



UCL



Our stories, our voices

A feminist toolkit for gendering the smart city

Table of image captions

Image 1: The Khadar girls.....	3	Image 17: Post-it notes used during editathon.....	12
Image 2: Nehru Place, important commercial centre near Madanpur Khadar	4	Image 18: Wikipedia page of Madanpur Khadar JJ Colony ..	13
Image 3: Main Street in Madanpur Khadar	5	Image 19: Fish market in Madanpur Khadar	13
Image 4: Main street in Madanpur Khadar	5	Image 20: Night walk in Khadar	14
Image 5: Ordinary houses in Madanpur Khadar	6	Image 21: Participatory drawing workshop	14
Image 6: Proliferation of digital technologies in commercial centre of Nehru Place	7	Image 22: Collage of participant WhatsApp photos on Delhi rains	15
Image 7: Entrance sign to Madanpur Khadar.....	8	Image 23: Participant photos of everyday infrastructure	16
Image 8: E-rickshaws are everyday forms of transport to reach the city.	8	Image 24: Participant selfies	16
Image 9: Main Street of Madanpur Khadar with mobile phone shop	8	Image 25: Exhibition being installed in Delhi's Mandi House metro station	17
Image 10: Madanpur Khadar main street from above.....	9	Image 26: Exhibition panel	17
Image 11: Madanpur Khadar residents in the lanes.....	9	Image 27: Exhibition panel	17
Image 12: Typical house in Madanpur Khadar.....	10	Image 28: Recording of the rap song in progress	18
Image 13: Rooftop view of Madanpur Khadar.....	10	Image 29: Screenshot of rap song - 'Khadar ki Ladkiyan'	18
Image 14: Infographic of a feminist digital toolkit	11	Image 30: Wordcloud of most frequently uttered words during training workshops	19
Image 15: Shop sign saying 'Airtel 4G is Delhi's fastest network'	11	Image 31: Community podcast poster.....	20
Image 16: Wikipedia editathon in progress	12	Image 32: Ayona Datta with some of the participants of community leaders	22
		Image 33: View of Madanpur Khadar.....	23



List of Contents

1 Introduction	4
1.1 Aims and objectives.....	6
2 Delhi's digital peripheries	8
2.1 Profile of participants	10
3 A feminist digital toolkit	11
3.1 Who will benefit from this toolkit	11
3.2 Curate local histories as digital archives.....	12
3.3 Annotate maps.....	14
3.4 Affective spaces of support and solidarity online	15
3.5 Spoken word: 'khadar ki ladkiyan'.....	18
4 Give voices to stories	19
5 Community podcasts	20
6 Conclusions	21
7 Acknowledgements	22



Image 1: The Khadar girls

1 Introduction

This report provides summary findings and recommendations to build capacity, knowledge and agency among women in low-income groups through diverse forms of digital ‘self-authoring’ practices using their mobile phones.

Ongoing and widespread violence against women (VAW) in Indian cities highlight the challenge in addressing SDG#5 and #11 commitments to **Gender equality** and **Sustainable Cities and Communities**. Urban governments have responded to this challenge by increasing CCTV surveillance, pushing safety apps to mobile phones, initiating police helplines and increasing rapid response rates. This technocratic approach however is biased in favour of those with increased access to digital space, and with the knowledge and capacity to raise their voices against violence. At the same time, the Indian government has initiated several policies such as the **100 Smart Cities Mission** and **Digital India** programme, which claim to leverage information and

Communication technologies (ICT) for wide ranging urban transformations and e-governance. These policies seek to produce a smart citizen, with the literacy and capacity to use their mobile phones in order to access welfare and services of the state.

The new technocratic rationality raises serious concerns for gender justice and sustainable urban futures since India is one of the world’s least connected countries (50% not connected to internet¹), with a huge gender gap in ICT and online access (women are 28% less likely to own a mobile compared to men²). At a time when women’s agency and empowerment has become a key concern in digital capacity building and ICT4D, existing research and scholarship³ has noted that mere possession of a mobile phone does not empower women. On the contrary, while possession of the mobile phone may be an indicator of access, the mere presence of digital devices and internet access does not necessarily enable gender empowerment.



Image 2: Nehru Place, important commercial centre near Madanpur Khadar



Image 3: Main Street in Madanpur Khadar



Image 4: Main street in Madanpur Khadar.

Gendering the smart city is not merely the ability of women to access information and knowledge through digital technologies, but it is linked to building capacity for self-authorship of marginalised communities in digital spaces.

This report is based on the findings from an international research network across UK and India titled ‘**Gendering the Smart City**’. Building upon strong foundations established through partnerships between academics, ICT enterprises, NGOs and creative industries, this network shared knowledge and built capacities on gendering the smart city through a series of digital and creative practices with young women living in slum resettlement colonies in Delhi’s urban peripheries. The network engaged them fully in the co-production of research, knowledge and impact, thus ensuring full partnership with LMICs.

VAW has received little attention under Indian smart city or ICT4D initiatives, yet continues to be a pervasive challenge to gender equality in its cities. The report highlights an important opportunity in the digital turn⁴ in India where a large masses of youth are increasingly using digital devices to access information and services through the mobile phone. The research aligns with the UN SDGs in utilising humanities based research, including its concepts, tools, and methods through cross-disciplinary, digital, and collaborative research. By using arts and digital humanities tools such as curating, archiving, annotating and speaking out with the phone in low-income neighbourhoods enabled by a dynamic participatory and collaborative ethos, this report embeds the future smart city with everyday gendered experiences from the margins.

By **gendering the smart city**, we draw upon a range of intersectional and everyday urban experiences that are mediated through information and communication technologies. ‘Gendering’ as a verb uses feminist practices of reflecting, critiquing, and correcting the largely universalist

and technocratic understanding of a smart city through co-production, co-creation and co-curation. It takes an embodied and gendered approach to the smart city in order to highlight lack of safety as ‘a form of political, institutional and economic violence’⁵. In practice, it does so by focussing on the **gendered use of digital devices and communication technologies among women in low-income groups by building capacity for diverse forms of self-authoring practices** such as writing, listening and speaking through the mobile phone.

Without addressing gender and digital divides, smart cities’ claims to creating inclusive cities will remain a developmental myth.

This is based on three main hypotheses.

First, that smart technologies in themselves cannot address the structural inequalities that lead to gender disempowerment and exclusion from digital and physical spaces. The adoption of smart technologies (such as CCTV cameras, safety apps, anti-rape underwear) as a ‘solution’ to VAW, has not addressed national commitments to New Technologies and ICT4development, NUA and SDG goals #5 Gender Equality and #11 Sustainable Cities and Communities. Indeed, these technologies have little to do with the conditions that give rise to structural gender inequalities. This is evident not just in the everyday experiences of VAW, but also its new and emergent forms of cyber stalking and bullying in online spaces. Without addressing the structural conditions of inequality, gender empowerment through universal digital access will remain a developmental myth.

Second, data on sexual harassment and violence is largely absent in low-income settlements because of underreporting, invisibility and normalisation of violence against women⁶. Existing data moreover does not capture the affective, cyclical

and intersectional nature of violence. These spaces are often in the urban peripheries – slums, resettlement colonies, urban villages and border towns which remain as the ‘blindspots’ of policy and intervention for gender safety.

Third, women in low-income urban neighbourhoods do not have access to smart technologies, and are largely excluded from wider smart city initiatives. It has been repeatedly observed that mobile phones are shared within

working class families, and working women have access to phones that often belong to male household members. These phones are often older models bought in the second-hand market with low storage capacity that does not facilitate downloading data heavy apps and other web content. Building the future smart city means building a deeper understanding of how women in the margins use mobile phones and how capacity to become knowledgeable critical citizens can be developed through their use of these everyday digital devices.

1.1 Aims and Objectives

Working class women are most vulnerable to VAW because of their lack of access to safe and reliable public transport and last mile connectivity, which impacts on their wider social and economic inclusion within the city.



Image 5: Ordinary houses in Madanpur Khadar

- Provide a safe space in digital and physical worlds for young women in low-income neighbourhoods in Delhi to express and articulate their experiences of the city determined by structural, gendered and infrastructural marginalisations.
- Enable digital capacity and skills to self-author a diversity of digital outputs that can speak back to the future smart city through ordinary digital devices.
- Co-create, co-produce and co-curate digital outputs in Delhi that draw attention to their gendered experiences of using urban spaces across physical, social and digital worlds.
- Establish a network of academics, ICT enterprises, feminist NGOs and creative industries from UK and India to engage in a dialogue on current research, artistic practice and development-oriented work on the smart safe city.

Gendered divides

Even though rise in mobile connectivity and ownership of mobile handsets, especially smart phones are seeing a phenomenal rise in India, it needs to be placed alongside the social indicators of gender/caste/class and regional divides.

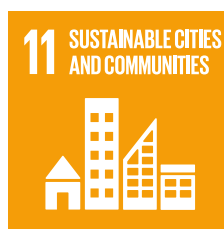
The 2019-20 the National Family Health Survey-5⁷ sought details on a specific indication for the first time- percentage of women and men who have ever used the internet. This survey was conducted in over 3 lakh households in 22 states and union territories. On an average, less than 3 out of 10 women in rural India and 4 out of 10 women in urban India had ever used the internet, as per the survey.

For working class women, the internet is seen as a place for accessing information as passive onlookers, rather than authoring and producing ‘official’ content of their own.



SDG #5 on *Gender Equality* argues that GBV requires a multi-layered, multidisciplinary and multi-scalar approach from the global to the urban, from the public to the private, and from the material to the digital spaces of the city. This needs to address fully

the experiences, narratives and digital presence of GBV survivors in India’s smart urban future.



SDG #11, *Sustainable Cities and Communities*, expands the notion of infrastructure to the digital realm and by arguing that safe and affordable infrastructure across digital and physical worlds are to be seen interconnected with each and that

vulnerability need to be understood from the location of the gendered subject.

Infrastructural Divide

Working class women are most vulnerable to VAW because of their lack of access to safe and reliable public transport and last mile connectivity, which impacts on their wider social and economic inclusion within the city.

In India since 2014, two linked national programmes – ‘100 smart cities’ and ‘Digital India’ have been central to its re-imagining of a digital urban future. Indian smart cities claim to be ‘citizen-centric’ by wiring citizens to cities through mobile platforms, biometric data, cashless transactions, social media and geotags that transform the experience of being in and belonging to the city through the instant sensorial experience of the smartphone interface. Yet inclusive development of women and girls particularly from minority religious, caste and ethnic backgrounds remain far from reality.

The huge digital information revolution in India has not been able to address the gendered digital divide.

Taking the safety of women and girls as a key indicator of development, this report examines how gendered big data on GBV is collected, stored, analysed and curated to address gender justice in the city. More specifically it also contributes to SDG indicators 4.4.1 Proportion of youth and adults with information and communication technology (ICT) skills, 9.c.1 Proportion of population covered by a mobile network, and 17.8.1 Proportion of individuals using the internet by squarely placing issues of internet and network connectivity, mobile ownership patterns by young women, and structural constraints to digital capacities.

Digital peripheries: working class women are often located in the digital peripheries. Even though they own mobiles they do not necessarily access wider knowledge streams available through the internet. Their limited knowledge of browsers, their confinement to family WhatsApp groups, the steady streaming of fake news into their phones, their unfamiliarity with the online gender equality movements in India; also points to their exclusion from digital space. Other factors include:

Crashing Apps: Low storage capacity in the phones of low-income users do not allow them to use many Apps, especially high quality Apps that require higher storage capacities. Hence, it is important to keep in mind compatibility with Apps for supporting low-capacity phones.

Dis-connectedness: Broken infrastructure in the city especially in the urban peripheries lead to many problems of network disruption. Basement rooms, spaces within localities and underground subways are places where citizens face blackouts leading to unsafe conditions. Those living in low-income settlements have to move around looking for reception on their phones, or they move to rooftop terraces for uninterrupted network.

Ownership: Most working-class households own just one or two phones, and it usually belongs to the male household head. Young women’s usage of mobile phones are heavily watched and surveilled. Women’s use of phones has become a space or a new terrain for extended surveillance on their mobility and social interactions.



Image 6: Proliferation of digital technologies in commercial centre of Nehru Place

2 Delhi's digital peripheries

Delhi forms the basis of investigations into the gendered smart city for several reasons. **First**, Delhi government has sought to reorganise its 'hard' and 'soft' digital infrastructures for quite some time and are part of the 100 smart cities programme. **Second**, Delhi faces significant challenges in addressing VAW. The sexual assault of a student in a bus in 2012 led to the enactment of a number of laws and policies, as well as the adoption and promotion of a number of crowdsourced smart safety apps by the Delhi Police⁸. **Third**, Delhi's smart city policies aim to create safe and sustainable cities through technology, but without a strategy to address gender misogyny particularly for its women in low-income settlements who continue to remain on the margins of the smart and safe city. These approaches make Delhi's smart city initiatives central to the social, political and digital spaces where intersectional identities of gender operate and materialise.

Delhi was already part of the eight metropolitan cities being developed under the Ministry's 'Safe City' programme. 'The goal of Delhi Safe City program is to build a safe and inclusive city where women and girls are enabled to live a life free from sexual violence, and from the fear and anticipation of such violence. Towards this, proposals included 33 per cent reservation of women in police, installation of CCTV cameras, deployment of women in police stations, emergency response system, police verified public transport, prevention of cybercrime, infrastructure issues, mapping of dark spots and crime-prone areas and involvement of educational institutions, etc.'⁹



Image 7: Entrance to Madanpur Khadar



Image 8: E-rickshaws are everyday forms of transport to reach the city.



Image 9: Main Street of Madanpur Khadar with mobile phone shop



Image 10: Madanpur Khadar main street from above

Madanpur Khadar

Located in south-west, near the border town of Badarpur, people started settling in Madanpur Khadar since 2002. Majority of the inhabitants here were forcefully evicted from various parts of the city, including Nizamuddin, Dr. Ambedkar Camp at Nehru Place, and R K Puram. Under the name of a ‘voluntary relocation programme’, residents living on the banks of the Yamuna river were also pushed into the resettlement colonies. Residents were allocated merely dug out empty, land. The original relocation plan envisioned the development of sites of 18 sq. meters each with a 7 sq. meters undivided share in open courtyards based on the cluster court- town house planning concept for relocation. The eligibility for relocation was set as those Indian citizens holding ration cards by 31st January, 1990. Later, it was modified to make those holding ration cards up to 31st December 1998 eligible to plots of 12.5 square meters”.¹⁰

During the time of forced evictions and arbitrary relocations, many children missed years of schooling either because they could not continue to afford travelling to their existing schools or because there were no schools in their new place of dwelling. Many instances of violence, gang attacks and sexual violence also profiled resettlement colonies to be an unsafe space for women, girls and young children. It is years of collective struggles and interventions by the local community along with the support of CSO’s that some of the basic services are in place in the colony. This is not adequate as many households continue to rely on public toilets and there is dependence on private services for drinking water and transport facilities in and out of both colonies

The metro stations nearby have enhanced the mobility options for residents of the resettlement colony, however majority of the residents perceive the metro to be an expensive mode of transport. The sentiment for public bus services to Khadar continues to be strong, as reflected in campaigns and grievances raised by residents. The introduction of e-rickshaws the last few years (3-4 years) have again improved last mile connectivity, towards nearby markets and metro stations.



Image 11: Madanpur Khadar residents in the lanes.

Today, majority of the people living in Madanpur Khadar constitute the large informal sector of the cities' working class. Mostly employed as domestic workers, factory workers, construction workers, taxi and rickshaw drivers, a huge section of young people working in the end tiers of the service sector, Madanpur Khadar today has also emerged to be an important settlement for migrant workers from many parts of the country, owing to low rents in the areas. Being a settlement of mostly informal workers, many issues around basic services and amenities continue to remain inadequate and broken and are left mostly unaddressed.

The youth in these colonies are mostly first-generation learners, with some of them pursuing their higher education along with their jobs. Most of the young are enrolled under the distance education programs, and do not attend regular college.



Image 12: Typical house in Madanpur Khadar

2.1 Profile of participants

The participants are those that can be roughly labelled as 'young millennials' who grew up in a 'millennial colony'. These were a group of 11 girls between the age of 18-24 who grew up digital in Delhi's urban peripheries. They had little memory of their urban history and trajectory, even as they continued to struggle with the impacts of mass displacement induced by a rule by law in the early 2000s. They belonged to families who had migrated from UP, Bihar and Rajasthan since the 80s and 90s and had settled in Delhi's informal cities, in central locations close to offices, factories and middle-class colonies. A majority

of them were resettled here in the early 2000s during the slum demolition drives in Delhi following a judicial order.

Although the participants' families were promised legal tenure and secure rights to the city, they were awarded only 12 sq^m of land for their houses and once in Khadar realized that infrastructure provisions were worse here than in the informal settlements where they had lived before. Electricity was provided four years after resettlement, and public toilets are still inadequate in several areas of the colony.



Image 13: Rooftop view of Madanpur Khadar

3 A feminist digital toolkit

“A toolkit is a collection of authoritative and adaptable resources that enables the intended user to learn about an issue and identify approaches for addressing them. Toolkits can help translate theory into practice, and typically target one issue or one audience.”¹¹

A feminist toolkit is a call for action that is grounded in empirical realities. This toolkit is a loose collection of mechanisms, instruments and guidelines to create new digital spaces from below.

The toolkit does not aim at completion nor closure. Rather, it moves beyond feminist paradigms, to present a *bricolage* – a loose collection of practices that sit together simultaneously, but not necessarily in complete agreement with each other or within itself. Each pathway charted by the toolkit comes with its own disclaimers and warnings to not take it too literally, and more importantly each pathway has its local context, biography and destiny.

The toolkit we propose here is digital, visual, aural and participatory. We present the feminist toolkit as a pathway to an intimate form of collaborative authoring that emerges by visually ‘composing-with’ as well as ‘learning-with’ and ‘speaking back to’ the realities and constraints of space,

technology and power. Through the toolkit, we map a pathway for those dispossessed of the public sphere of the city and the public digital realm alike, to ‘see’ and ‘speak’ with their phone, and thus enrich urban-digital space through affective and subjective data on their lives.



Image 14: Infographic of a feminist digital toolkit

3.1 Who will benefit from this toolkit



Image 15: Shop sign saying ‘Airtel 4G is Delhi’s fastest network’

- Inter/Government departments and agencies interested in making policy on gender-based planning and safety.
- Third sector organisations, grassroots collectives and NGOs working with women in low-income settlements.
- Creative practitioners interested in working with technology can see the impacts of combining arts based approaches to shift smart city agendas towards gender needs.
- Built environment professionals, architects and planners will find the report useful as a way to understand the importance of designing for safer cities.
- Young women in low-income neighbourhoods can use the toolkits to speak in their own voice, claim agency and transform into rights claiming citizens.

3.2 Curate local histories as digital archives

Curation meant putting together and giving meaning into a metaphor for journeys, communications, connections, associations, interceptions, social networks and individual/collective behaviours, that is curated as women 'see' and 'speak' with/through their mobile phones.

By Archiving, we mean facilitating the writing of the history and contours of any given space by the inhabitants themselves. Through this practise of knowledge production, inhabitants or residents are themselves able to write their history through their knowledge of the city or any given geographical space. Without recourse to formal knowledge systems, which continues to be exclusive in nature, residents are able to claim what knowledge is relevant to be written about them.

This is a tactic that enables more privileged mediators such as us working within the existing frameworks of rules and conventions, but to tacitly subvert the site's ideological landscape by including subaltern voices and life histories.



Image 16: Wikipedia editathon in progress

Wikipedia as a textual medium expands the possibility neighbourhood references and stories that circulate in the form of oral narratives to be documented and written as authentic knowledge of a certain space, which are otherwise only accessed through Google map platforms. Wikipedia's diversification into hosting pages under many vernacular and regional languages also allowed the participants to co-write a page in Hindi, which can be viewed and edited by the residents of the neighbourhood.

In August 2018, the project team worked with the participants to write a Wikipedia entry about their neighbourhood, Madanpur Khadar JJ Colony.

Limited Digital Capacity: As the team started the Editathon, we encountered challenges in digital capacities of the participants on two accounts – one, their **lack of knowledge of the difference between browsers and search engines**. All the participants were only familiar with the Google Chrome App in their mobile phones which they perceived to be the 'internet' and from where they could mine information on jobs and education opportunities via the net. This meant that they were ghettoised in the marketplace of Apps and were unable to navigate the vast spaces of the internet and open knowledge platforms.

The second challenge was **infrastructural – network connectivity**. The women only had access to mobile phones, but the network was slow and intermittent. This meant that even for those who finally managed to finally access Wikipedia, it was near impossible to register, log in and contribute to information online and in real-time as a group.

As a way of moving forward, we switched to an **analogue editathon**, by using post-it notes to mimic co-authoring wiki entries.

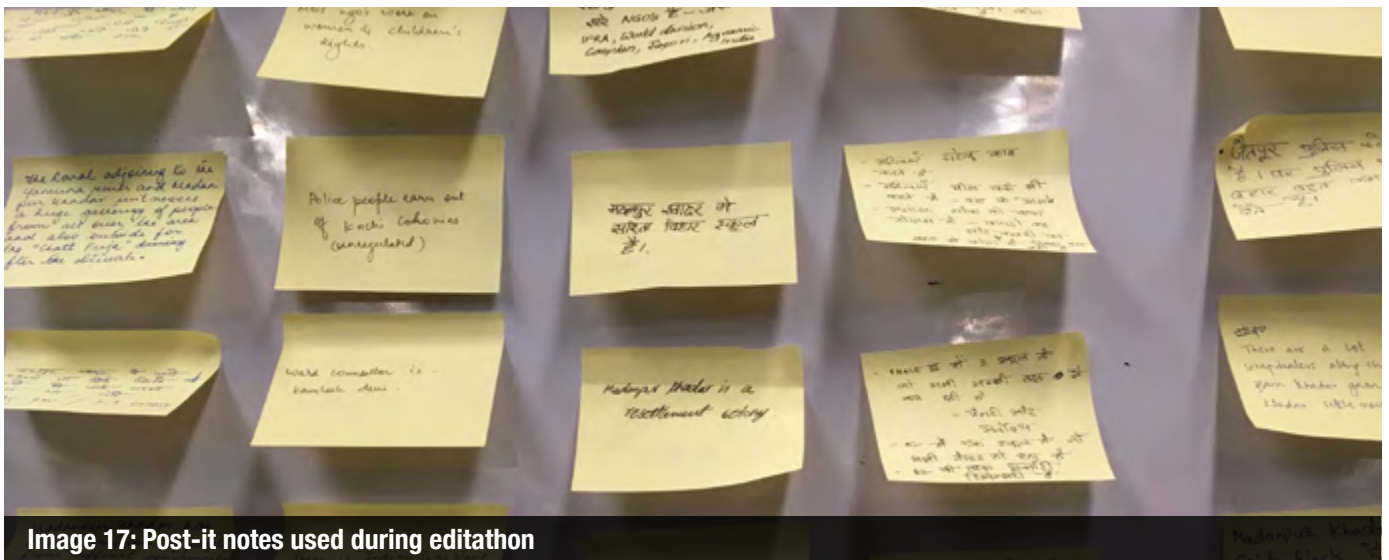


Image 17: Post-it notes used during editathon

JJ Colony Madanpur Khadar

From Wikipedia, the free encyclopedia

Coordinates:  28°31′48″N 77°18′49″E

JJ Colony is a resettlement colony on the Gram Sabha Land of **Madanpur Khadar Village** in the south-eastern region of Delhi. It is located in close proximity to **Sarita Vihar** and **Kalindi Kunj**, about 1 kilometers from the **Uttar Pradesh** border. It was created in 2004 when the slum dwellers from across Delhi were **forcefully evicted** and relocated to the urban peripheries. Since its formation, the community has undergone massive structural, political, economic, and social changes affecting the lives of the community. The transformation of **JJ Colony** in Khadar is underscored by several challenges ranging from the provision of basic amenities, mobility, and the condition of women's safety. From then to now JJ colony in khadar has changed much from the lanes of agriculture canal to road channels has come far bit.

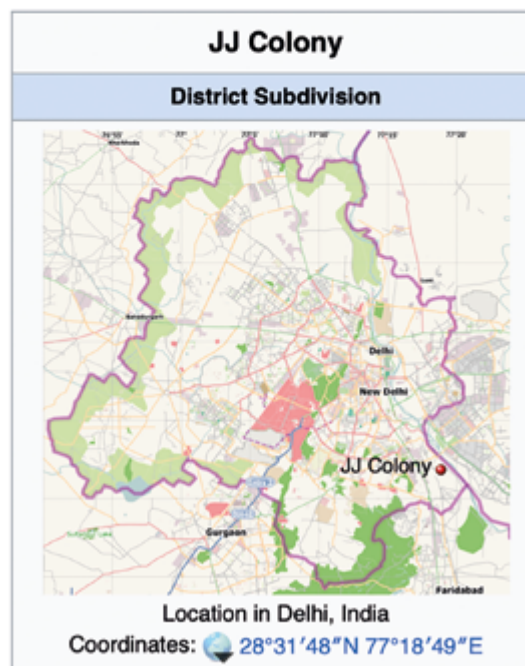


Image 18: Wikipedia page of Madanpur Khadar JJ Colony

Framework for the Wikipedia page

- History
- Geography and demography
- Politics and governance
- Infrastructure – public toilets, garbage, drainage, bus stops,
- Public spaces/Markets – Jalebi chowk, Shani market, Sri Ram chowk
- Festivals
- Gendered Safety Audits



Image 19: Fish market in Madanpur Khadar

Wikipedia – Questions of authenticity

Immediately after the page went live, the project faced another challenge – **authenticity**. Wikipedia marked the page with two notices, one pertaining to grammar/style and cohesion and the other regarding citation, to annotate the page with 'reliable published material'. This was of huge concern as Wikipedia threatened to remove the page if it was not cited against authentic publications.

A set of volunteers worked on editing the grammar/style of the page, meanwhile, some academic works which sited Madanpur Khadar JJ Colony within the literature on urban politics of evictions, resettlements and informality were inserted as citations to position the page as authentic.

In times when history writing is a terrain marked by ideological contestations, platforms like Wikipedia rightly raise questions of authenticity. Similarly, the fact that anyone with an account can edit the pages regularly also foregrounds the need for active collectives challenging any appropriation.

However, through the editathon, we spoke of Madanpur Khadar JJ Colony as a ways to go beyond the imagination of commercial and the corporate platforms (such as Google) as active players in digital space, and as a gesture to the possibilities that Wikipedia and other ideologically similar movements, such as OpenStreetMap can have for platform urbanism.

3.3 Annotate maps

By Annotating, we mean collecting and assembling gendered knowledge of the city through women's gendered location and everyday gendered experiences. Maps showcase any community in a two-dimensional manner. Mapping as a tech tool also uses set parameters for the need for objectivity. Annotating is a process by which dark spots on the map are supplemented and substantiated through collecting everyday lived experiences of safety and as well as quotidian strategies of countering violence. This process of capturing gendered knowledge and experiences enriches the data points captured on the mobile App. Their knowledge and awareness of what is safe and where is unsafe can be captured through a process of social auditing through community mapping practises such as night walks, safety trails and conversations in the neighbourhood.

While safety-driven infrastructural claims have often led to policies focusing on building more pedestrian friendly subways, these particular concerns and knowledge contributions by women who actually walk the mile and use public amenities are important criticisms of the gender-blind built environments in the physical infrastructure of the city. Dark-disconnected-deserted subways are a common feature across the city, and for women from working class backgrounds, such enclosed spaces are additional burdens of exclusion in the cities.

“There are no places without network, rather there are lanes without network, sometimes some homes don't have it but the one right next to it will have, that's how it is” (participant)

Night Walk

Young women expressed fear and anxiety over rising safety concerns in the event of a murder of a young man at a very popular junction in the colony, under the watchful gaze of the CCTV camera. Since then, tensions, suspicion and fear have been very common in the conversations in the community. The community organisations decided to conduct a safety audit at night. This was organized by using two tools – one, set of people used the Safetipin App while others conducted manual audits, talking to residents, shop keepers and pedestrians on the roads. By undertaking a two-fold process, safety could be mapped using a technology enabled platforms with in-built parameters meanwhile conversation with community residents could capture what was not mapped through the App.

Safety Trails

In the workshops in Delhi, mapping was a method used to lay out young women's knowledge of the city- through routes frequented regularly by them for livelihood or for education and of dark spots on this route. In these exercises, they laid out connectivity issues in last-mile coverage traversed by young women and the predominant dependence on pedestrian routes, private service and public transport. In one of the exercises, the participants also mapped their familiarity with their neighbourhood of the resettlement colony, including service providers such as the milk delivery man, NGO workers, police constables and recharge shops.



3.4 Affective spaces of support and solidarity online

A closed WhatsApp group can function like a safe space, in times of increasing control over physical spaces and resources. It can act as a safe virtual medium for women to share their experiences and frustrations of everyday experiences of GBV. It also acts as source of gendered support, solidarity and empowerment to be part of a community – at arm’s length, at the tip of the fingers.



The project’s use of the medium of WhatsApp has been central to the practise of curation and authorship undertaken under it.

The Medium: The in-built features of the App, allowing short-hand, emojis, voice notes and easy sharing of multimedia files can be positioned as a very important de-colonial move in knowledge production. The inbuilt features of recording voice-notes are especially useful in breaking the barriers set by the textual format. The using of WhatsApp and other multimedia messaging Apps for research purposes also gives insights into the digital capacities, knowledge and awareness amongst working class women in order to then drive policy initiatives. It is an important moment where there is a shift from the gate-keeping model to democratic platforms. It has the potential to redefine representation, writing and authorship. Even though WhatsApp remains in the centre of many controversies, it has emerged to provide a platform to an act of authoring, whereby young women are finding the ability to speak, write, curate the city in their own terms, based on their own experience and struggles and making these visible, legible and legitimate in the public domain.

- Curate city stories
- Annotate maps
- Archive local histories
- Spoken word



Image 22: Collage of participant WhatsApp photos on Delhi rains



Image 23: Participant photos of everyday infrastructure

3.4.1 Geotagging with the Selfie

During the research project, a curious aspect that unfolded was the influx of 'selfie' into the WhatsApp group. These selfies were rarely taken inside the homes, mainly outside—when the women navigated the city, starting from the weekly markets that they went to, new places they saw — a heritage site or a commercial point in the city. It was also a way of expressing what one went through when one of the participants shared her selfie while being the sole woman

commuter in a bus full of men. It spoke volumes in aspirations and place-making through the front-facing camera on the phone. They can be explained as a form of geo-tagging¹² when women went out to different parts of the city. These selfies are digital-visual stories from the margins which capture their struggles and accomplishments as they step out of women's traditional roles in the home to navigate the largely male-dominated realm of the public. The project urges to look into the 'power' of the selfie and front facing camera belonging to the girls on two accounts – to look beyond the selfie as a generational-narcissistic act and to see/hear up close as to what the gendered margins are calling upon the 'others' to see. The affective dimensions of joy, of being in a new place, fear in an alien-hostile space were all captured through the Selfie.

“Hello friends, if you know of any jobs, then let me know, i'm very troubled – i left the job in july and i'm trying but also very troubled” (23rd August, 9:07 pm)

“I'm sitting on a rickshaw for Okhla phase 2, and the driver is a woman! It makes me really happy, and she's riding it very calmly!” (9th July, 1:49 pm- didn't have space in phone to send a recording)

“Sheher (city) – where no one listens to you – i got on a bus, on the bus stop from Okhla tank, near Harkesh nagar to go to chidiya ghar, he shut the gate so hard that i fell and my phone broke. I complaint on 100, called on 181, i also got a traffic police number, but no one listened to me” (27th June, 2:47 pm)



Image 24: Collage of Participant selfies



Image 25: Exhibition being installed in Delhi's Mandi House metro station



Image 26: Exhibition panel design by Kruttika Susarla



Image 27: Exhibition panel design by Kruttika Susarla

3.4.2 Occupy the city through art (January 2019)

The project exhibition titled *Aana Jaana* presented different perspectives of Delhi's urban mobility generated by young women living in Delhi's urban peripheries – resettlement colonies, urban villages and border towns. Using visualisations of selected data – participatory maps, photographs, videos and WhatsApp diaries maintained by the participants over a period of 6 months, *Aana Jaana* curated women's everyday stories of comings and goings in the city. The exhibition presented how women on the margins view, understand, and ultimately navigate the city through information and communication technologies (ICT) accessed from low-cost mobile phones. It provokes us to think what *Aana Jaana* means in a context where social media provides real time information on the dangers and freedoms located in the metro, bus, auto rickshaw, and walkways as well as the opportunity to express this in creative and poignant ways. It shows us how women living on the urban peripheries negotiate the 'freedoms' of moving (aana) in online space with the 'dangers' of going out (jaana) into the city, or the restrictions of entering (aana) online space with the freedom of leaving (jaana) home for the city. Through a convergence of art, digital media and architecture, this exhibition demonstrated the potential of a new form of visual language co-produced with the women and its capacity to reveal interesting gendered and socio-economic patterns of inclusions and exclusions brought about by a digital urban age¹³.

The exhibits included curated visualisation of:

- WhatsApp diaries kept by young women which were presented through a data collage of pictures, stories and conversations
- Participatory maps drawn by women during focus group meetings
- Safety audit maps conducted by the women in the resettlement colonies.
- Redesign of public spaces frequented by the women to make these more gender inclusive.
- History of evictions in the Delhi city and the making of resettlement colonies

This exhibition was hosted at Mandi House metro station for the entire month of January 2019. This exhibition, in one of the busiest metro stations in New Delhi, with a footfall of over 11,000 commuters daily became a portal through which Delhi's citizens engaged with the city and its peripheries.

"I am really loving this day very much. I feel so happy, I cannot imagine what I have achieved, I never thought I would be able to do this." – Participant on the day of exhibition launch, January 2019.

3.5 Spoken word: ‘Khadar ki Ladkiyan’

Using the power of the voice and utterances, free-style songs and podcasts with community participation can bring in their perspectives through collecting and assembling narratives. It breaks the age-old dictums of the textual format, one that has evolved with creating huge barriers for people in the margins. The spoken word, assembled in slam style poetry, songs, rap or podcasts gives opportunity for creative expressions of gendered experience and violence, and gives legibility and legitimacy to the voices of the people in the margins.

The freestyle song was one of the artistic co-productions undertaken from the project. While the initial idea and aspirations emerged around a rap song, a Music Director worked with the participants to evolve the song into the form of a spoken work/free style hip-hop song.

Writing the script

The lyrics of the song were written over a series of 6-7 workshop when an artist worked with the participants to familiarise them with the form of rap, music rhythms and sounds from the neighbourhood. The first few workshops went in telling each other their stories, and familiarising with the rhythms from their surroundings. The music artist began by asking all participants to showcase the style in which they washed their clothes, and it emerged to be so diverse and full of rhythms. Soon the rhythms and their familiarisation with sounds followed. The participants wrote their stories and stories from the neighbourhood in the form of prose, poetry and couplets, and the team worked with them to weave it into a free style hip-hop song.

Performative practice

A film Director and Cinematographer joined after the music was assembled to shoot a video of ‘Khadar ki Ladkiyan’. After a brief interaction on story boarding and direction, the participants plunged into its production, in between chasing their jobs, classes and responsibilities at home. Over 4 days, sneaking in at early morning hours and late-night shoots, the girls performed the songs in various parts of the neighbourhood- from terraces, lanes, crowded streets and open parks, while shooting the video. It emerged to be an act of reclaiming as they performed their story through the very streets and spaces that has also been hostile to their aspirations.



Image 28: Recording of the rap song in progress



Image 29: Screenshot of rap song - ‘Khadar ki Ladkiyan’

4 COVID19: Our stories, our voices

As the world grappled with the sudden disruption in our lives, the Covid-19 pandemic brought forth into prominence already existing schisms in a city like Delhi.

During our research, we were especially curious about the challenges faced by the youth in Delhi's margins, especially in resettlement colonies, where scarcity of resources like water is common and public infrastructure like toilets and buses remain evasive common goods. Through Jagori and Safetipin, we reached out to existing and a new set of participants to gather, hear and understand what unfolded over the course of the lockdown and phases of unlock that is continuing in India.

While early on images of migrant workers walking thousands of miles over days had become the iconic images of the lockdown in India, this phase of research points to clear shifts in digital and physical worlds of the lives of gendered margins, to point to the faultlines that the pandemic has deepened in India.

Locked in-Logged out

Majority of the participants in our dial-in surveys reported economic distress at home owing to the lockdown and sudden stoppage of work. To begin dealing with the shift, young millennials reported that they were practically cut-off from the world outside- as phone-TV-Internet recharges were part of the first set of expenses to be cut down by families. Many participants reported that their phones were not

recharged for months during the lockdown. For emergency phone calls and internet use, only one phone in the family (usually belonging to the household head) was recharged.

As many schools re-opened online, youth in these colonies complain that they are missing out on admissions, classes, exams and tests. A wide range of issues, from network connectivity, number of phones at home, or sharing phones with siblings are leading to situations where many young women are having to skip their classes, or drop out of school/college for a year. Without adequate digital capacities as well as jobs which could not be converted to remote-mode, many young women are suddenly grappling with feeling isolated and getting stuck at home for a really long time.



Image 30: Wordcloud of most frequently uttered words during training workshops

Yes ma'am, we knew about video calls earlier. But Google Meet is a new app we learnt about. And we did not need PDF earlier, so we learnt to do that now. We learnt a lot of new things we did not know about. Also, we did not use Wi-Fi earlier, but we learnt how to use Wi-Fi now.

R: No, no one here has Wi-Fi as such. As I told you I was missing my UTs. When we have network problem on our phone, and we are having our important classes on Google Meet, we sometimes use it from our neighbour's phone. I don't think anyone here has Wi-Fi, and I don't know if there is someone who has it. But we use it on someone's phones for 5 minutes or something, as we ourselves had only one phone.

Q: So you mean you used hotspot (not wifi) right? (Katrina)

Q: what about phone recharges?

R: no we did not do it, there was wifi in our neighbourhood, so we used whatsapp through that.

Q: Whose wifi?

R: Our neighbour, they had already recharged before the lockdown, of 3 months, so it could be used till the end of the lockdown.

Q: So people around used it?

R: Yes.

Q: Were you able to recharge phones on time?

R: Ma'am, my phone was not recharged during the entire lockdown.

Q: Are online classes going on?

R: They are going on, but I am unable to attend them on the phone. I have to use my father's phone, and he goes out to work.

Q: So, can't you use your mother's phone for classes?

R: Yes, but it is used for my younger siblings' classes. My classes happen in the morning and theirs too, so they use it for their classes. I don't take mine.

While access to the phone became a source of serious concern, as most dimensions were pushed into the digital realm, especially amongst those taking online classes, some said that they took recourse to Youtube and other social media platforms for moments of 'fun', breaking isolation and for 'passing time'. Women also narrated experience of mobilising relief and support in rations through the phone for friends who were in even worse conditions. Beyond the digital realm, majority of the participants received assistance from relief organisations and other NGO's that distributed dry rations.

Rise in share of Domestic Work: Majority of the participants shared that women, old and young were pushed into the household realm even more during the pandemic and the lockdown, as many roles that they previously performed for the family-home were taken over by men, including getting vegetables, groceries or anything that entailed 'stepping out' of the confines of the home. Income crunches at home has deeply affected these adolescent young minds, when all participants reported to having 'eaten just enough survive'. Girls complained that any little relief available through community kitchens and government food distributions were inaccessible owing to distances and overcrowding in the locations where they were distributed.

Curfewed Days

While the participants in the earlier study shared stories of curfews on their mobility at night by their families, the

curfews have been extended in the day, along with many infrastructural curfews. Our study points to the specific hurdles faced by young women in the urban slums in Delhi.

Timing and affordability of Public Toilet: for those residents without toilets at home, the two-month period of the lockdown in India was an additional burden to the already aggravating situation inside homes. Young girls in our earlier phase had reported how the public toilets were very unsafe, and that they always went in groups to the public facilities. However, with the strict enforcement of lockdown in India, it became for most women very difficult to reach the public toilets without harassment from law enforcement agencies. Women narrated how they would wake up much early to go to the public toilets and use it only once before they went to sleep. Similarly, the government continued to levy the fee as well as maintain closing and opening hours of the public toilets. This led to huge constraints as nobody in the locality were going out to work, and more people relied on public toilets through the day.

Crisis in access to affordable and regular Public Transport: Participants reported the worsening of a public transport crisis in and around resettlement colonies as India underwent different phases of unlock. While the older women working in the factories often walked to their factories, young girls who had to access other parts of the city faced issues like erratic bus services or non-availability of any transport facility. Fares of electric rickshaws went up in some cases more than 100 per cent, forcing residents in the peripheries to depend on walking to get to banks, factories and places of employment.

5 Community Podcasts



With the Covid-19 pandemic, the project team went back to the participants seeking and asking their stories and struggles over the pandemic. The team decided to familiarise them with the popular online medium of podcasts through the example of community radios which they were familiar with. A series of 8 workshops were conducted with the participants to record and

co-produce a set of four podcasts narrating issues they felt were crucial for others to listen to. Podcasts as a listening medium has the power to capture the spoken word and bring diverse textures through capturing sounds. It can then be assembled to be a podcast series which given its audio character can have more audience listen-in. The form also makes it an accessible form to take it back to the community members¹⁴.

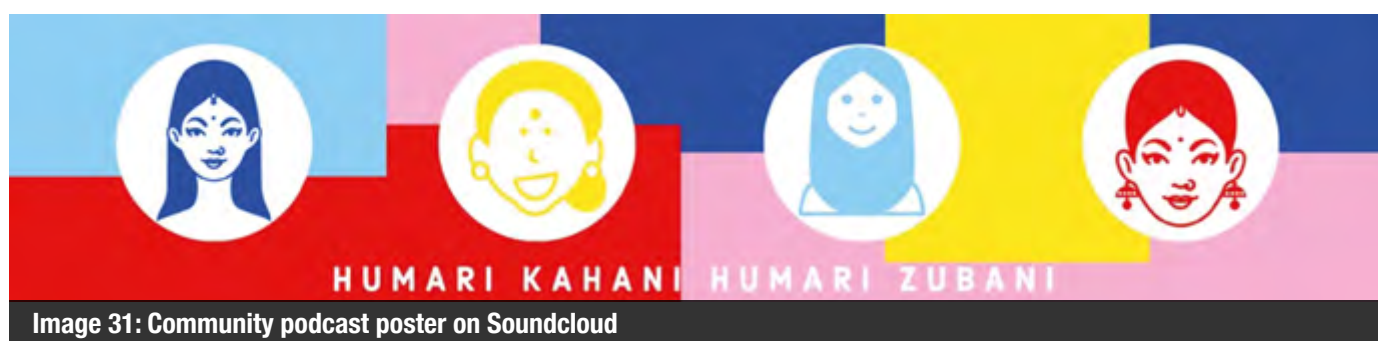


Image 31: Community podcast poster on Soundcloud

6 Conclusions

Social and Political Value

1 Authoring with Participation

The key to empowerment is enabling the gendered and other socially marginalised communities in self-authoring. The digital world has opened up immense opportunities for subaltern groups to make claim to their rights, by-passing the traditional -keeping model. What is the gatekeeping model – languages and formats and ways of conceptualising. Empowerment can really be about giving legitimacy, legibility to languages and expressions that have been traditionally ghettoised.

2 Digital vs. Analogue Safe Spaces

Virtual communities have emerged to be safe spaces for socially excluded and marginalised communities living under conditions of resource crunches. In times of withdrawal of city commons including basic services like housing and water as well as safe spaces like public hostels and community centers accessible to all, virtual communities can emerge to give social solidarity and support both in the digital and physical worlds. To summarise, virtual communities can be seen as a mode of existence of cultural institutions in any city.

Physical and Infrastructural Value

1 Network Penetration versus Capacity

Network penetration cannot be the indicator for connectivity. Dark Spots on the streets extend into the digital world - the subways, basements, or even homes can remain disconnected from the mobile network. Phone ownership doesn't ensure access to high quality Apps as majority of economically marginalised groups use phones with low-storage capacity and short-term data packs.

2 Ownership vs. Possession

Similarly, emphasis on ownership doesn't capture the entirety of reality where working class households often jointly hold one or two phones. Young people are likely to use it more, but women's access is regularised and monitored. In the post-pandemic world, women might own phones, but they leave it behind for their children or sibling to access their classes. So ownership itself is intertwined in many power dynamics.

Oral Archives as urban history

1 Can the citizens write about their city?

Practices of digital curating can archive the city from below - as marginalised inhabitants through such processes can become rights-claiming citizens. It is the need of the hour for policy-makers and governments to listen to such expressions of it's citizens. The Covid-19 crisis has shown us how digital expressions of the marginalised have been central to the government's response to relief. Wikipedia.

2 Can citizens curate a digital archive?

The exhibition in the metro station in New Delhi was a moment when an artefact, created and curated by young millennials became part of an urban heritage. Delhi's official history does not feature the history of evictions and demolitions. The Wikipedia page and the exhibition in Mandi House curates history in a way that official documents does not record. These endeavours by the women also bring their personal histories to the heart of the city.

7 Acknowledgements

This report has been made possible through an AHRC funded research network (PI ref: AH/R003866/2 from 2018 to 2020). This project would not have been possible without the participation and enthusiasm of the young women in the low-income settlements in Delhi who were part of this research. We are grateful to Jagori and Safetipin for partnering on this project, and providing support and access to the community, recruiting participants, organising the workshops and feedback on this research. We are grateful to research assistant, Arya Thomas for her commitment to this project and continuous support recruiting participants, conducting the fieldwork and facilitating the workshops. We are also grateful to Sunayana Wadhawan for her hard work in co-producing the rap song

with participants and later during the COVID lockdown for her work with Amartya Ghosh in leading and planning the podcast training workshops as well as co-producing the final podcasts. The rap song video was conceptualised, directed and produced by Nandan Latwal and the Umbrella Collective in collaboration with the participants. The Wikipedia editathon was conceptualised and led by Dr Padmini Ray Murray, founder of Design Beku. The exhibition panels were curated and designed by graphic artist Kruttika Susarla and were on exhibition in Delhi Mandi House Metro Station from 1-31 January 2018. All photographs unless otherwise mentioned have been taken by Rohit Madan.



Image 32: Ayona Datta with some of the participants of community leaders

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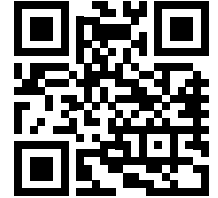
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Image 33: View of Madanpur Khadar

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This project is funded by the Arts and Humanities Research Council

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This report is funded by:

