-kind experience. The idyllic green streets of Nagpur begin to resonate with the sound of the dhols and tutaris, and the city inhabitants come onto the streets, gathering immense charm and enthusiasm with them. The Nagpuris, much like any other Maharashtrian city, are high on devotion, modak and colour at this time of the year. Unlike the humongous Ganesha idols that the festival is primarily perceived about, the scale of the nine-day event in this city is comparatively more intimate on the first eight days. Energies, however, peak on the

day of the visarjan or idol immersion when the sounds of celebration transform the city streets. Families are seen carrying their tiny idols like carrying a child. The way to Koradi lake, the site designated for visarjan, is about six kilometers from the central city core. The stretch accommodates personal vehicles and heavy vehicles carrying idols of all scales and appearances. It is an unplanned procession that invigorates in the sounds of celebration. While the smaller domestic idol immersion activities find their way into a couple of designated shallow water zones of the lake, it is a delight to see the initiatives the NMC took to arrange artificial tanks and cranes for larger community-level idol immersions at various locations in the city. This further aids in crowd management and systematic idol immersions that are neither hurried nor chaotic. The initiative deserves much accolade as Nagpur sits on undulated terrain and houses several lakes, unaffected by the gigantic quantities of festive waste. The city manages to keep in tandem with traditions beautifully and focused measures for safeguarding the environment.





## 8 Biased - Bhopal - By Us !

A reflective piece by four highly career-oriented - young (by our own timeline) urban professionals - unapologetically women! Who landed in Bhopal with a mission to co-create a digital product and integrate it with the existing ecosystem of the unfamiliar city within a defined time of three months.

### Begums of Bhopal

Bhopal has a multi-faceted profile with the old

city - its marketplaces, mosques and palaces bearing the aristocratic imprints of its former rulers, chief among them being the Begums. The era of 'Begumats', famous for its peaceful rule, created a unique blend of different cultures - Hindus, Afghans, Buddhists and Mughals, giving Bhopal a distinct cosmopolitan identity rarely found in other Indian cities. One of the Begums, Sikander Begum, was a modernist and a reformer and undertook many administrative, social and

educational reforms which turned Bhopal into a haven for scholarship, culture and a centre for arts and crafts. Contrastingly, her daughter Shah Jahan Begum bore a distinct passion for architecture which led to the ambitious architectural development of the city. For instance, the Taj Mahal, built during her reign, is a peculiar mix of Hindu and Islamic architecture, with some aspects appearing to have a colonial influence. Many insights can be drawn by analysing the

era of 'Begumats', chief among them being the postulation that "the rule of women in any kingdom is more peaceful, accommodating and assimilating". Quoting Gordon Childe, "Revolutions are not always violent, they can be a culmination of a progressive change", we would say that the Begum dynasty did bring a revolution in the city, without any bloodshed. Talking about revolution, in present-day Bhopal, Indian Tea House (ITH) - with its million-dollar view of the



Begums of Bhopal Source: Author (2022)



Begums of Bhopal Source: Author (2022)



Upper Lake along the VIP road - taking inspiration from the nightclubs in Hauz Khas Village has taken the idea of stag entry up by a notch. Men are not allowed to enter the dining area unless a woman accompanies them. ITH offers a breathtaking view of the sunset with a sip of chai, making the evening very peaceful. However, these chai chit-chats at ITH include debates about this probable marketing gimmick which appears to give women more power but might be a step away from gender equality.

### Street life

Like any other city, homelessness is a ubiquitous sight in the city of Bhopal. Families camp under bridges, on sidewalks or footpaths, altering the space into their living room or bedroom while also

labouring on these streets to earn a living. They wake up before the city wakes up to give up their night space for the rest of the day. On an early morning walk, one can see colourful small shelters covered with tarpaulin in many parts of the city. While some of these shelters are temporary, others have taken on a semi-permanent presence by occupying the inactive frontage of commercial areas and sidewalks. What gives these shelters an even more exciting and vibrant character are the children of these families who come out on the streets at night to play with each other forgetting their living conditions - an undoubtedly nostalgic sight reminding everyone of their childhood memories.



Street life Source: Author (2022)

### Foodaholic's corner

The amalgamation of diverse cultures and religions is significantly reflected in the city's food culture. The colours of lakeside street food, the aroma of kebabs and tea (Chai) from Old Bhopal, and the cakes of different bakeries can make anyone's mouth water. The combination of salty, tangy Sev Poha and jalebi is Bhopal's staple breakfast. Similar to Rajasthan's Dal-Bati-Churma, Bhopalis have developed expertise in preparing Dal-Bafra, which will give you a real taste of Bhopal. Sulemani Chai from Raju Tea Stall, Gaagar's most hygienic panipuri and milky cheese dessert - "kalakand" to reduce the optimal 'teekhanan' can be an after-office evening snack. On the days when you feel like splurging, you should visit Amer Bakery and

dive into the 'Triple chocolate pastry', which is not just a cake, but an experience where you taste, distinguish and enjoy every layer of the pastry marking that experience as an unforgettable moment in your life. On weekends visiting Shahpura lake and having roadside spicy tandoori momos with freshly squeezed juice and watching all the four-wheelers of the city in the same spot to grab their food or having kurkure momos and kulhad cold coffee at city Chaupati peacefully can give you enough energy to start your week. No kidding!

### Lovestoriyaan!

Here, we are talking about the quintessential love stories you see daily on your streets, bridges,



Foodaholic's corner Source: Author (2022)





Lovestoryaan! Source: Author (2022)



Children of the city Source: Author (2022)

across your balcony, in open fields and needed.

on almost every corner of a city. Yes, **Children of the city**

the relationship between the roads of a city and its cows and Bhopal is more potent than in any other city we have witnessed.

So much so that traffic routes are diverted daily in our colony depending on the position of the cows' resting spot for the day. They are your best friends when it comes to disposing of leftover food for the day, a source of enchanting smells around your house and can serve as a median, too, when

In the post-COVID era, where parents barely allow kids to step out of the house and the maximum physical activity they can be seen doing is changing positions on the sofa or watching TV, we encountered a phenomenon rare to the eyes these days. Kids celebrate all festivals on the streets in small groups of their own. Be it Independence day or Ganesh Chaturthi, and the enthusiasm is infectious. Seeing four kids on a

small hand-drawn cart, with an idol of Ganpati covered with a newspaper, a steel plate and a spoon as the replacement for extravagant drums and DJ setups. Still, eyes lit with more joy and faith than any adult was probably the most endearing and overwhelming sight we saw.

Concludingly, the city leaves its mark! You get a glimpse of the different cultures, which existed in the past erstwhile city, along with the new changes telling you about the present.



Akanksha Singh



Divya Bharti



Kastury Biswas



Sarayu Madhiyazhagan



## 9 Kochi- A town with enormous Charm



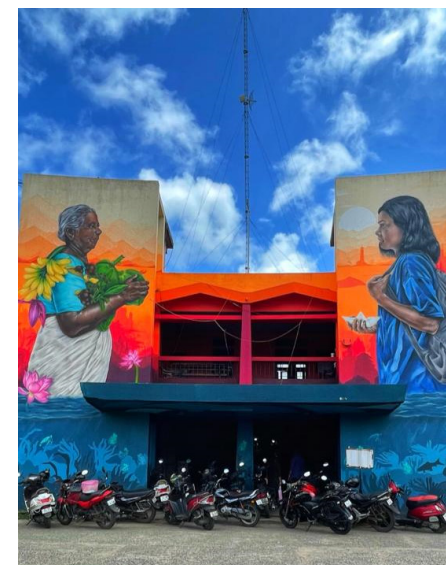
Kochi- the queen of Arabian sea Source: Author (2022)

Kochi, popularly known as the “Queen of Arabian Sea”, the city flaunts one of the finest natural harbors of the world and was the center of the world spice trade for many centuries. It is known for its cosmopolitan nature from time immemorial. Religious and cultural integration of festivals. Only the Chinese have not mixed with the people here, but their fishing nets and cookware (cheena chatti) find a strong presence here. The city is

a cluster of islands connected by lagoons and backwaters. Throughout the city, multimodal transport systems are cherished through ferries, buses, trains, and metros, providing a variety of commute experiences.

Throughout the city, you can admire its lush greenery and blue skies as you stroll around. Some of these spots are difficult to describe, as their

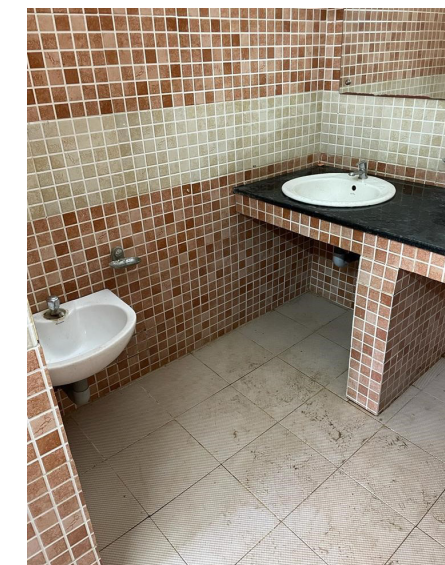
beauty must be experienced. Subhash Park opposite the Kochi Municipal Corporation is one such place where we as a team have enjoyed spending time. The park draws children and adults alike. Magnificent vista of the backwaters of Lake Vembanad and the impressive stretch of Kochi harbor could be spotted from the park. This park is a great example of how the city has tried to maintain its open green spaces, making it inclusive and accessible for all. The houses in the city are mostly individual



KSRTC Bus Stand, Ernakulam  
Source: Author (2022)

plots with ‘Parambu’ - Kerala’s traditional homestead system, which is an integration of family-based agricultural and pastoral activities within a cohesive neighborhood network.

Crowned as one of the greenest cities of India, Kochi falls back on waste management and public hygiene. It is drowning in its own garbage with each passing year owing to the lack of vision and unwillingness on the part of



Child inclusive Infrastructure  
Source: Author (2022)

authorities as well as the public in addressing the issue. Vast mounds of garbage are piled up not just in Brahmapuram, Kalamasseery and Thrikkakara waste dumping yards, but on the side of the road leading to Kannangattu Bridge and at Cochin Port’s land in Vathuruthy. Further aggravating the problems, the yards or the dumping points are situated very close to water bodies or streams leading to water pollution. The environment pollution and public health issues



An art and or picture worth a thousand words Source: Author (2022)





A woman at the driving seat of a public bus Source: Author (2022)

due to dumping of waste seem to raise little concern for authorities.

For the first time in, we saw a women bus driver, conductor, traffic police, auto driver and swiggy delivery partner, and this makes us so happy and secure to see equal contribution in almost everything. Even the metro staff has more than 500 women staff, the metro has also employed a huge number of people from the transgender community for departments like housekeeping and customer care. This is the first time in India that a state owned company has officially hired so many transgender employees. The wings of women economic and social empowerment is further spread across Kochi Police and



Some of Unsafe traffic corridors of Kochi Source: Author (2022)

also in the apex representative body of the city i.e. Kochi Municipal Corporation. Kochi will never fail you in terms of inclusivity.

Kochi is also one of those cities, which not only understand the language of art and artists, but also celebrate the power of art. In many parts of the city, your eyes can easily catch beautiful art and the message the artist wants to convey. The vicinity of Fort Kochi and its artistic infrastructural panorama will undoubtedly make a mark in the eyes of a visitor to the city. However, on the contrary, there is much scope for two essential interventions across most of these places and the much-talked public transportation. Those are namely; work towards behavioral revolution across public hygiene and working upon safe traffic points or intersection of roads. For instance, near to our office there is a crossing point, crossing that junction being one of the most daredevil mobility stunts we have ever done on a daily basis.



Irene Anna Shaji



Nishant Raj Tonk



Shonit Nayan



Soumya Srivas



## 10 Ahmedabad - What Google doesn't show you

Nowadays, it is challenging to think about things Google doesn't offer. Moreover, who doesn't seek permission from the 'Big Boss anyway? Want khaman or gathiya? Just say 'Hey, Google, show me the best places to find khaman near me,' and you instantly have a plethora of results, highlighting the '10 best places for khaman', '20 best places for khaman', 'How to make khaman' and 'Want an educated IIM-A graduate to marry you? Log on to IIT-IIM Shaadi.com'.

We don't even know why the fourth one is on the list, but you get our point. It is almost unthinkable to reveal things the Silicon Valley giant already doesn't offer. So, we rattled our brains and guess what we found? Nothing! Yet we created something out of nothing for Ahmedabad, the city of heritage, gathiya, festivals and entrepreneurs.

Team Switch was entrusted with developing a platform to visualise the city's electricity consumption and track

its renewable energy generation. A reasonably enormous but crucial task, considering India's target of generating 50% of India's electricity through renewable energy by 2030. Considering Ahmedabad's smart grid project and robust solar energy infrastructure, it was an ideal city to pilot our project. As a result, we were deployed to Ahmedabad or Amdavad, as the locals call it.

The city needs no introduction; its legacy of producing cotton and being labelled as the Manchester of India is splashed across history books. While that's not it, Ahmedabad is one of the oldest inhabited cities since the 11th century and is a 'UNESCO World Heritage City'. Rich culture, scrumptious food, robust infrastructure and friendly people render the city one of the most liveable cities in the world.

The City Through the Eyes of a Resident:



BRTS corridor Source: Author (2022)

Many would ask, what makes a resident connect with Amdavad? Is it the BRTS? or the city's constant power supply, or the swift resolution of any grievances from the municipality? Although these form the backbone of the city's development, the people and the legacy of more minor, unnoticed things hold value.

Inspired by Mahatma Gandhi, Amdavadis have been brought up on the principle of 'High Thinking and Simple Living.' Everyone in the city wants to become an entrepreneur; while some, like Dhirubhai Ambani and Gautam Adani, have become one of the wealthiest people in the world, others, like Dr. Vikram Sarabhai,

have revolutionised the country by setting up a space programme. Yet you will find Amdavadis sitting on slabs, enjoying their Sunday morning gathiya with kachumbad ka chutney and kadhi from Gathiya Rath or playing Garba during the Navratri.

Taking innovation a notch higher, the city actively provides Startup and Innovation Funds known as 'SSIP,' offering students with seed funds to start their own projects.

The year 2022 witnessed exponentially high rainfall in a long time. While the new city succumbed to the flash floods, the old city stayed unaffected. While the ill effects of climate change

have started exhibiting, the city administration remains strong. It has already unleashed several monitoring projects which can prevent flash floods in the next season.

The City Through the Eyes of a First-time Visitor:

The grandiose of the city would mesmerise anyone who would visit it for the first time. The architecture of the old town, the street food and the elaborate BRTS network. Moreover, the apprehension of being in a new city and the subsequent concern for one's safety is taken away the moment you land in Amdavad, one of the safest cities in India.

A significant takeaway from Amdavad is its people, who are extremely sweet, like the dal there. A smile is omnipresent across all Amdavadis, making even first-time visitors feel connected. The second any Amdavadi sees you struggle to reach the main road, they'll come and offer you a ride. If enquired if it is too much trouble, the response is always Vandho nai! (No problem). This vandho nai attitude is what the city offers you, and you carry it throughout your life.

Additionally, the city administration and the Smart Cities Mission have



BRTS Electric Bus Source: Author (2022)





Gathiya Source: Author (2022)



Ahmedabad - old city heritage site Source: Author (2022)



Shsashi nu chavanu Source: Author (2022)

relentlessly worked to make Ahemdabad the most liveable city of the year. As someone new to the city, you cannot help but be amazed by the ease of living in the city. But all in all, if you are apprehensive that you might not get the same nightlife as other cities, you will be wrong! Manek Chowk and Navratri are enough to give Kormangla a run for its money.

### The City of People:

We came to Ahmedabad thinking we would help the citizens become climate resilient, but little did we realise that the 'land of entrepreneurs' would send us back with a suitcase full of memories. The city is exceptional with its grievance redressal, transportation and welcomes everyone. We hope we could give you a glimpse of the town for which google wouldn't provide much. For more, you must spend some time here since, as the Gujarat Tourism tagline goes, 'Kuch din to guzariye Gujarat main.



Abhishek Chatterjee



Shivam Dave

## Testimonials

### Abhishek Chatterjee



I was born and raised in one city, studied in another city and finally worked across cities. Cities have shaped me to be the person I am today. The grandiose of its well-oiled administrative systems, the confluence of culture and the never-ending stories made me fall in love with it. Contributing towards urban development is what I felt was the right way to give back what I received from all the cities that welcomed me because, as Batman says, "It's not who you are underneath but what you do that defines you". The India Smart Cities Fellowship came as a boon for me to work right in the heart of planning for urban development in India. It not only allowed me to create an innovative project which aims to monitor electricity consumption and renewable generation in the city, but also gave me an in-depth understanding of how smart cities function and how they can be made better. In the last year, I was fortunate to have colleagues who turned into friends and helped me form a holistic view of the urban environment. Each day came with a new challenge for me, from being intimidated at orientation to hitting roadblocks during the project implementation. But rising above the challenges to create alternate paths is my most significant takeaway from the Fellowship, which I will always carry with me for the greater good.

### Akanksha Singh



*"I am seeking, I am striving, I am in it with all my heart." - Vincent Van Gogh.*

About a year ago, I decided to leave a corporate work environment and instead work in a government setting on purpose. After having spent two years in a private consulting organisation, I had experienced the difficulties associated while engaging with government agencies. Hence, I set it as a personal objective to become acquainted with their internal functioning. In all honesty, the first week of the Fellowship felt really intimidating. The Fellowship's innovative method and execution strategies can occasionally appear excessively extravagant and unconventional. Since I am a fervent believer in Karma, I have always believed that you are only put in a circumstance when you are worthy of managing it, and this is what drove me to commit to this challenge entirely. One can converse with the most enthusiastic people, discuss concepts that would be ridiculed in any other circumstance, and produce work that would have been sneered at in any other environment. Weekends vanish, Friday night cocktails turn into rant sessions, and co-workers turn into friends and family. The difficulties ultimately become normal as each day brings a fresh set. Today, when I reflect on the last year, I am proud of myself for having braved such treacherous seas and emerging with what I would respectfully describe as a shining sun.



Akruti Murhekar



*"You don't start a revolution by fighting the state but by presenting the solutions" – Le Corbusier.*

The India Smart Cities Fellowship has been an enriching experience as it offered to learn from the experts in urban development and the diverse multi-disciplinary cohort. It has deepened my understanding of the city processes and systems, broadened my horizons and equipped me with the skills to not just discuss the issues in the urban realm but also ideate the solutions to address them. Along with de-layering the issues, we as Fellows have engaged with experts, whether learning the fundamentals of urban development through the well-curated induction program or building relationships through various working and networking opportunities with the Ministry of Housing and Urban Affairs and National Institute of Urban Affairs. The Fellowship also opened avenues for various opportunities while being a part of thought-provoking discussions and having meaningful interactions that help shape one as an excellent professional. From the project's inception, the Fellowship has encouraged us to draw inspiration from the experiences of everyone and to understand the nuances of how ideas can be transformed into actions. It is incredibly rewarding to have been mentored by the best experts the country can offer and to know that the ideas that the cohort co-created are grounded in some of the cities, contributing to making them more inclusive, sustainable, and robust. The most exciting and truly insightful part of the Fellowship journey has been the knowledge and the one-of-a-kind experience I have gained, and I wish to continue to do so.

Anna John



The India Smart Cities Fellowship Program provided a front-row access into the workings of the government. It opened avenues to engage with the central and city governments to build situational awareness and address urban challenges across India. The program helped to conceptualise and implement projects to resolve real-time issues faced by Indian cities using data solutions. The city immersion experience to pilot the solution developed is one of the program's most significant advantages, which would help build negotiation and liaising skills. The Fellowship provides a platform to interact with leading think tanks and other organisations in the urban domain across India. It is also a great place to meet vibrant, young professionals from various disciplines who are likely to be the change-makers of tomorrow. Significant takeaway from the Fellowship, which I will always carry with me for the greater good.

Divya Chand



The India Smart Cities Fellowship Program has been a unique platform to get an insider's understanding of how the state machinery in India tackles urban development, mainly through the lens of Smart Cities at the central and local levels. It has been an eye-opener regarding the disconnect between academia and practice within the government and highlighted challenges of interdisciplinarity, scale and hierarchies. Working with peers from various educational, geographical and practical backgrounds has been an exacting learning experience as we were thrown together to develop city-agnostic urban solutions collaboratively in New Delhi based on data and reports about the Mission and everyone's individual experiences. The city deployment phase was a valuable experience in Raipur, as we got to work with the local government to adapt our project into something relevant for them. The fieldwork involving speaking to local stakeholders, conducting field visits, talking to various experts, and understanding the government engineers' perspectives and constraints is a rewarding exercise, albeit short. It emphasised the need to be locally embedded in the sector and city to create relevant solutions. It highlighted the distinction between the mission's perception in tier-2 cities vs what gets documented in the mainstream media. The past months have made me more sensitive to the intents, objectives, tools and limitations of the Municipalities and Smart City SPVs, and opened many avenues for ways to work with them in congruent ways to tackle local challenges and bridge the gap between socio-scientific knowledge, and urban governance on the ground.

Divya Bharti



My quest for knowledge gives me a sense of purpose to get to a problem's root and identify solutions, which aligns with the central work under the Fellowship of ideating on problems a city faces and developing digital solutions for the identified issues. The India Smart Cities Fellowship Program offers a challenging and stimulating multi-disciplinary and multi-sectoral environment for a person's growth. Our capacity building through induction, project ideation, and events like webinars and workshops organised by NIUA and MoHUA on topics like 'Building Inclusive Digital Infrastructure for Resilient and Sustainable Cities' and 'Swachh Talks Episode 4 - Managing Plastic Waste' equipped me with an in-depth exposure to these sectors policy, governance, and administration. Being deployed in Bhopal Smart City and piloting an open-source digital product - an AI/ML-based monitoring dashboard to identify and predict vulnerable garbage points and suggest strategies for tackling them - in conjunction with Bhopal Smart City Development Corporation Ltd. taught me the life cycle of project management. It provided necessary fieldwork, exposure to on-ground realities, problem-solving skills, innovation and creative thinking, etc. The Fellowship taught me basic life skills like taking risks, encountering setbacks, accepting failures, and graduating with a great learning experience. It allowed me to work in public policy and urban transformation and create real-life impact. In conclusion, this Fellowship has been a fulfilling step in my journey to make my work socially relevant and impactful.



**Harsha Arya**



As a Smart Cities Fellow, I was given the opportunity to work on the project based on my interest, which was crucial as I wanted to reinvent my career. The flexibility of choosing a project made the transition easier. It introduced me to the challenges of the opted area of work, giving me confidence as the decision is not made with a lack of information. The Fellowship journey had bittersweet moments, though I am focusing on the ones that pushed me to excel beyond my expectations. The cohort is divided into teams of three to four Fellows working on a project. Since there are ten to twelve projects per cohort, the individual team is primarily aware of the details. This can often be demotivating, but discussion with peers to develop innovative opportunities to deal with the challenges. The Fellowship also provided good exposure, which, if marketed in a well-planned manner, can do wonders for one's career trajectory. Intrinsic motivation is crucial, and the experience will clarify what one wants to take forward in the career.

**Irene Anna Shaji**



For those seeking solutions to urban challenges, the Fellowship provided an excellent opportunity to learn about and mitigate these problems. The Fellowship afforded me experiential learning opportunities through system and design thinking, project planning, and personal growth - allowing me to be creative and innovative and see how our learning is applied in real life. By brainstorming, debating, and networking with other young people like myself, I was able to learn from their experiences, share ideas and techniques, and mutually reinforce our drive to keep striving. It provided me with technical tools and the emotional boost I needed during times of crisis. The platform enabled me to interact with and learn from leading government, academia, and private sector experts.

**Kastury Biswas**



India Smart Cities Fellowship was a transformative experience as it allowed me to explore myself in a highly professional setup with a larger peer group from diverse backgrounds. This Fellowship gave me the time and space to unlearn my biases, overcome my anticipations and form new perceptions to analyse new things each day with clarity. The Fellowship is an integral part of the Smart City Mission. It worked as an eye-opener for me to experience how systems work closely. It was enthralling to work towards fulfilling its objectives, making me a better team player. At the same time, brainstorming new ideas, delivering unique solutions to various challenges and tapping our creative potential, I have seen and experienced some of the best stories of friendships which was an added accomplishment. After our deployment in different cities, we overcame all the challenges of experiencing a new city together as a team, making the rest of the journey smooth. Trying to give life to a newly developed concept in an unfamiliar town, working hand in hand with government officials, coordinating with the developer regarding our product, and struggling to acquire data have enhanced my interpersonal and other professional skills. This journey has been one of the best experiences of my life. I worked for something I believed in, which helped boost my confidence as a person and professional.

**Kaustubh Mirajkar**



The Fellowship gave me a platform to implement my college thesis project on underutilised spaces at the national level, which has the potential to be scaled to multiple cities. The strong urge to serve my country was fulfilled through this Fellowship as I had been working with my parents in Kolhapur, where retaining their firm to the level they have been practising is another challenge for me. The most important learning is communicating with everyone, not thinking too highly of ourselves, but staying humble. I am grateful for my pillars, Ojaswini and Sarayu, who stayed with me through thick and thin and helped me achieve what I could not even think of. I have been blessed to have Prasanna, Vignesh and Tarini for letting me be me, also Yateen, Anshul, Akruti and Roshni for playing their parts to complete my journey. Lastly, Vasudha, who always believed in me when I did not at times and brought out the best in me!



## Lipi Ghosh



If I have to write a single sentence to explain my journey in this Fellowship, I will write “Transformation of a Research Scholar into an Administrative Worker”. My journey in this Fellowship was exciting. I made friends, cried, learnt, and finally became a technically-sound employee. I was an intellectual yet nervous individual a year ago. However, in this one year, the system has tried to create a bridge between my learnings and execution. Working under the Azadi Ka Amrut Mahotsav program was a unique experience for me to make people comfortable with my words. Analysing different sets of urban data to coordinate or organise an Open Data initiative for smart cities. Working with the city officials in Nagpur Smart City allowed me to learn insight into the administrative process. There were many stories, and I still remember I cried like a child over not getting my domain project. I believed that the best decision happened, not because I got to learn something different from my subject. The decision made me an employee rather than a Fellow who can easily fit into any role. Being a Smart Cities Fellow, I enjoyed the legacy truly.

## Manoranjan Ghosh



The India Smart Cities Fellowship gave me an incredible platform to brainstorm different ideas, solve complex socio-environmental problems for Indian cities, and explore how policies and missions work and how various institutes react to them. The Fellowship gave me more experience, especially in how to convert laboratory research into real-world practices. The peer learnings from Architects and Planner colleagues were terrific. Moreover, my stay in Nashik and the experience of working with officials from Nashik Smart City was a perfect opportunity to learn about the details and functionality of urban governance. My highly creative teammates- Prasanna and Ritika- made the Fellowship journey more insightful and memorable. Finally, I am thankful to my colleagues, manager Nabamalika, and other members of NIUA and MoHUA for their support and for making the Fellowship journey memorable.

## Nikhil Sanjay Shah



The India Smart Cities Fellowship Program has instilled in me a multi-dimensional thought process toward working with urban challenges in India and understanding various facets of it in all its complexities. It has been a unique experience to be a part of the cross-disciplinary ecosystem to identify the fundamental issues through extensive participation and work within the state machinery to bring about systemic transformations at the central, city and local levels. I was fortunate to have been associated with diverse projects such as ICCC implementation, placemaking initiatives at MoHUA, PMAY impact assessment, ISCFP editorial and outreach, and more, giving me a holistic perspective of the Smart Cities Mission. Observing the disconnect between academia and practice has also been a great revelation and ISCFP certainly offers a space for conversations and discourses to emerge and build a bridge through sensitive praxis. Working on the ICCC Connect platform to develop an Urban Water Resilience platform for the city of Surat was a wonderful opportunity to contribute to the most pressing issue for Surat and cities across India, which also built upon my previous extensive research in the city of Surat. It allowed us to build collaborations across various government departments, civil society organisations, marginalised communities, and citizens to demonstrate a shift SCM can bring at the grassroots level in participatory planning, envisioning, and urban governance.

## Nishant Raj Tonk



I came in as an Urban development professional but will leave the program as a more capable Urban development professional. ISCFP gave me a once-in-a-lifetime chance to gain an insider's view of how the bureaucracy works and how decisions are taken in Ministries. Throughout the Fellowship program, I was exposed to various additional works related to the Ministry, such as implementing ICCCs throughout the 100 smart cities and implementing a toolkit related to infant, toddler and caregiver-friendly neighbourhoods (ITCN). I acquired a deeper understanding of managerial work. Throughout my career, I will be able to draw extensively from the insights and expertise gained during the Fellowship—both in facilitating cooperation and negotiations with developers. Apart from the main project, this Fellowship ensured exposure to various insights through focus group discussions through the Samavesh ISCFP chapter. I look forward to contributing to the development of the nation.



## Ojaswini Bansal



I joined the 2021-22 cohort intending to understand the various sectors in the urban domain and to be a part of a group that bridges the gap between research and implementation. The India Smart Cities Fellowship Program was an experience of significant learning. It gave young professionals like us multiple opportunities in informal engagements, events and workshops for capacity-building essential life skills in a professional setting. It was unique because learning here not only meant gaining knowledge but also working with people of conflicting opinions and often giving in to the expertise of other disciplines to come up with common solutions. I understood the responsibility of being in positions where it could affect many people if you cannot be inclusive of other disciplines or overcome any personal bias in a vertical. As a cohort, we realised the importance of this for innovation when we achieved outputs we never thought we were individually capable of. At the same time, the officials and our manager kept us grounded in reality so that the result was more practical. The pressure-free working environment provided room for exploration, which allowed me to broaden my horizons. Towards the end of the Fellowship, I know it will be hard to get such a flexible working atmosphere again, but it gives me great joy to take back so much from this experience which has chiselled me to become more competent in my roles ahead.

## Prasanna Bhangdia



A boy from a small town—Latur, Maharashtra—struggled to comprehend why his city faces so many problems on various fronts, missing links, and so on. I guess the Fellowship answered all these similar questions. When I found out that I was chosen for the India Smart Cities Fellowship Program, I was happy because this was an opportunity to directly ask the authorities working at a central level about the problems my city encountered. Not only did I get the answer, but I was also trained to develop problem-solving skills and possible ways to integrate them with the existing system over time. This opportunity that MoHUA and NIUA are giving to young professionals is fantastic, as it helps you grow as a complete individual. Working on the Fellowship project, assignments, outreach, allied engagements with MoHUA, participating in competitions, international conferences, and whatnot, the last year was full of excitement for me. Apart from my core planning knowledge, I learned coding, dashboard development, and various new technologies, which I doubt I would have learned otherwise. I am very impressed by how mission drivers and people at the National level work. Their motivation and dedication towards improving India and, ultimately, every citizen inspire me to work with the same honesty, loyalty, responsibility and sensitivity. The love and affection the cohort shared is something I will remember for the rest of my life.

## Prakriti Saha



Being selected as part of the ISCFP'21 cohort was serendipitous for my work timeline, as my inclinations about the interrelationship of the physical and digital space had only begun to brew. Accepting my initial proposal to develop a tool to aid the design of streets - an extension of my previous work with a different organisation as a cohort project placed me into the very niche I had aspired to be in. This was a huge source of encouragement and proof that quality and intent matter beyond everything in this ecosystem. The Fellowship has pushed my limits to unlearn the ways of a metropolitan lifestyle, revealed numerous facets of team dynamics and exposed me to the inspiring calibre of my colleagues. With immensely supportive management to back us, we took the plunge of developing this tool in Nagpur as a team comprising an urban designer, an economist and a built environment expert. The context and scale of the city befitted our primary objective of promoting walkability. Additionally, several street design initiatives by the SPV provided our team with the opportunity to interact with stalwarts such as Prasanna Desai, professionals from ITDP, as well as local officials and academicians. The exposure continuously guided us in refining our perspective towards our project. The harsher learnings came towards the end of the deployment when funding the project and processing correspondence in government machinery stood out as a significant test of patience and resilience.

## Oviya T



Looking back in time, precisely a year back, as a fresh Postgraduate with considerable interest and enthusiasm to understand the functioning of Urban governance and the sociological reality of cities initiated my journey into the Smart Cities Fellowship. One year down the lane, the Fellowship gave me valuable exposure to policymaking and its implementation process, both from the top to bottom and bottom to top approach. The Fellowship made me come out of my comfort zone from living in unfamiliar cities with cultural and linguistic differences. It taught me how to adapt to them by empathising with them. Through the Fellowship, I faced fears I never thought I would and successfully met them only to prove it was possible. ISCFP is my first professional experience to help me in my future endeavours.



**Rahul Saikia**



The India Smart Cities Fellowship Program gave me an immersive experience in innovative urban governance and data-driven policy implementation. Through this Fellowship, I explored and contributed to projects focused on community-centric urbanism and efficient administration. During the first phase of the Fellowship, I was initiated into the entire life-cycle of urban innovation, starting from an induction program under leading urban practitioners, to a critical SWOT analysis of Indian cities, to the creative ideation, shortlisting and finalisation of pilot projects for select cities. In the second phase of the Fellowship, I was part of a team of four professionals that worked to develop a digital platform for participatory budgeting in Pune. This project provided me with a valuable understanding of how citizen-centric projects must be implemented in close collaboration with city administrators, civil society, academia, and digital innovators. Despite its focus on policy implementation, the Fellowship also encouraged a spirit of open enquiry into existing government interventions. Thanks to this conducive environment, I worked on two academic papers on the Genealogy of Data-Driven Innovation in Urban Policy-Making, along with Place-and-Path Dependency in the Smart City Mission, which was presented at the International Conference on Digital Geographies at Delhi University (2022). I would like to express my sincere gratitude to the National Institute of Urban Affairs and the Ministry of Housing and Urban Affairs for all these invaluable insights, opportunities and work experiences.

**Ritika Rajput**



The ISCFP gave me an excellent opportunity to get an insider view of how bureaucracy and, mainly, the Smart Cities Mission works and how decisions are made at different governance hierarchies. It was a wonderful learning experience that taught me to be patient, persistent and passionate even when nothing worked out the way it was meant to be. It allowed me to apply some of my academic learning to practise. It was incredible how the Fellowship brought together Fellows from different disciplines on the same platform to address the issues of Indian cities. During the city deployment phase (three months in Nashik Smart City), I got to work closely with the smart city's officials and learnt how the mission operates in a non-metro city. My journey became smoother and more enjoyable because of my team members, Prasanna and Manoranjan. I had a great experience working with them. I am thankful to my colleagues, manager, and teammates for creating this memorable experience.

**Rashi Jain**



Since its inception, the India Smart City Fellowship Program has given young professionals a once-in-a-lifetime chance to get an insider's view of how the bureaucracy and government work and decisions are made in the development cycle of India. My year-long experience as a Smart City Fellow has helped me think broadly, equipped me to navigate puzzling situations, and given me exposure to work and learn with a mixed cohort of talented and bright individuals. Beginning with engaging FGDs to shortlisting projects and sectors, to being deployed in a suitable tier 2 city and working in the Nagpur Smart and Sustainable Development Corporation, the Fellowship gave me a trajectory on ideating, designing, implementing, and hosting events based on my ideas on the ground keeping in mind the social, political, economic and behavioural structure of a city. It not only added to my entrepreneurial mindset but also gave me space to develop the only digital tool for assisting in designing Smart Streets in the country, therefore making an impact on the Built Environment. Adding to it, I got a chance to be associated with some of the current projects of the Ministry, like the City Innovation Exchange, where I co-ordinated the AKAM event from CIX parallel. The Fellowship has helped me realise my potential and strengths and let me identify the areas in which I would like to engage and work in the coming years.

**Roshni Gera**



The India Smart Cities Fellowship provided me with a unique opportunity to discover and develop a strong passion for work in the urban sector. Culminating from rigorous research, problem-solving techniques and stakeholder consultations, I had the chance to pitch and execute plausible solutions for a given city. I became a more informed citizen whilst understanding the government's various initiatives aimed at bettering the Indian scenario. The unique aspect of the Fellowship is the Fellows themselves. The stringent and careful selection process brought together diverse Fellows from varying age groups, professions, ethnic backgrounds, and geographic and cultural settings. To be able to expose oneself to such a rich set of tangible resources in the form of peers spiked my learning curve multi-fold. To execute my project, I was put in a team of 4 – each with varying skill sets and expertise. The team and I had the opportunity to work closely and interact with officials and stakeholders at various levels within the government – centre, state and city levels. Having worked on Participatory Budgeting for Pune Smart City, I can certainly say I have grown to be a smarter individual. Being able to come from an architecture background and work on a finance-forward project in a city like Pune is an opportunity you don't get very often. I am grateful for this year-long set of irreplaceable experiences that have improved my life.



## Sarayu Madhiyazhagan



The Fellowship gave me access to exceptional leaders with a practical and usable approach to problem-solving in the development sector. It put me in various rooms full of passionate minds who were always seeking ways to elevate and contribute to solutions for the nation's city-specific urban challenges. I'm grateful for the platform that brought together 36 unique Fellows, allowing for cultural exchanges, lifelong bonds, and unforgettable experiences. I'm also grateful to the Fellowship's diverse setup, with special thanks to Ojaswini, Kaustubh, Anshul, Akriti, Roshni, Prasanna and Vigneswar, who encouraged workplace empathy and genuine respect for everyone involved in teamwork. The deployment to Bhopal Smart City with Team IMPROV was a wholesome experience, from co-creating a digital product that went through the complete innovation life cycle by tackling all the roadblocks to finding a reliable squad in the new city for integrating our product into the existing urban governance ecosystem. This continuous learning prompted us to venture into avenues we had never explored before! The on-ground exposure of working with ULBs gave us the confidence to step out into the real world and pursue our passions as a career.

## Satarupa Roy



I believe in the mediation between top-down and bottom-up approaches for better growth of the cities with a win-win situation for all the stakeholders. Working as a Fellow has widened my perspective and provided me with hands-on experience in merging design and system thinking approaches. Researching urban issues and empathising with the on-ground requirements to solve them gives the best practical insight into the nuances of smart cities. It allowed me to expand my horizons around innovative solutions required to build a smart city, its infrastructure, living quality, and governance. Our discussions led us to think about how we can ensure better performance at the granular levels to have sustainable smart cities. We intend to develop a platform for Ward-level competitiveness to enhance urban service delivery by localising SDGs in Pimpri Chinchwad. The Fellows are brilliant and dedicated, with varied backgrounds, experiences, and cultures. The Fellowship has allowed me to explore resources to tackle urban issues through digital solutions at UGSDSC. This exposure put me in a room with some nation-building leaders, intellectuals, public administrators, stakeholders, and industry stalwarts across all urban sectors of the country. It also provided me access to a problem-solving approach that is practical and implementable. It immensely boosted my confidence and managerial skills and helped me build networks and connections to pilot our project. I was able to experience my further strengths and desire to contribute towards better governance and inclusivity that promotes liveable and sustainable cities.

## Shaurya Chauhan



To start an enquiry into any urban issue from the 30,000 feet view but not reaching conclusions before reaching the 3 feet view. NIUA Director Mr Hitesh Vaidya shared this premise during the India Smart Cities Fellowship Program orientation. It confused me. ISCFP introduced me to the nuances between this either/or approach that I've resorted to as a development professional. As an Architect and green building professional, I have always been biased towards the latter. The inclusivity of India Smart Cities Mission towards complex Indian cities is visible to all but the system for granular understanding and approach that make it possible is not. Through immersive engagement with numerous intuitive digital initiatives like the centralised GMIS or the city-specific ICCCs, ISCFP has provided a unique appreciation for operating and maintaining large-scale urban solutions. Even more rewarding has been the opportunity to work closely with the City Support Coordinators, City Nodal officers, the Mission Management Unit, and the Directors themselves. In the period spent working at MoHUA and Surat Smart City, ISCFP gave me a chance to share in the journey of a research-born Idea to its impact on lakhs of people in a city. The cohort is a melting pot of radical ideas & interactions between professionals of the highest calibre. The tenure has provided not only knowledge & unexplored avenues to venture into but also rare experiences & vibrant professional relationships that remain unique to ISCFP.

## Shivam Dave



*"Technology is good when it brings people together" – Matt Mullenweg.*

In our nation, a vast populace resides in urban areas. My electrical engineering background helped me understand the technical part, while the India Smart Cities Fellowship Program enabled me to explore the urban realm. The Induction week was too intimidating as everyone spoke of the urban domain, which is idiosyncratic to the engineering faculty. But the Fellowship activities, such as the SWOT analysis, design thinking and system thinking workshop, and focus group discussions, assisted me in getting acquainted with the concepts of the urban sector. The Fellowship allowed me to work with people from different backgrounds. Through several intra-cohort interactions, I've had the chance to learn about different perspectives and understand others' opinions better. Along with the Fellowship activities, I also had the opportunity to be onboarded on various assignments of MoHUA and NIUA. Through these assignments, I interacted with the leadership of the Smart Cities Mission at the Ministry and several stakeholders involved in the mission. This again helped me to come out of perceived perceptions and preconceived notions and instilled clarity in aspects I had never pondered upon. Overall, the Fellowship has been a very enriching experience. The work was challenging, but I'm happy to have learned by doing it.



Shonit Nayan



The learning journey of being one of the Fellows at ISCFP is genuinely magical. The foremost is mutual learning gained during interaction with co-fellows. Most are Urban Planners, so their understanding of urban panoramas differed from my practical exposure to cities. Another unique learning, or in better words-we as Fellows of the third batch, who are on the verge of hybrid learning and working environment. This was related to the start of our orientation session and brainstorming interaction(s) with official pillars of SCM in a face-to-face mode, followed by our rigorous virtual FGD sessions. This further carried across knowing some new concepts as a curious learner in terms of touching the learning universe of system and design thinking, scaling down an urban problem, and working upon more than one group in diverse urban issues. City deployment became one of the best urban learning laboratories in terms of gaining many accolades in terms of knowing the practical functioning of ULGs. It broadened my horizon when I compared my earlier work with the local government, the taste of patience in terms of convincing the authority, and that twilight zone between waiting corridors of ULG offices and tryst with coping up with smart solutions, not only to report ministry officials but also, to assist the city government in better asset management to which I am indebted for fantastic hospitality offered by city & its officials in our quest for data or other aspects.

Soumya Srivas



*"People want guidance, not rhetoric. They need to know the plan of action and how it will be implemented. They want to be given the responsibility to help solve the problem and authority to act on it." – Howard Schultz.*

We seldom come across platforms that help you navigate through the journey of problem-solving and implementation, and this Fellowship was nothing but that. We, Fellows, worked our way through some intensive Focus Group Discussions, toiled in with heaps of data, challenged our colleagues with issues on the ground and were encouraged to give our best to come up with the best possible solutions to the problems of the city and its people. Meanwhile, our Manager constantly reminded us of the importance of work-life balance. Our Team eventually worked on developing an asset management tool for the local governments and various stakeholders. I am incredibly grateful for this opportunity, which helped me polish my knowledge and professional capabilities. Going out of my comfort zone and trying to work on digital interventions sculpted me further with the strength of better decision-making. This Fellowship has been a stepping stone in my story of success.

Swati Pradhan



This Fellowship has been an immense period of growth for me as an urbanist. It allowed me to access the most prominent leaders in the development sector and an insider's view of the way government functions and decisions are made. Having the chance to get hands-on experience of Participatory Budgeting in Pune helped me understand the problems from the different lenses of society and the subsequent design of simple and practical solutions to solve complicated issues. I have also had the opportunity to develop a profound knowledge of financial affairs in the public sector and direct interactions with government officials, industry experts, and active citizens of Pune. Working with my team was a pleasant experience. We complemented each other's educational and professional backgrounds, which benefited us in overcoming any issues and dealing with unforeseen circumstances during the project implementation phase. We used to organise formal and informal meeting sessions, which sparked exchanges and inspiring discussions. Additionally, I will always value the professional connections and experience I gained through this program. The information and skills acquired in this Fellowship will significantly help me in my future engagements

Tarini Gupta



Don't count the days; make the days count. These words gradually established my belief in creating opportunities rather than awaiting them. The India Smart Cities Fellowship Program (ISCFP) was one such opportunity. I remember the day I got to know about the Fellowship. I went home, combed through the site and saw that most of the Fellows were architects. Disheartened because I majored in Public Policy, I shut my laptop. But as they say, you only regret the chances you don't take. I applied, and well, here I am, sharing a part of my journey. The induction week was a bit daunting, mainly due to my different background. Nonetheless, the Fellowship proved to be an excellent platform to share our ideas for possible problems arising in the urban domain. A storehouse of creative individuals, ISCFP enabled me to hone my skills and broaden my horizon by going beyond my subject matter expertise. My allocated project was based on public spaces and dealt with crowdsourcing ideas and crowdfunding projects in the city of Indore. Being a part of this initiative and learning from the stalwarts, I have developed a skill set essential to survive in dynamic surroundings. Apart from that, working with MoHUA and NIUA allowed me to interact closely with top officials while witnessing on-ground project ideation and implementation. Last but not the least, I am grateful for the enriching experience I had.



## Upama Ghosh



"In order to change the system, we need to change our ideas." - Martin Wolf.

Standing at the threshold of a systemic shift in the urban development scenario of India, the India Smart Cities Fellowship Program provides a platform for young professionals to infuse new ideas of transformation within the system. In the third discourse of this program, I got the opportunity to share my knowledge and learn more from a multidisciplinary cohort of like-minded and differing-minded passionate individuals. Through continuous sessions of critical discussions and, at times, arguments over urgent urban challenges, we arrived at innovative solutions for a few of them. Being an enthusiast of working towards alternate models of urban development in consideration of ecology, my interest is reflected in one of the solutions that try to manifest sustainable development by considering the values of services offered by an ecosystem. We arrived at the capital city of Chattisgarh, Raipur, a city famous for having more than 200 lakes. The initial "ideal" solution went through rigorous brainstorming sessions, talks with experts and city officials, surveys and conversations with citizens to finally arrive at an "implementable" solution that best fits the city's needs. In this context of a complex nature-urban relationship, although collecting relevant data pertaining to the field of the environment became a significant challenge, the growing awareness amongst the city officials for their waterbodies post our interaction with them instilled a sense of accomplishment in us for fostering informed decision-making towards sustainable and resilient development.

## Vasudha Sharma



As an urban planner, I've often wondered where we go wrong when implementing plans and policies on the ground. MoHUA's extremely ambitious India Smart Cities Fellowship Program allows its Fellows to freely test their ideas in real life without worrying about their success. This Fellowship, in contrast to others, gave Fellows like me a first-hand experience of what implementing the project on the ground is like and made me realise that it is easier to criticise from the comforts of your seat without knowing the behind-the-scenes work dynamics. The Fellowship lets you work directly with the urban local body, which was a very enriching experience for me. Being deployed to Indore for more than three months was a novel experience for someone who had never lived outside of Delhi. An experience which gave me a lifetime of memories and learning to nurture. This journey was made much simpler for me by Ojaswini, who provided me with hospitable food and support, and Kaustubh, who helped me stay sane the entire time. Even though my aspirations of joining this Fellowship may not have been fully realised, it taught me to continually retain my composure and stay positive despite the problems I encounter, which will be helpful to me in the future. My mantra, "Keep your zen mode on and efficiently slog through the office dynamics," has been strengthened by the Fellowship. It has paved the way to better things in life.

## Vignesvar J



India Smart Cities Fellowship Program is unique, allowing you to explore and travel the road that leads to developing meaningful innovation. Before starting my journey in the Fellowship, as an Urban Planner, my life was stable with a routine, working on various master plans, regional development projects etc. I thought I was doing a great job. Coming to this Fellowship with no idea about its structure, there was an element of comparative risks. Today in my landing stage of this Fellowship, it turned out to be worth more than I imagined, not the risks, but the spectrum of opportunities it provided. Being a member of the Management team has aided me in unearthing the extent of my managerial skills. Every little engagement has helped me discover my capabilities and utilise them to their fullest potential, precisely suited to my working style. My premier engagement was coordinating and managing the cohort to enter the Nirman Bhawan. In the first instance, the act of taking responsibility and communication helped me to do it my better way. This Fellowship has fuelled me with opportunities to expand my knowledge and enhance my professional competencies. Ideating, Developing and Executing an innovative project by interacting with multidisciplinary professionals widened my urban lens. The other ministerial engagements, especially working with CIX and SCMMU, and participating in UGSDC, helped me enhance my professional competencies. Last but not the least, this has given me a broader networking opportunity with various officials and work with a multi-talented batch of 36 professionals.

## Yateen D



The ISCFP has allowed me to understand the intricacies of working with city corporations and other government organisations. It has empowered me with skill sets that will assist me in working in dynamic environments. India Smart Cities Fellowship provided a platform to hone my knowledge by engaging with people from various backgrounds. This has helped me view developmental issues in a multidimensional manner and improve my analytical abilities. Working on Participatory Budgeting at Pune provided me with first-hand experience of the issues faced by people. However, this opportunity also offered me insights into administrative constraints that are overcome to solve these issues. Hence, this Fellowship helped me understand the challenges faced by both stakeholders and widened my perspectives. Apart from helping me develop professionally, the Fellowship imbibed in me the soft skills necessary for an individual to grow personally. All the persons I consistently engaged with during the tenure of the Fellowship helped me learn something new. Every day was fun-filled and complemented by a "Smart" learning curve.





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[ISCFP MoHUA](#)



[iscfp@niua.org](mailto:iscfp@niua.org)



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