

Contents

326

Public Representation of Regional Plan and Development Plan

333

Eastern Waterfront

336

Evaluation of SRA Schemes

337

Empowering Indigenous Communities of the Mumbai Metropolitan Region

345

Fort Management Plan

353

Urban Design Interventions

357
 UNESCO Signage
 Interventions

■ 366 UDRI Events 2019-2020

364GIS and Digital Inclusion

365
 Comparison of MCGM's
 Annual Environment
 Status Report

The Urban Design Research Institute (UDRI) was established in 1984 as a public charitable trust to enrich the understanding of the urban environment and work towards its improvement. Our mandate is to make Greater Mumbai and the Mumbai Metropolitan Region an inclusive region that is humane and balances its cosmopolitan cultural heritage and social fabric with equitable growth and efficient infrastructure - a city where living, working and mobility are less stressful and more enjoyable, with easily accessible amenities and public spaces for all. Therefore, urban planning and policy, urban design and heritage conservation are the core concerns of UDRI.

Through an integrated system of public lectures, exhibitions, forums, publications, research programs, and projects, UDRI facilitates the interaction between the public and architects, urban designers, and professionals to foster an understanding of the city's problems to engender practical solutions for improvement.

UDRI is structured around five key programs that support its vision:

Resource Centre:

Instituted in 2003, the Resource Centre hosts a collection of books, reports, maps and newspaper clippings on Mumbai, accessible to all. It also houses the Charles Correa Archives – a unique, digitised collection of the work of the renowned architect.

We maintain one of the largest repositories of research on urban planning and design related to Mumbai, including the UDRI's own publications and research. As a commitment towards digital inclusion and to enable users to visualize data efficiently, UDRI maintains a free maps database on Greater Mumbai - currently accessible via the Login Mumbai web portal: www.loginmumbai.org

Public Forum:

Begun in 1995, the Forum has grown into a platform to engage with citizens and other organisations through lectures and workshops

for understanding issues and framing solutions for the city.

Projects:

To complement the debates emerging from the Public Forum, UDRI has carried out a range of studies – for instance, on the textile mills, Mumbai's eastern waterfront and other regional dynamics.

Publications:

Since 1993, UDRI has published studies, manuals and monographs on various urban issues emerging from its research initiatives and projects. It also produces the Mumbai Reader, an annual publication on the city's key issues.

Mumbai Studio:

The first Mumbai Studio was initiated in 2005 and continues to engage with young students, international institutions, local architecture schools and municipal schools to evolve a strategy for Mumbai through academic participation

The following pages summarise a few projects UDRI has been working with in the past year.

Public Representation of Regional Plan and Development Plan

Mumbai Metropolitan Regional Plan 2036

Mumbai Metropolitan Region Development Authority (MMRDA) published the Mumbai Metropolitan Regional Plan (Draft RP) 2016 - 2036 in September 2016. This plan is critical in defining the development and growth of the Mumbai Metropolitan Region (MMR) and addressing relevant issues such as insufficient affordable housing, lack of governance, slum proliferation, and environmental issues. The RP affects 22.8 million people, yet the RP process has largely been kept out of the public domain. UDRI has conducted multiple stakeholder meetings with local leaders, members of the government and bureaucrats to discuss public representation in the Draft RP process and raise awareness for the misleading, inaccurate and incomplete parts of the RP document. UDRI has also submitted suggestions and objections (SOs) to the planning division at MMRDA on topics like transport, land use, housing and urban form, economy and livelihood, utilities, amenities, environment, heritage conservation and governance.

In April 2021, as per the notification published by the Urban Development Department¹, the 'Draft Regional Plan for Mumbai Metropolitan Region' was sanctioned as the 'Final Regional Plan for Mumbai Metropolitan Region' after modifications.

More details on the Regional Plan can be found in the Mumbai Reader 19,18 and 17.

Notified Development Plan 2014-2034

The Development Plan 2014-2034 (DP) is a planning blueprint for Greater Mumbai published by the Municipal Corporation of Greater Mumbai (MCGM). The DP is the most important document affecting the provision of basic services in the region under consideration.

¹ UDD NOTIFICATION NO. TPS-1218/1665/C.R.-79/20/UD-12, DTD. 20TH APRIL 2021

Over past several years as covered in the Mumbai Readers, UDRI has been instrumental in bringing about participatory planning in the Development Plan process through extensive advocacy and consultation with stakeholders and the MCGM. The Draft DP, published after reaching a broad consensus between the MCGM and citizens, was unfortunately turned on its head by the State. The State-sanctioned DP promotes high FSI without a commensurate increase in infrastructure and public amenities, making an adverse impact on the city. The plan, which opens up large tracts of Natural Areas for built development, fails to consider the environmental implications of doing so. It does not provide any measures for flood mitigation, improvement of air quality, augmentation of public amenities etc. Hence, these issues will not only continue to persist but will be aggravated exponentially by 2034.

Below is a detailed timeline of UDRI's involvement in the DP revision process:

- UDRI published three short films to spread awareness about the provisions of DP 2034.
- UDRI was a part of an online Shanghai Institutes for International Studies (SIIS) Roundtable on 'Post-CoVID Urban Planning and Governance in India and China/Mumbai and Shanghai' organised by the Gateway House Think Tank.
- UDRI was a panellist on an online webcast, organised by the Gateway House think tank, on 'Post CoVID Mumbai: Governance, Planning & Realignments'.
- UDRI submitted SOs to the Draft Environment Impact Assessment (EIA) Notification, issued by the Ministry of Environment, Forests and Climate Change (MOEFCC).
- UDRI worked on a social media campaign to mobilise architects, planners, social workers, and government officials towards a common understanding of Mumbai's DP.
- Urban Development Department (UDD) sanctioned certain Excluded Part (EP) from the DP Sheets.

2020

• UDRI attended a Hearing with the Deputy Director of Town Planning (DDTP), Greater Mumbai, for SO letters filed towards modifications to DCPRs made under Section 37(1AA) of the MR & TP Act 1966.

UDD sanctioned certain EP from the DP Sheets.

2019

• UDRI published a short film titled 'Free Housing - Free TB' to spread awareness about the provisions of DP 2034.

- UDD released Schedule A (sm sheets), Schedule B (EP sheets) and the DCPRs of Notified DP.
- MCGM released EP sheets in parts, in the order-Island City, Western Suburbs and Fastern Suburbs.
- UDRI sent a letter to the Hon. cm, GoM highlighting missing DP documents, and the lack of Marathi and Hindi documents.
- UDRI filed SOs on Schedule A and B, recommending all DP documents be published as one cohesive suite, EP sheets and DCPRS further modified under Section 37(1AA) of MRTP Act 1966.
- UDRI attended Hearings on SOs filed for Bandra' A' Block, Oshiwara
 District and Parigkhadi, cotton textile mills to support Mill Workers
 Association, DCPRs and EP sheets with DDTP.
- Meeting with Principal Secretary, UDD on DP issues.

2018

• UDRI conducted public meetings and meetings with experts to discuss the revised modifications to the Notified DCPRS & EP sheets.

- UDRI's suggestions were incorporated in the DP for 'Alternative approach to slum rehabilitation / upgradation.
- MCGM published the final Draft with all modifications thus far on the MCGM website as per Section 28 (4) of the MRTP Act 1996.

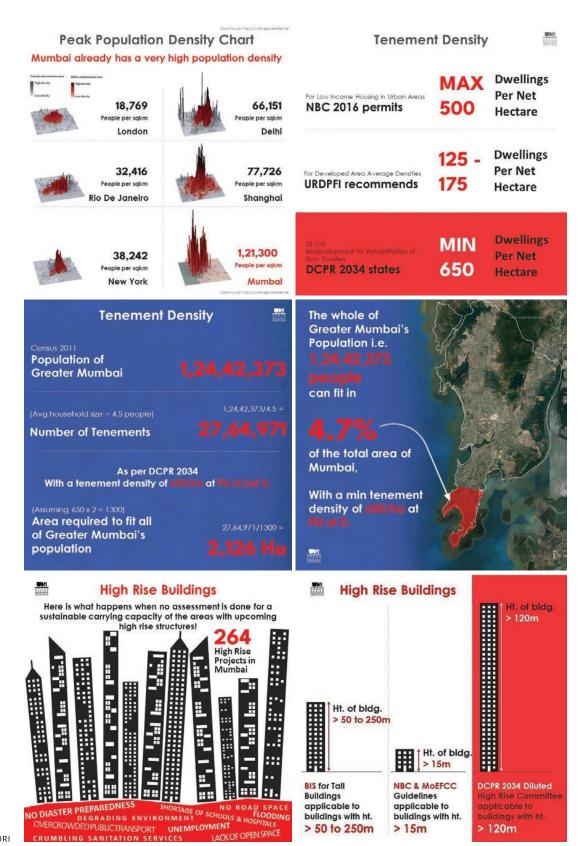
2017

- MCGM released DCR chapters in parts (1-2, 3-4, 10, 9-12); UDRI comments on DCR chapters.
- MCGM released seven areas of errors in the RDDP.

 A Planning Committee was constituted on 15.10.2016 to review RDDP and conduct large-scale public SO hearings.

2016

 CM States in the Assembly – DP Dumped. A3-member Committee constituted by GoM to look into errors in the DP. • MCGM released Proposed Land Use (PLU) documents. UDRI launched 'Dump this DP' Campaign. 2015 UDRI provided continued support to the MCGM in revising the DP. • UDRI hosted 12 stakeholder meetings on urban form, public amenity and formal housing, education, environment and sustainable city, solid waste management and sanitation and slum housing. MCGM conducted Ward-level stakeholder meetings on Preparatory 2014 Study McGM. MCGM released the Revised ELU and Preparatory Studies Report. • The second round of stakeholder meetings was held, and the High 2013 Rise Judgement was won in court. Existing Land Use (ELU) released. UDRI submitted consolidated planning principles to MCGM with 120 signatures. 2012 ELU verification guide prepared by UDRI. · UDRI surveys to identify people's priorities in collaboration with Academy of Architecture and IIE COA. • UDRI identified 12 civic themes, including urban form, finance, environment, education and water and sanitation, and created platforms for discussions through public workshops. 2011 Planning principles formulated. MCGM initiated a participatory process to disseminate 2010 information and involve stakeholders in its DP process



UDRI Short Films

UDRI, with the support of the A.T.E. Chandra Foundation, has published a series of short films and is in the process of commissioning a few more as part of its DP 2034 Campaign on pertinent issues arising out of the erroneous DP provisions and diluted DCPRs. Issues include:

- SRA tenements and the proliferation of tuberculosis;
- Impact of proposed high FSI and tenement density;
- Existing Natural Areas rendered vulnerable due to DP modifications and
- Dilution of side open spaces in the proposed building regulations.

UDRI produced a short film titled 'Free Housing - Free TB' to spread awareness about the provisions of DP 2034 which was directed by Abeer Khan. The Development Control and Promotion Regulations (DCPRs) for the Development Plan 2034 for Greater Mumbai have proposed some mega plans for the city. The film brings out several adverse issues faced by existing residents in SRA's buildings, including lack of natural light and ventilation. With the new provisions for SRA, Mumbai is on its way to becoming a breeding ground for deadly tuberculosis.

This film, Free Housing – Free TB' is available on UDRI's YouTube page at

https://www.youtube.com/watch?v=w_AAcsU18rg

The second film titled, 'Reduction in Open Spaces – a coup with numbers' explains how the DP 2034 has managed the calculation of open spaces, leading Mumbaikars to believe that their city has far more open spaces than it has in reality. This film which was directed by Shreyas Dasharathe, looks into the implications of seemingly erroneous provisions such as these, especially in the light of the recent worldwide outbreak of Coronavirus (ncovid).

The film, titled 'Reduction in Open Spaces – a coup with numbers' is available on UDRI's YouTube page at https://youtu.be/Bbqax8osyiy

The third UDRI Short Film, 'Dilution in Layout Open Spaces – a megacity with mega problems' focuses on the dilution of layout open spaces in the DP 2034, was directed by Abeer Khan. As per this provision, 40 or 100 percent of layout open spaces can now be permitted on podiums, leaving zero layout open spaces on-ground. This film explores the ramifications of these provisions.

The third film, titled 'Dilution in Layout Open Spaces – a megacity with mega problems' is available on UDRI's YouTube page at https://youtu.be/dOuAx9iiXtl

The fourth short film, titled 'Flooding Issues in Mumbai' explores the flooding issues faced by Mumbai every year. This film directed by Anand Holla and Kunal Purohit delves into the provisions for flood mitigation measures and the city's current responses. This film is available on UDRI's YouTube page at https://youtu.be/mW9CPF2hhtu

Eastern Waterfront

Mumbai Port lands present an opportunity to provide the much-required land resource for Greater Mumbai and the Region. The abundant underutilised post-industrial landscape opens up the possibility of envisioning the use of this land for public purposes. The eastern waterfront remains isolated from the rest of the city and has been largely left out of the public imagination.

Below is a timeline of the planning process of the Mumbai Port lands: **2002**: Chief Secretary of GoM constituted a Task Force to strategise future development of the eastern waterfront.

2004: MMRDA commissioned UDRI to put together a team for the preparation of a Vision Plan for the area.

2014: Rani Jadhav Committee formed to prepare a roadmap for the development of Mumbai Port lands.

2015: Rani Jadhav Committee Report released.

2016: UDRI continues to follow up on the planning process and submits SOs for Draft DP.

27th **April 2018:** MbPT approved conceptual masterplan by HCP Design, Planning and Management Pvt. Ltd.

8th May 2018: DCPRs for MbPT kept in abeyance from Notified DP 2034.

1stJune 2018: MbpT notified as a Special Planning Authority (SPA).

13th November 2018: DP DCPRs sanctioned and came into force.

7th December 2018: MbPT presented a draft proposal and DCPRs for SPA MbPT.

27th **December 2018:** Draft DP for SPA MbPT notified U/S 115(2), read with section 40(3)(d) action groups.

15th **January 2019:** UDRI hosted a public meeting to discuss the notified Draft DP for Mumbai Port lands.

21st **January 2019:** UDRI attended a meeting with the planning advisor of MbPT discussing the notified Plan.

25th **January 2019:** UDRI filed SOs to Mbpt on the DP and DCRs for area notified under SPA Mbpt.

8th February 2019: UDRI attended a hearing at the MbPT office on the submitted sos.

12th **February 2019:** UDRI attended a meeting with Chairman, MbPT to discuss sos.

20th February 2019: UDRI attended a public meeting organised by a civil society organisation, wherein the Chairman, MbpT, confirmed in the presence of the media that there were 900 objections to the plan.

28th **February 2020:** UDRI organised a public lecture by Dr Bimal Patel on the Redevelopment of the Eastern Waterfront of Mumbai.

More details on the Eastern Waterfront can be found in the Mumbai Reader 19, 18 and 17.

Public Lecture on Redevelopment of the Eastern Waterfront of Mumbai

UDRI organised a public lecture on the Redevelopment of the Eastern Waterfront of Mumbai on 28th February 2020. Eminent architect and urban planner Dr Bimal Patel was invited to discuss various aspects of the EWF, such as urban form, land use and street networks, among others. The talk was followed by an interactive 'Questions and Answers' session moderated by Mr Cyrus Guzder, Trustee, UDRI. More than 300 participants attended the public lecture. The talk was uploaded on the UDRI YouTube channel in May 2020 to reach a broader audience.







Public Lecture on the Redevelopment of the Eastern Waterfront of Mumbai, February 2020

Evaluation of SRA Schemes

Mumbai is one of the densest cities of the world. Out of the 458.28 sq km of its area, approximately 34.22 sq km is occupied by slums. This accounts for nearly 42% (5.5 million) of the city's population, who reside in poorly built, temporary shanties without proper sanitation, infrastructure and civic amenities. To address these issues, the Government of Maharashtra (GoM) established the Slum Rehabilitation Authority (SRA) in 1995. To study the effectiveness and distribution of SRA projects across all 24 administrative Wards in Mumbai in the last 25 years, UDRI initiated an evaluation of the transparency of the SRA website and its GIS portal, which documents housing schemes across Greater Mumbai.

UDRI made detailed recommendations to improve disseminating information through these virtual platforms to the State Information Commissioner (SIC), GoM. Following this, a landmark Order passed by the SIC directed SRA to implement UDRI's recommendations.

More details on this project can be found in Mumbai Reader 19.

Empowering Indigenous Communities of the Mumbai Metropolitan Region

UDRI is working with indigenous communities, the koliwadas, gaothans and adivasipadas across the MMR to understand and highlight several urban issues at a community level. The civic administration has not demarcated most of these settlements since the 1960s; the absence of land acquisition for extension led to complex issues of non-upgradation of the settlements and infrastructure, threatened livelihoods and poor infrastructure. Despite being one of the oldest in the Region, these communities are facing a loss of identity. Hence, UDRI has been assisting the communities since 2017 to achieve the following:

- a) Inclusion in the Coastal Zone Management Plan (CZMP);
- b) Demarcation of extended koliwadas, gaothans and adivasipadas;
- c) Formulation of unique Development Control Regulations (DCRs) for the demarcated koliwadas, gaothans and adivasipadas;
- d) Empowering indigenous communities and primary livelihoods;
- e) Infrastructure upgradation ideas including water, sanitation, and solid waste management.

Inclusion in CZMP

UDRI has been providing technical assistance and supporting the koli and gaothan communities on CRZ matters and the Draft CZMPS of the coastal districts of Maharashtra, published by the MCZMA. These maps are grossly incomplete and, amongst other issues, completely ignore the very existence of coastal communities and livelihoods. UDRI put forth a series of

suggestions and objections to the Environment Department, highlighting the fundamental issues in the Draft CZMPS. These include:

- The absence of existing fishing villages in CRZ areas of Greater Mumbai, Mumbai Suburban District and other coastal districts of Maharashtra;
- Land use for fishing and other allied activities, fishing zones in water bodies and fish breeding areas have not been indicated on the CZMPs as stated under Guidelines for Preparation of CZMPs;
- The 1:25,000 scale at which the plans have been published are incomprehensible and not in conformity with the 1:3960 scale Cadastral maps, as stated in CRZ Notification 2019. Due to this, it is difficult to understand which plots are affected by the CRZ line.
- · Absence of important bridges and sea links;
- Absence of certain Bunds and Breakwaters;
- Absence of vital ferry routes;
- · No indication of fishing villages;
- Incomprehensible graphics;
- Incorrectly demarcated rivers;
- Contradictions in the land use provisions of the DP and CZMP;
- Errors in the legend of the CZMP;
- Incorrect and incomplete denotation of salt marshes;
- Inaccurate hazard line;
- Inconsistencies in the CRZ boundary and hazard lines;
- Dilution of CRZ norms under the 2019 notification.



Demarcation of extended koliwadas, gaothans and adivasipadas

The Land Revenue Department (LRD) has not demarcated most of the indigenous communities since the 1960s. They have also been excluded from the Regional Plan, facing a constant threat of demolition and eviction notices. UDRI organised meetings with members of the Parliament (MPs) and the Revenue Minister to raise concerns regarding this issue and helped draft letters to the LRD on behalf of the community. Owing to the community's resilience, the LRD (State Government) began the demarcation process in the koliwadas of Greater Mumbai and completed the survey of 42 koliwadas. The LRD has been directed to publish the draft maps online. The process of acquiring land rights has formally started.

Public hearing regarding the suggestions and objections to the draft CZMP of Thane District

Image Credit: Mehak Tiku



Meeting with the Municipal Commissioner regarding special DCRs for the koliwadas and gaothans areas.

Image Credit: Mehak Tiku

Formulation of Special DCRs

The DP 2034 has not proposed DCRs for the koliwada, gaothan and adivasipada areas. However, there is an urgent need to formulate appropriate DCRs for indigenous communities and their extended areas. Through large scale consultation with stakeholders residing in these communities, UDRI has drafted the following DCRs with consideration of culturally significant heritage precincts and the infrastructure issues faced by communities:

- Type A: For declared or proposed heritage precincts;
- Type B: For repair or redevelopment of existing buildings;
- Type C: Formation of Community Land Reserve (CLR).

The special DCRs were well received by the then Municipal Commissioner, and he expressed interest in seeing a model of the Type 'C' DCR in the indigenous settlements.



Empowering Primary Livelihoods of Indigenous Communities

UDRI has been discussing various aspects of the community's livelihood to ensure the inclusion of all ancillary activities within the CZMP, upgradation of infrastructure in their workplaces and conservation of their livelihoods. Among other issues, UDRI has highlighted the need for better infrastructure and practice in market areas to facilitate and encourage women entrepreneurs.

Koliwada Gaothan Vistar Kruti Samiti (κονκs) regarding infrastructure in fish markets of Greater Mumbai

Meeting with members of

Image Credit: UDRI

Infrastructure Upgradation

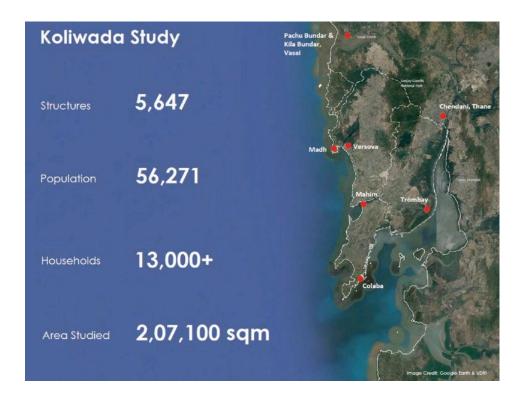
UDRI carried out extensive discussions with community representatives on infrastructure provision in the indigenous settlements, including water supply, sanitation, sewage, stormwater disposal and solid waste management.

Under this comprehensive study, UDRI has reached out to various stakeholders to advocate these issues and bring about a broader awareness. UDRI carried out extensive research through eight case study areas to evaluate sanitation facilities, living conditions, livelihoods and issues related to demarcation, amongst others. UDRI aims to assess the situation and formulate a matrix of appropriate short-term and long-term interventions to address the community's difficulties.

Study on Understanding Indigenous Communities

• UDRI conducted a three-week-long, intensive workshop in May 2019 with the students from four colleges across Mumbai, i.e. Rachana Sansad's Academy of Architecture, L S Raheja School of Architecture, Bharati Vidyapeeth College of Architecture and Indian Education Society's College of Architecture. The workshop intended to map five koliwadas across the MMR and conduct household and community surveys to generate primary data on infrastructure.

- Following this workshop, UDRI collated data from household surveys, photo documentation, physical infrastructure mapping and community interviews of the five case studies in addition to the three koliwadas studied by UDRI on a pilot basis. In total, eight koliwadas viz., Mahim, Colaba, Madh, Pathwadi, Versova, Trombay, Chendani and Vasai were studied and mapped;
- The base maps were digitised using Google imagery and onsite data with the help of the Geographic Information System (GIS). A series of GIS maps were attributed with data collected during the survey. The maps represented different layers of sanitation and allied infrastructure;
- The primary data collected was analysed and translated into a preliminary report comprising research, photographs, survey results (pie charts), maps, issues and observations;
- This study covers 13000+ households from the koliwadas, comprising a population of over 56,000 people. UDRI carried out an existing situation analysis and need assessment of existing sanitation infrastructure such as water supply and storage, toilet and bathing provisions, sewage disposal and wastewater drainage across the eight case study areas. UDRI evaluated the requirement for utilities, livelihood, housing, urban form and social amenities such as crèche, multi-purpose spaces, reading rooms and more.





Students' Interaction with fisherwomen during 'Empowering Indigenous Communities' Workshop

Image credit: Mehak Tiku



UDRI being presented the Kaka Baptista Award by the East Indian Community

Image credit: Mehak Tiku

Events

- UDRI participated in a round-table conference on 'The Water Crisis in India', organised by the Indian Environmental Association (IEA) and National Environmental Engineering Research Institute (NEERI).

 UDRI put forth suggestions on improving water availability, demand management and efficient use, water pricing, conservation of water bodies, water supply and sanitation. The conference was attended on 5th October 2019. A key achievement of the conference was that UDRI's recommendations were forwarded to the Prime Minister's Office as suggestions for the nationwide Jal Shakti Abhiyan, led by the Ministry of Drinking Water and Sanitation.
- UDRI participated in the 'EnviroVision' conference hosted by the Indian Environmental Association (IEA), in which UDRI presented a technical session on 'Environmental Paradigms and Ground Realities'. UDRI also enrolled itself and became a certified Corporate Life Member of the IEA.
- The Mobai Gaothan Panchayat of the East Indian Gaothan community felicitated UDRI with the 'Kaka Baptista Award' for being 'Gaothan Initiators 2020'. UDRI received this award in a ceremony amidst 250 community members on 9th February 2020 for its contribution and work with the Gaothans.

Fort Management Plan

Refurbishment and Upgradation of M G Road:

Since 2003, as part of its Fort Management Plan, UDRI has been promoting urban design interventions to facilitate ease of pedestrian movement, adequate public transport infrastructure, conservation of heritage, access to public spaces, among other interventions in the Fort area.

UDRI has been working with the Additional Municipal Commissioner (AMC), Western Suburbs, and with the Municipal Commissioner to improve the visibility of heritage buildings in the Fort Precinct as part of Heritage Precinct Projects. Following a series of onsite visits, documentation of the existing situation and meetings with stakeholders, it developed a comprehensive proposal for the stretch of M G Road from Wellington Fountain (South) to the Flora Fountain (North), which was agreed upon as the pilot street through the following urban design interventions:

- 1. Footpath re-engineering;
- 2. Minimal bus stop and bus pole design and
- 3. Appropriate standardised street furniture.

UDRI conducted a pilot project and coordinated with various government departments, facilitating meetings and presentations to get the requisite No Objection Certificate (NOC) and assisting the MCGM with the onsite execution of work. In a joint meeting held on 10th January 2020, the Municipal Commissioner, with all the concerned departments of the MCGM, chose UDRI as an advisor to provide support for the execution of the same urban design principles in other areas across the city. Following the directions of Hon. MC, a Project Management Unit (PMU), was set up under the chairmanship of the Joint Municipal Commissioner (Vigilance) to facilitate the implementation of urban design interventions.

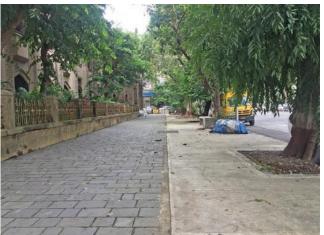
Activities Conducted:

To assist the MCGM in the implementation of the pilot street project, UDRI carried out the following activities:

- a) UDRI worked on visualisations and drawings during April 2020 as the project was in the implementation phase;
- b) Work on the pilot project commenced as soon as construction activity was permitted in the government-mandated lockdown; May 2020;

Before (Left) and After (Right) of the footpath along Mumbai University





Before (Left) and After (Right) of the footpath along NGMA







Before: Bus stop shelters creating visual clutter



Proposed: Minimal bus stop shelter design



Present: Bus stop shelter dismantled



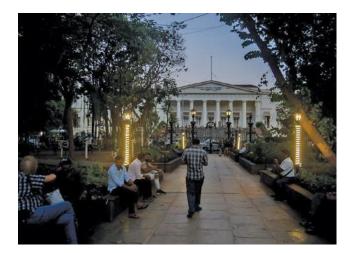


Existing (Top): BEST chowky obstructing the view of the CSMVS Museum building

Visualisation (Bottom): Relocation of BEST chowky will improve the visibility of the CSMVS Museum building

BEST Chowky Redesign

UDRI proposed the relocation and redesign of the BEST chowky that obstructs the view of the CSMVS Museum building to improve the visibility of Heritage sites. UDRI followed up on this for its relocation in a meeting with the Joint MC and Assistant General Manager, BEST.







Illumination of Heritage Buildings

UDRI proposed guidelines for sensitive illumination in the Fort precinct to enhance the appearance of Heritage Sites here at night. More than 300 Heritage sites in the Fort Precinct could be considered for illumination to celebrate the unique character of the Precinct. UDRI submitted a letter to the Heritage Cell with a list of Heritage sites for this along with information on the buildings' Heritage listing, Grade and ownership. MCGM undertook UDRI's suggestion to illuminate the Horniman Circle garden in the Fort area to improve the usability of public spaces.

Illumination of the Horniman Circle Garden, Fort





Illumination before (Left) & after (Right) street light modification

Street Safety - Footpath Illumination

Footpath illumination plays a vital role in ensuring safety as people feel unsafe while walking in the dark. UDRI proposed upgrading and modifying the existing streetlight poles, as per site conditions, to enable adequate illumination for footpaths that have inadequate lighting and therefore feel unsafe in the dark. In November and December 2019, UDRI conducted site visits for mapping street light poles to be modified to ensure adequate illumination for the footpaths. UDRI prepared an inventory of the existing streetlight poles and suggested site-specific modifications and a list of identified street light poles for further action to the Heritage Cell and the Joint Mc. The MCGM approved UDRI's suggestions, after which implementation began on the MC Road as pilot.

Signage Plan for Colour Coding of Heritage Districts

UDRI proposed colour-coding of signages in different sub-precincts in the Fort area to emphasise their character. UDRI mapped the existing signages that could be modified to incorporate colour-coded district names, important landmarks or aerial images of the district in November and December 2019.

Re-organisation and Modification of Buildings and Shop Signage

As part of UDRI's work in the Fort Heritage Precinct, it was observed that the signages used for shops and establishments have either been placed in an ad hoc manner or are oversized, covering the entire façade of the heritage buildings. In most cases, an excessive number of signages have led to visual clutter, thus becoming an eyesore for the streetscape of the city. The Fort area in Mumbai, being a Heritage Precinct, has unique historical and architectural value, and it is imperative to implement uniform, standardised signages here. UDRI proposed signage guidelines on the principles of uniformity of sizes, complementary ability with the building and the locality, placement to avoid obscuring any architectural feature or element, and retention of the original colour codes of each of the individual establishments.

Type 1A (Top): Existing (Left) & visualization (Right) of shop and establishment signage

Type 1B (Bottom): Existing (Left) & visualization (Right) of shop and establishment signage for heritage buildings









Type 2: Existing (Left) & visualization (Right) of building name signage







Type 3: Existing (Left) & visualization (Right) of arcade signage





Type 4: Existing (Left) & visualization (Right) of projection / blade signage





Urban Design Interventions

Decluttering of Streets:

UDRI had proposed reducing the visual clutter on the streets and initiated work on rationalising the use of signboards. Six streets in South Bombay were studied on a priority basis. In the first phase (November 2019-February 2020), UDRI conducted site visits on the pilot street, i.e. the M G Road stretch from Flora Fountain to Wellington Fountain, Veer Nariman Street and the path around Horniman Circle, and Netaji Subhash Chandra Bose Road (Marine Drive). These visits were conducted to map signboards that were duplicated, redundant, unreadable or in poor condition. UDRI prepared a signboard inventory that included photo documentation and individual comments on each signboard to take necessary urgent action to rationalise signages, bollards, railings and footpath engineering. The Joint Mc directed Ward officers and the Traffic Department to incorporate UDRI's suggestions to consolidate signboards. The results are visible on the pilot street, Veer Nariman Street, and Marine Drive (refer to pictures below).

Removal of redundant signages and bollards on Netaji Subhash Chandra Bose Road (left) and Veer Nariman Street (right)









Similarly, a total of 870 locations for decluttering were identified on the following streets:

- 1. Khan Abdul Gaffar Khan Road (Worli Seaface),
- 2. Pandurang Budhkar Marg and
- 3. Dr Annie Besant Road.

Intending to expand the scope of the project, the UDRI team recently conducted a survey and analysis of the following arterial streets in North Bombay between August 2020 and November 2020:

- 1. sv Road (Dahisar West Railway station to St. Michael's Church, Mahim);
- 2. Eastern Express Highway (Viviana Mall, Thane to Sion Circle, Sion);
- 3. Western Express Highway (Dahisar Toll Plaza to Bandra Reclamation);
- 4. Santa Cruz—Chembur Link Road (SCLR);
- 5. Juhu-Vikhroli Link Road (JVLR) and
- 6. LBS Marg (Muktai Nagar, Thane West to Sion Railway Station, Sion).

Examining Replicability of Urban Design Proposals for Main Streets - Mahabaleshwar

Dr Sabne Road in Mahabaleshwar, historically known as Bazaar/Market street, serves as a street for providing the basic needs of residents and as a marketplace for local agricultural produce. Presently, Dr Sabne Road forms an attractive mixed-use tourist-friendly spine with shops, eateries/restaurants, hotels, entertainment stores, religious structures, facilities and other establishments within walking distance. Though the street has retained its cultural identity as a market street, negative impacts of tourism are observed here, which may threaten this street's original fabric and environs.

To improve the market street, the Chief Officer, Mahabaleshwar and Collector and the District Magistrate (IAS) approached UDRI to carry out a preliminary study and submit a design proposal. UDRI conducted a site visit and an introductory survey of the existing situation and photo documentation, along with an onsite meeting with the Chief Officer Mahabaleshwar and Collector and District Magistrate (IAS).

Urban Design Proposals and objectives:



Improvement in physical space and pedestrian connectivity of the street



Improvement in site sanitation management



Upgrading of public spaces and landmarks as pause spaces



Aesthetic improvisation











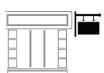
Maximum visual and physical access to open spaces



Improving walking experience through effective footpath re-engineering



Insert pause point and locate appropriate standardised street furniture



Improving visual experience by decluttering signage



Restoration & opening-up of Heritage sites for public activities and events

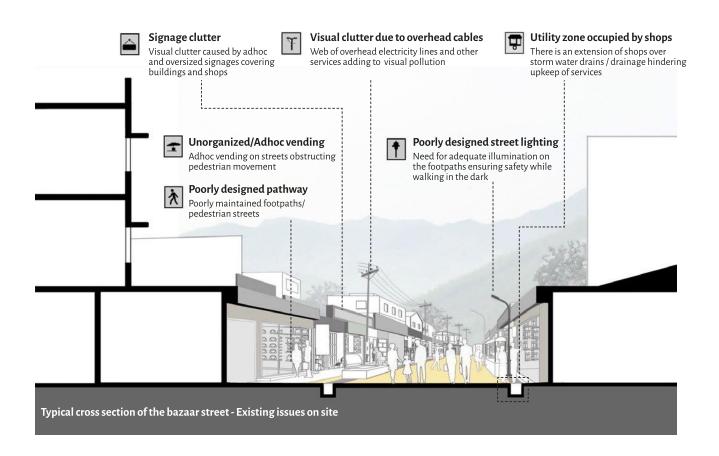


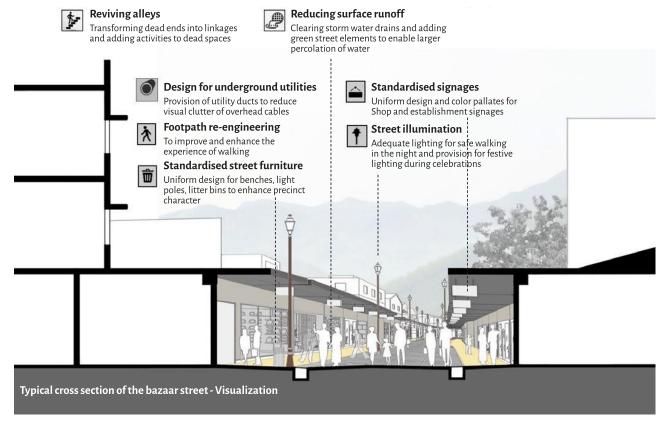












UNESCO Signage Interventions



Urban Design Research Institute (UDRI) collaborated with the Organisation for Verdant Ambience and Land Trust (OVAL Trust), Oval Cooperage Residents Association (OCRA), Art Deco Mumbai Trust (ADMT), Nariman Point Churchgate Citizen's Association (NPCCA) and Kala Ghoda Association (KGA), as part of the Federation of Residents Trust (FORT) which successfully got Mumbai's Victorian and Art Deco Ensembles nominated for a World Heritage Inscription from UNESCO. The Ensemble predominantly comprises 19th-century Victorian Gothic structures and 20th century Art Deco buildings, conjoined together by the vast open space of the Oval Maidan, a listed Grade I heritage ground. The World Heritage inscription proposal was endorsed by the Government of Maharashtra and the Government of India and sent to UNESCO as India's nomination for this prestigious international award. On 30th June 2018, the 'Victorian Gothic and Art Deco Ensembles of Mumbai', consisting of 94 sites, was inscribed as a UNESCO World Heritage Site.

View of the Oval Maidan, Churchgate

IMAGE CREDIT: CHIRODEEP CHAUDHURI FOR ORGANISATION FOR VERDANT AMBIENCE AND LAND TRUST (OVAL TRUST)

Need for Effective Signage









Improve mobility

Enhance tourism

Enhance interpretation

Inclusive plan

The Victorian Gothic and Art Deco Ensembles of Mumbai covers a large area in one of the city's prime locations. Thousands of people—daily commuters, residents, tourists, school children navigate the area using different transportation modes. A comprehensive interpretation plan was formed through the signage strategy to inculcate an awareness and a sense of public responsibility for the Heritage site. An effective signage plan, mindful of the historic fabric, streetscape, buildings, users, enhances a city's heritage consciousness. A World Heritage Site adds invaluable cultural, economic, and social value to the area and the city. It also promotes active tourism bringing in larger audiences, and hence the maintenance and upkeep of this area and its buffer zone must be ensured.



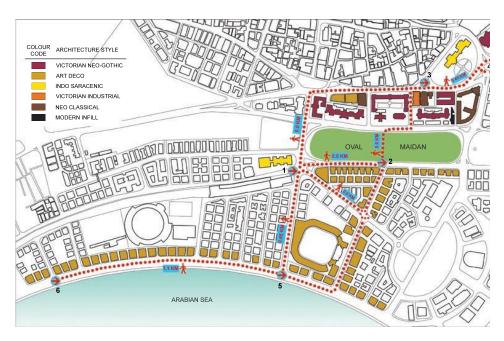
Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, Kala Ghoda IMAGE CREDIT: ART DECO MUMBAI TRUST

Aerial view of the Kala Ghoda precinct, Mumbai IMAGE CREDIT: JEHANGIR SORABJEE



Aerial view of the Art Deco buildings along Marine Drive promenade IMAGE CREDIT: ABEER KHAN FOR FEDERATION OF RESIDENTS TRUSTS (FORT)





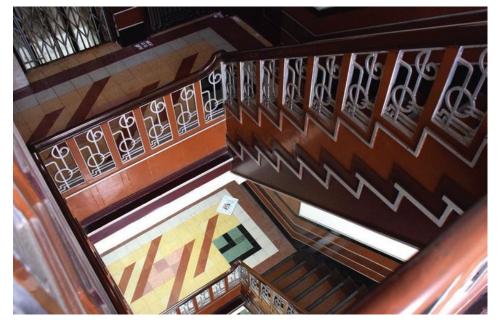
Proposed **unesco** Signage Plan CREDIT: UDRI



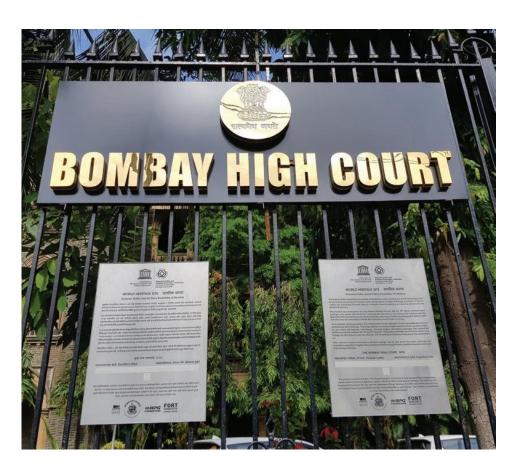
Details of the Victorian Neo-Gothic architectural style IMAGE CREDIT: AISHWARYA MOHGAONKAR



Soona Mahal, Churchgate IMAGE CREDIT: ART DECO MUMBAI TRUST



Court View, Art Deco Architectural Style IMAGE CREDIT: ART DECO MUMBAI TRUST



Signages installed at High Court IMAGE CREDIT: APOORVA IYENGAR



UNESCO Signage installed on an existing junction board at the S.P. Mukherjee Chowk, Colaba IMAGE CREDIT:

AISHWARYA MOHGAONKAR





UNESCO Signage installed at Bombay High Court.

IMAGE CREDIT:
APOORVA IYENGAR

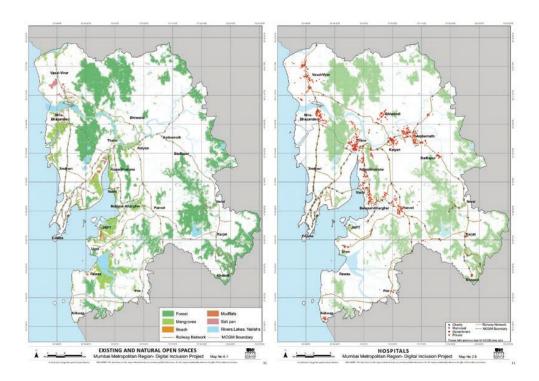
unesco Signage installed at Maharashtra Police Headquarters, Colaba IMAGE CREDIT: AISHWARYA MOHGAONKAR





UNESCO Signage installed at University of Mumbai IMAGE CREDIT: APOORVA IYENGAR

GIS and Digital Inclusion



Data Repository

UDRI has created a data repository with over 200 GIS layers on Greater Mumbai and the MMR currently available for reference at UDRI'S Research and Resource Centre (RRC). These are made available on UDRI'S GIS website, www.loginmumbai.org, for easy public access.

Greater Mumbai and MMR Mapbook

The Mumbai Metropolitan Region (MMR) spreads over 4,355 sq. km, comprising 9 Municipal Corporations, 9 Municipal Councils, 35 Census Towns and 994 villages. UDRI has collated extensive datasets for Greater Mumbai and the MMR and has prepared a Mapbook comprising 88 maps related to demography, governance, physical infrastructure, land use, education, health and several other thematics.

Mapping Indigenous Communities

Mapping 205 gaothans and 51 koliwadas in the Mumbai Metropolitan Region has been carried out by looking into data collated from ELU maps (2012), Greater Mumbai DP-SM sheets and DP sheets for the MMR region, along with discussions with the community representatives from koliwadas and gaothans.

Comparison of MCGM's Annual Environment Status Report

UDRI had undertaken a preliminary study to analyse the availability and consistency of existing data tables across all editions of the Environment Status Report, spanning from 2011 to 2019. A significant drop in the available datasets was noticed from its results, particularly since 2016, in various key chapters such as Air Quality, Sanitation, Noise and Health. Furthermore, the latest 2018-19 issue of the report consists of only 36 of the 62 uniquely identified data tables across all reports. To address these issues with the intent of improving the annual report, UDRI and Shri DM Sukhtankar put forth suggestions to the Municipal Corporation.



Mumbai Reader 19 Launch, December 2019

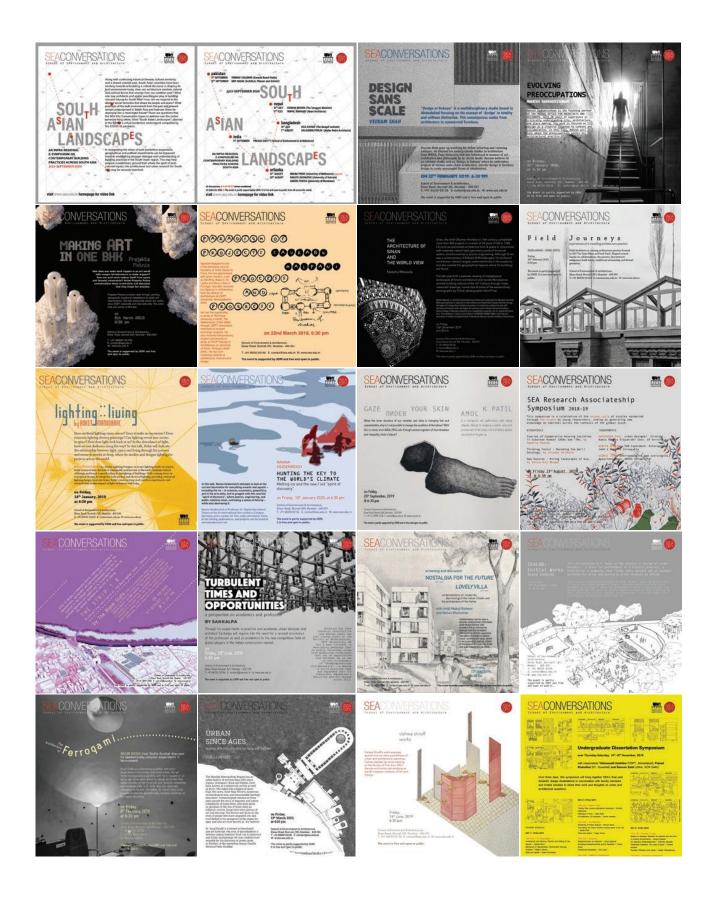
UDRI Events 2019-2020

Launch of Mumbai Reader 19

Mumbai Reader 19 was launched on 3rd December 2019 in collaboration with the International Association for Humane Habitat (IAHH). The celebrated architect and recipient of the prestigious Pritzker Prize, Prof. Fumihiko Maki, noted architect and urban planner Charles Benninger, Ms Shirin Bharucha and Ms Nayana Kathpalia launched the publication among 1,000 participants. It was a significant opportunity for UDRI, with the Mumbai Reader receiving international acknowledgement and recognition through this international conference.

UDRI and **SEA** Conversations

The Urban Design Research Institute (UDRI) collaborated with the School of Environment and Architecture (SEA) for a conversation series - a lecture series to establish a dialogue on contemporary issues and practices around the built and cultural environment. Eminent practitioners from various disciplines were invited as speakers.



Sharada Dwivedi Memorial Lecture 2019

The Sharada Dwivedi Memorial Lecture (SDML) was initiated in 2013 to commemorate her work. UDRI decided to host a memorial lecture every year to celebrate her achievements in collaboration with Sharada Dwivedi's family. Sharada Dwivedi Memorial Lecture 2019 was held on Friday, 10th May 2019. The speaker for this lecture was noted conservation architect Abha Narain Lambah, who spoke on 'The UNESCO World Heritage Inscription: Victorian Gothic and Art Deco Ensembles of Mumbai'.

Sharada Dwivedi Memorial Lecture, May 2019





Sandhya Savant Memorial Lecture

The Sandhya Savant Memorial Lecture (SSML) was initiated in 2008 by UDRI and the Sandhya Savant Urban Innovations Trust to engage with students, professionals, and experts alike, sharing unique ideas, representations in urban design, architecture and urban planning. The Memorial Lecture Series is organised in memory of Sandhya Savant, a renowned conservation architect who made several significant contributions to conservation practice in Mumbai.

The SSML 2019 was conducted on 5th March 2019 at the Sir]] College of Architecture. The speaker for this lecture was noted urban historian Prof Narayani Gupta, who spoke on 'When Architecture Becomes Archaeology'.

The SSML 2020 was conducted on 3rd February 2020 at the Sir JJ College of Architecture. The speaker for this lecture was the noted conservation architect Rahul Chemburkar, who spoke on 'Intangibles and Tangibles: Journey in Heritage Conservation'. The presentation focussed on his journey exploring the vast field of heritage and conservation.

Sandhya Savant Memorial Lecture, February 2020



