Readiness and Needs Assessment of Select Cities in India for Collaborative Learning

National Urban Learning Platform (NULP)
An Ecosystem Approach to Capacity Building
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An Ecosystems Approach to Capacity Building

Anchor Institute
National Institute of Urban Affairs (NIUA)

Nodal Ministry
Ministry of Housing and Urban Affairs (MoHUA)

Supported by
Foreign, Commonwealth & Development Office (FCDO)
The Ministry of Housing and Urban Affairs (MoHUA) released the National Urban Innovation Stack (NUIS) Strategy and Approach in February 2019 with the goal to address the needs of cities in India through large-scale and rapid digitisation of urban India using digital tools and platforms for enhanced coordination and integration between ecosystem actors. For this, the National Institute of Urban Affairs (NIUA) has created the Center for Digital Governance (CDG) to anchor and operationalise the NUIS Strategy and Approach. To facilitate adoption, CDG will work across multiple practice areas, including Governance, Platforms, Partnerships, Learning, Research, and Communications to support state and city governments in India. The launch of the CDG will kickstart two priority programs: Citizen Centric Smart Governance (CCSG) and National Urban Learning Platform (NULP).

NULP, developed with support from the Foreign, Commonwealth & Development Office (FCDO), is envisioned as a means of digitally consolidating key knowledge and skills required by urban stakeholders and making these available to all actors on the digital channel of their choice.

The platform is proposed to primarily empower India’s urban functionaries, administrators, elected representatives, civil society, industry actors and other ecosystem players to build smart, inclusive, sustainable and resilient cities.

The principles of public participation which forms the cornerstones of the Smart Cities Mission has been adopted in the National Urban Learning Platform. The NULP program will oversee the selection of a few pilot and early adoptive cities to ignite long-term adoption of the program. Feedback received through its users would help determine platform efficacy and enable continuous improvement.

Embedding innovation and collaboration in city-level functioning forms the core elements of the program and remains the primary objective of NULP. Thus, NULP, is expected to be a watershed initiative for capacity building in urban development in India, one that will pioneer training and upskilling into a new era.

This document, part of a series of knowledge products showcased through the program, intends to present a summary of features pertaining to the program and functionalities of the digital infrastructure. While some will be available in the initial stages of program deployment, the documents are intended to be iterative and will undergo revisions at different stages of program maturity. Hence, these knowledge products are purposed to document the various stages of platform development in alignment to the vision of NULP.

I congratulate and thank all partner agencies working hard to envision and develop NULP for its intended mission in Urban India.

I sincerely hope that this document will serve as a valuable source of reference for other cities/prospective users looking to develop similar platforms.

We look forward to receiving your inputs to continually enhance the platform’s design.

Hitesh Vaidya
Director, NIUA
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Executive Summary

The National Urban Learning Platform (NULP) will run its flagship program in two pilot cities in India, while also taking on a few early adopter cities to demonstrate learning and models for success replicable in other cities of India. For this purpose 19 SMART cities were scoped out to be participants for program implementation out of which 16 (enclosed below) were found to be responsive and keen to align with the program. A City Preparedness Survey was conducted with these three cities to assess ULB readiness for onboarding an online learning platform based on the principles NULP. A conference call was conducted with all nominated Nodal Officers for each of the 16 cities on 4th June 2020 to kick-off the proceedings of the survey and record preliminary expectations, if any. Post the conference call, 1x1 pre-survey briefing calls were scheduled with Nodal Officers of all 16 cities to run them through the assessment parameters and gather tacit insights into the City’s expectations, challenges and general motivation for adopting NULP to cater to their learning needs.

A questionnaire was shared to assess preparedness of the cities under consideration on the following 10 parameters:
1. Human Resource & Governance Structure (2)
2. Citizen Engagement (6)
3. Training & Development Opportunities (21)
4. Technology Resources (20)
5. Content Readiness (10)
6. Community Participation (8)
7. Innovative Initiatives (6)
8. Challenges (6)
9. City Expectations (6)
10. Briefing Call Participation (15)

*Total weightage allocated to each parameter has been listed in brackets alongside totaling to 10

Rationale for selection of parameters and relevance for the assessment were outlined in the survey framework along with the questionnaire shared for discussion in the inaugural conference call and briefing call. Insights from the survey on these parameters would form the basis of the selection of two pilot cities and remaining early adopter cities.

For convenience of the nodal officers, the responses were collected using any one out of the three methods - Google Forms, Word file and PDF to be shared via email.
The following table outlines the overall positioning of all 16 cities in terms of preparedness, as marked on a total of 100:

<table>
<thead>
<tr>
<th>City name</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pimpri Chinchwad (PCMC)</td>
<td>87</td>
</tr>
<tr>
<td>Pune</td>
<td>87</td>
</tr>
<tr>
<td>Bhopal</td>
<td>74</td>
</tr>
<tr>
<td>Chennai</td>
<td>71</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>64</td>
</tr>
<tr>
<td>Varanasi</td>
<td>61</td>
</tr>
<tr>
<td>Indore</td>
<td>60</td>
</tr>
<tr>
<td>Bhubaneswar</td>
<td>59</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>58</td>
</tr>
<tr>
<td>NDMC</td>
<td>54</td>
</tr>
<tr>
<td>Thane</td>
<td>52</td>
</tr>
<tr>
<td>Agartala</td>
<td>41</td>
</tr>
<tr>
<td>Kanpur</td>
<td>40</td>
</tr>
<tr>
<td>Shimla</td>
<td>38</td>
</tr>
<tr>
<td>Namchi</td>
<td>38</td>
</tr>
</tbody>
</table>

Key observations from the survey results of the 16 cities are as follows:

**PCMC** and **Pune** showcased maximum preparedness for a platform like NULP by obtaining higher scores on all 10 parameters under consideration.

**Bhopal** and **Chennai** followed close in terms of showcasing preparedness for the implementation of NULP in the top-band cities.

Bottom-band cities like **Namchi, Shimla, Kanpur** and **Agartala** showcased a higher need and an area of opportunity for learning platforms like NULP to bridge an existing gap on capacity building.

Middle-band cities like **Ahmedabad, Varanasi, Indore, Bhubaneswar, Chandigarh, NDMC**, Thane have showcased alternating patterns of preparedness and opportunities for adopting NULP as early adopter cities reflecting future models for success.

A closer study of the preparedness parameters in detail highlights areas of strengths and opportunities found within the cities to institute and implement the NULP program.
CITY REACH AND RESPONSE SUMMARY
The 19 cities which were contacted for initial conversation and recording responses to the city preparedness survey fall under different geographical regions of the country. The following maps shows the state-wise bifurcation of the cities contacted:

<table>
<thead>
<tr>
<th>State</th>
<th>No. of cities contacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maharashtra</td>
<td>3</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>3</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>2</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>1</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>1</td>
</tr>
<tr>
<td>Delhi</td>
<td>1</td>
</tr>
<tr>
<td>Gujarat</td>
<td>1</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>1</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>1</td>
</tr>
<tr>
<td>Odisha</td>
<td>1</td>
</tr>
<tr>
<td>Sikkim</td>
<td>1</td>
</tr>
<tr>
<td>Tripura</td>
<td>1</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>1</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>1</td>
</tr>
</tbody>
</table>

The names of the cities are as follows:
1. Kanpur (Uttar Pradesh)
2. Shimla (Himachal Pradesh)
3. Varanasi (Uttar Pradesh)
4. Agartala (Tripura)
5. Bhubaneshwar (Odisha)
6. Dehradun (Uttarakhand)
7. Lucknow (Uttar Pradesh)
8. New Delhi (Delhi)
9. Ranchi (Jharkhand)
10. Visakhapatnam (Andhra Pradesh)
11. Ahmedabad (Gujarat)
12. Bhopal (Madhya Pradesh)
13. Chandigarh
14. Indore (Madhya Pradesh)
15. Chennai (Tamil Nadu)
16. Pimpri Chinchwad (Maharashtra)
17. Pune (Maharashtra)
18. Thane (Maharashtra)
19. Namchi (Sikkim)

The 16 cities for which the response has been recorded are:

<table>
<thead>
<tr>
<th>Ahmadabad</th>
<th>Indore</th>
<th>Thane</th>
<th>Kanpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandigarh</td>
<td>Pune</td>
<td>Agartala</td>
<td>Namchi</td>
</tr>
<tr>
<td>Chennai</td>
<td>PCMC</td>
<td>Bhopal</td>
<td>Ranchi</td>
</tr>
<tr>
<td>New Delhi (NDMC)</td>
<td>Shimla</td>
<td>Bhubaneshwar</td>
<td>Varanasi</td>
</tr>
</tbody>
</table>
The responses of the 16 cities were quantified for assessment based on an evaluation rubric annexed in this document (Annexure ?). Each city was provided a score on a total of 100, of which their positioning with regard to the study for consideration as a pilot and early adopter city was ascertained.

The rubric scheme was designed to encompass various capabilities of the Urban Local Bodies (ULBs) within these cities with regard to manpower abilities, technology and infrastructure, content readiness and partnerships with probable content partners. This would help understand the cities that could helm the capacity building charge through initiatives like the NULP.

Sub-criterias under the parameters for assessment for which a score was attributed is outlined as follows:

1. **Human Resource & Governance Structure**
   a. Total number of employees
   b. Number of permanent staff
   c. Number of Contractual staff
   d. Number of ICT trained staff
   e. Number of Departments (within ULB)

2. **Citizen Engagement**
   a. Engagement of citizens in community-based programs
   b. Formally adopted a citizen-engagement plan
   c. Engagement of citizens in budget preparation
   d. Communication of the budget to the citizens
   e. Publishing of an annual report (including more than financial information)
   f. Conducting of citizen satisfaction surveys

3. **Training & Development Opportunities**
   a. Regular updation of opportunities for participation in municipal education, training or development
   b. Professional development funding to employees towards learning and education (e.g. training)
   c. Having a policy for encouraging and recognising employees’ participation in learning activities
   d. Having a policy of providing any extra weightage of specific domain related certifications in transfer and promotions of employees
   e. Supporting of staff to supplement their education with relevant post-secondary training and/or attendance at relevant conferences
   f. Formal allocations for funds to ensure that staff receives the training necessary to support any required accreditation

4. **Technology Resources**
   a. Having access to:
      ii. Any existing ‘Learning Management System’ for providing training?
      iii. High-speed internet access
      iv. Information Technology (IT) support service (manpower)
      v. An IT plan

5. **Content Readiness**
   a. Availability of the following content from various municipal functions for showcase:
      ii. SOPs
      iii. Manuals
      iv. Digital learning materials
      v. Research papers
      vi. Best practices
6. Community Participation
   a. Domain specific sectoral tie-ups (i.e. formal or informal tie-ups with educational institutions like college of town planning, climate change, financial institution etc)
   b. Participation in conferences and seminars
   c. NGOs associated with ULB
   d. Community based programs run by ULB
   e. Partnerships between the city and the private sector/industry actors supporting the learning strategy

7. Innovative Initiatives (as outlined by the ULB)

8. Challenges
   a. Encountered due to lack of training or capacity building in
      a. identified municipal functional areas such as waste management, water, municipal finance etc.
      b. Any other related to training or capacity building

9. City Expectations (summary of expectations outlined in the survey)

10. Briefing Call Participation
    a. Activeness of ULB during one to one briefing call & interest shown for NULP
City Expectations

General themes of expectations cited by cities through pre-briefing call interactions or enlisted via the survey form are listed below:

1. **Structure and Method in Implementation Approach**
   a. Clear guidance and structure for course topics/ modules
   b. Ground realities of ULBs to be strongly considered while developing a plan of action for such programs
   c. Inculcating a regularity of learning in city-functioning
   d. Incentives and impetus by Ministry (MoHUA) through mandates or funding support to aid voluntary participation and adoption of these programs in the MC.

2. **Access to tacit and codified knowledge through:**
   a. Sharing of personal/anecdotal and technological expertise
   b. Enabling of learning through community interaction
   c. Insights into best practices and information of new technological interventions

3. **To promote standardisation of peer processes/approaches like:**
   a. All government related documents like policies, SOPs, SLBs, RFPs etc.
   b. Templates and framework for all the various government documentation
   c. Governance for

4. **Continuous building of a central knowledge repository:**
   a. Promoting robust mechanisms for a mutual learning repository
   b. Platform for niche and high value skills relevant to ULBs are showcased
   c. Curated globally for adoption and advancement
   d. Easy to consolidate and navigate via a ‘plug and play’ model

5. **Cross pollination of learning across city ecosystem:**
   a. Bringing state and non-state land stakeholders together to exchange ideas
   b. Building strengths and avoiding duplication in efforts
   c. Creation of multi-stakeholdership in areas of expertise.

Key expectations highlighted by specific city stakeholders are additionally outlined below:

a. Clarity expected on definitions for ICT-viewed personnel by Bhubaneswar
b. Customised training for employees above 55 years to help them even after their retirement by PCMC

1. **By Chennai**
   a. Need for deployment of NULP-like initiatives to be expedited to match general capacity building requirements.
   b. Enhanced learning channeled through AR/VR to help amplify value proposition.
   c. Support from the Ministry through adequate funding/compulsory training mandates to aid the adoption of NULP in initial stages.
2. By Pune,
   a. Training and capacity building calendar to be made on a monthly basis prior.
   b. Provisions for webinar series and crash course on subjects related to stakeholder interest.
   c. Specific content on usage of ICT effectively by each stakeholder.
   d. Provision of getting certifications and further incentives to opt for courses on NULP.
   e. Availability of details of all vendors dealing with different projects in urban sectors
   f. Details of consultants along with past project information to invite consultants for open bidding.

3. Domain specific skills and capacity requirements
   a. WASH and Integrated solid waste management (SWM) highlighted by Shimla, Agartala, Pune, Chandigarh, Kanpur
   b. Stress and Time Management, specialised computer training for different age group of employees,
      Basic Health, Employee Rights and child rights training for school teachers by Thane
   c. Efficient management in Urban Governance by Namchi
   d. Comparative analysis of consolidated data on various urban infrastructure developments like parking
      policies, e-mobility, waste management etc. by Pune
   e. Municipal finance especially for dealing with legal issues by Kanpur
   f. Continuous and progressive exercises to aid adaptation to the changing trends by Varanasi
   g. Data Analytics training for ULB staff to conduct analyses of data uploaded on Smart Open Data Portal
      and facilitate decision and policy making by Thane.
   h. Information seminars and conferences along with showcases of successful case studies by Kanpur
City Challenges

Challenges for ULBs under the study have been across various factors affecting functioning of municipal initiatives and general administration. General themes pertaining to the need for capacity have cited by cities through pre-briefing call interactions or enlisted via the survey form are listed below:

1. Motivations of ULBs and its employees
   a. Manpower supporting daily municipal services generally do not understand the impact of their misled action.
   b. Indifference towards the use of IT among employees and public at large
   c. High risks associated with content sourcing/creation through only voluntary participation.
   d. Lack of right incentives to retain users on learning journeys
   e. Reluctance for participation in IT-related interventions
   f. Lacking proactivity of HoDs in taking up the initiative of training their own department in the required skill sets.
   g. Clarity on benefits of programs like NULP for larger ULBs are unknown.

2. Capabilities of ULB employees through lack of:
   a. Inclusion of personal and professional aspirations of the user base while developing certifications/learning paths
   b. Internal capacity mandated hiring of consultants for many jobs.
   c. Dedicated technical trained staff
   d. Department specific training and capacity building

3. Interdepartmental impediments
   a. Disjoint approaches at MC and SPV level for adoption and implementation of such initiatives
   b. Dependencies in inter-departmental coordination augmented by COVID-19

4. Lack of structure in Training/Learning strategies
   a. Primitive or obsolete content requiring updation and renewal
   b. Reporting mechanisms to relevant higher authorities are troublesome and
   c. Unavailability of schedule and trainer facilities are not consistent
   d. Needs for a regularised training system

Key expectations highlighted by specific city stakeholders are additionally outlined below:

5. By Namchi
   a. Lack of inclusivity of NE states in national initiatives like these.
   b. Limited availability of tech infrastructure.
   c. Trust deficit between government and people

6. By PCMC
   a. Pushed to cultivate own training center and build internal capacity to current trends and initiatives.
   b. Lack of mandate for both specialist and generic training should be mandated for all the employees
   c. Lack of performance and attendance linkages to increments
7. **By Ranchi**
   a. No proper training strategy in place for contractual and daily wages employees.
   b. Hierarchical disarray caused by some supervisor-level employees constituting the daily wages cohort.
   c. Centre-led community participation programs have no monitoring mechanisms for mapping/showcasing efficacy.

8. **By Varanasi**
   a. Lack of active Industry participation in capacity building of resources and a shared module and understanding with the associated organisations.
   b. Need for collaboration to develop indigenous as well as locally relevant customised learning platforms for capacity building of resources.
Innovative Initiatives

City-wise innovative initiatives undertaken for furthering principles of SMART cities in aspects of City Improvement (Retrofitting), City Renewal (Redevelopment) and City Extension (pan-city SMART Solutions) are showcased as follows:

1. Bhopal
   a. **ICT and Civil Infrastructure projects** based on the immediate and future needs of the citizen and city.
   b. **Integrated Command and Control Center** for effective governance and intercommunication between various departments.
   c. **Intelligent traffic Management System** with state-of-the-art ‘No Helmet’ project
   d. **Water SCADA project** for water resource management, for cleaner roads and a biogas methanation plan to reuse dry waste.
   e. **Digital Door Numbering** for smart-mapping of households.
   f. **India’s second largest Arch bridge** created to connect different CBDs of the city
   g. **Bhopal Plus Mobile Application** for the city services provisions
   h. **Smart Roads** created spaces for bicycles, pedestrians, with green covers in-sync with existing green cover of Bhopal

2. NDMC
   a. **NDMC 311 CITIZEN App** - Mobile App for easy accessibility of civic services through expansion of the digital platform to a user friendly mobile cloud based
   b. **Unique Addressing of NDMC properties** for the urban dwellings in the city of New Delhi based on a geo-spatial solution, depicting an alpha-numeric smart address code for each property.
   c. **Promotion of usage** QR codes on NDMC website and digital app for various legal and civic payments.

3. Shimla
   a. Integration of Whatsapp mechanism for grievance redressal for civic purposes.
   b. Dedicated on-call garbage vehicles.
   c. Online payment mechanism of taxes and online approval of building maps.

4. Ahmedabad
   a. **UCD Department** of AMC has started various innovative programmes like:
      ii. Operation and management of ‘Pay & Park’ at various spots.
      iii. Selling of vegetables/fruits at a doorstep project called Vegetables-on-Wheels (VOW).
      iv. Sales and marketing of SHG/ALF/CLF products and items.
      v. SAKHIHAAT - to provide employment and self-employment to rag-pickers.
      vi. Segregation of solid waste at dumping sites.

5. Chandigarh
   a. **E-Governance and Digitalisation of all citizen centric services**
      ii. E-pass for street vendors
      iii. Command Center for covid-data, traffic management and surveillance and composting of biodegradable waste
      iv. Mandatory installation of solar rooftop panels in residential houses in Kanal.
      v. Manufacturing of tiles with building waste
      vi. Use of waste plastic in construction of roads
   b. **Efficient utilisation of renewable and non renewable resources**
6. Chennai
   a. No mention of innovative measures undertaken by the ULB for the survey however, as highlighted in the briefing call there are multiple innovative initiatives undertaken by the Team in road, park and digital community centre development.

7. Thane
   a. DigiThane App was introduced to incorporate and promote e-governance and community engagement through the digital platform with its 2+ lakh user base.

8. Indore
   b. Initiatives undertaken for Swachh Bharat Mission, Heritage Development, Riverfront Development and Smart Education

9. Namchi
   a. Public Address System for efficient waste collection through timely collection of waste and enhancing citizen involvement in keeping the City clean.
   b. Other initiatives pertaining to drone-enabled 3D mapping of cities referenced in prior engagement calls.

10. PCMC
   a. Multiple payment options for the citizens like UPI, online payment gateway system, PoS, Kiosks, Card payment etc.
   b. War room constituting real time tracking and monitoring of COVID-19 patients.
   c. Smart Sarathi App - for engaging with its citizens.
   d. Conducted an event to help local entrepreneurs and startups showcase their ideas to investors and private companies.
   e. Conducted a college-level Hackathon with PCCOE and PCSCL to find solutions on various problems statements which were defined by the departments of PCMC.

11. Pune
   a. Single window clearance for NOCs related to building permissions can be procured online for Architects by submitting a single common application form.
   b. Town Planning Scheme restarted through 651 hectares of Uruli Devachi and Phursungi villages with public access to owners meetings and consultations.
   c. Riverfront development planning project through Community participation: for the Pune River Rejuvenation Project through participation in draft proposals.
   d. Urban Street Design Guideline (USDG), Pune to provide a mechanism for establishing street systems to accommodate growth and provide transportation choices for city livability.

12. Varanasi
   a. Solid Waste Management with innovative use of RFID tagged bins through GPS monitored waste collection vehicles and surveillance at collection points for monitoring, controlling and analytics of waste management activities.
   b. Safai-mitra, a smart attendance system for cleanliness workers using biometric and face ID systems using personalised apps.
   c. Smart Grievance redressal system through Smart Kashi app for effective monitoring, redressal and inter-department coordination for grievances raised by citizens and authorities.
   d. COVID-19 Integrated War Room through conversion of Kashi Integrated Command Control Centre (KICCC) into a centralized monitoring and control centre for the administration, regarding controlling and management of various citizen centric facilities during and post lockdown.
   e. Shiksha Express for turning scrap bus into a makeshift school with classes conducted by volunteers to marginalised sections and slums.
   f. E-pass facility for allocated zone-wise plying of auto rickshaws and e-rickshaws easily accessible and controllable on an app.
This section comprises questions related to staff strength. Information like total number of employees, permanent and contractual staff, number of departments, ICT trained staff were captured using this survey form and formed the only parameter for quantification in the scoring scheme because the ICT trained staff is crucial for training about NULP content creation.

The relevance of capturing these questions is to gather information about the probable content consumers, content creators and platform implementers for the ULB. The information related to the total departments in the ULB is useful to understand the probable number of domains for activation.

A summary of city capabilities as highlighted in the survey from the 16 cities is enclosed in the table and positioning chart below:

<table>
<thead>
<tr>
<th>City</th>
<th>Total Employees</th>
<th>Permanent Staff</th>
<th>Contractual Staff</th>
<th>ICT Trained</th>
<th>% of ICT Trained Staff</th>
<th>Number of Departments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agartala</td>
<td>1662</td>
<td>536</td>
<td>38</td>
<td>0.42%</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Ahmedabad</td>
<td>38582</td>
<td>32518 (24706 AMC +7812 other AMC institute)</td>
<td>6064</td>
<td>5.14%</td>
<td></td>
<td>1986</td>
</tr>
<tr>
<td>Bhopal</td>
<td>5686</td>
<td>4641</td>
<td>1045</td>
<td>8.79%</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Bhubaneswar</td>
<td>1071</td>
<td>1020</td>
<td>51</td>
<td>42.02%</td>
<td></td>
<td>450</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>7864</td>
<td>2995</td>
<td>4669</td>
<td>3.10%</td>
<td></td>
<td>244</td>
</tr>
<tr>
<td>Chennai</td>
<td>20640</td>
<td>17265</td>
<td>3375</td>
<td>83.66%</td>
<td></td>
<td>17265</td>
</tr>
<tr>
<td>Indore</td>
<td>15096</td>
<td>3677</td>
<td>12419</td>
<td>0.10%</td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Kanpur</td>
<td>6121</td>
<td>-</td>
<td>-</td>
<td>2.45%</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>Namchi</td>
<td>46</td>
<td>5</td>
<td>0</td>
<td>0.00%</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>NDMC</td>
<td>10344</td>
<td>9369</td>
<td>975</td>
<td>0.00%</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>PCMC</td>
<td>8251</td>
<td>7617</td>
<td>634</td>
<td>45.78%</td>
<td></td>
<td>3777</td>
</tr>
<tr>
<td>Pune</td>
<td>21715</td>
<td>15643</td>
<td>6072</td>
<td>6.91%</td>
<td></td>
<td>1500</td>
</tr>
<tr>
<td>Ranchi</td>
<td>2978</td>
<td>399</td>
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Key observations from responses in this section of the survey are as follows:

1. **Indore** has enlisted a high number of contractual staff clarity on which would have to be explored further from a user base and governance perspective for a platform like NULP.

2. For **Kanpur** details on permanent and contractual staff would have to be explored to define the target user base.

3. For % of ICT trained staff:
   a. Cities like **Chennai**, **PCMC** and **Bhubaneswar** have a good ICT trained staff strength hence, they will have ease in deploying a digital learning platform.
   b. Middle band cities having ICT trained staff are **Ahmedabad**, **Bhopal**, **Shimla** and **Pune**.
   c. Low band cities are constituted by Chandigarh, Kanpur, and Varanasi.
   d. Lowest band cities were observed as NDMC, Thane, Agartala, Indore, Namchi and Ranchi.
   e. Clarity would need to be sought from NDMC on ICT trained personnel while Namchi being a newly formed SMART city provides great potential to anchor long-term adoption of such programs.
Citizen Engagement Activities

As citizen participation and civic engagement are building blocks of any ULB to aid overall operations. This section is considered important for gaining a perspective of ULBs performance in engaging citizens in the activities, planning and budgeting of the ULBs.

The following chart shows the performance of various cities in the section of citizen engagement:

Key observations from responses in this section of the survey are as follows:

1. **Pune, PCMC, Bhubaneswar, Bhopal, Ahmedabad** and **Thane** have almost similar level of work in citizen engagement.

2. Reallocating and redesigning community based activities to bring better outputs is necessary in cities like **Shimla, Agartala, Kanpur, Namchi**, and **Ranchi**.

3. Formalised channels of engagement are lacking in low to middle band cities.
Training and Development Opportunities

This section focuses upon understanding if the ULB promotes employees to regularly update their skills through training and opportunities. Comparative findings for the cities under consideration in this section are:

The following graph represents the city wise performance (score) in this section:

1. 12 out of 16 cities regularly update opportunities of participation in municipal education, training or development

2. 11 out of 16 cities provide professional development funding for its employees towards learning and education (e.g., training, travel to conferences, etc.)

3. 11 out of 16 cities have some policies (or internal instructions) for encouraging & recognising employees’ participation in learning activities

4. 6 out of 16 cities give weightage of specific domain related certifications in transfer and promotions of employees

5. 9 out of 16 cities support staff supplementing their education with relevant post-secondary training and/or attendance at relevant conferences

6. 9 out of 16 cities formally set aside funds to ensure that staff receives the training necessary to support any required accreditation

7. 12 out of the 16 cities provide developmental support to staff (e.g., performance reviews, coaching, mentoring or on the job training)
Other key observations from responses in this section of the survey are as follows:

1. **Pune, PCMC, Indore, Bhubaneswar, and Ahmedabad** are the highest scoring cities in this section.

2. **Namchi** and **Ranchi** have recorded no formalised opportunities for training and development which is an important and an urgent gap to be filled with initiatives like NULP.

3. **Thane, Agartala, Kanpur** have recorded negligible formalised opportunities for training and development as well.

4. **Bhubaneswar**.
   a. 60% of the employees have received ICT based training in the last 12 months which has been on the higher side for cities under study.
   b. Funding for professional development and other training accreditation is not formally allocated and utilised under miscellaneous expenditures.

5. **Bhopal**.
   a. 60% of employees received ICT training in the last 12 months as well.
   b. HR policy having a component for encouraging and recognising employees' participation in learning activities is in process.

6. **NDMC**.
   a. ICT training was not provided to any employee in the past year which
   b. This is worth exploring to gauge potential challenges for deploying a digital learning resource in the ULB.

7. **PCMC**.
   a. 8.22 % of the employees participate in job-related education and training

8. **Varanasi**
   a. 40% of the employees are engaged in job-related training and education which is the highest recorded under the study yet.
   b. 20% of the employees have received ICT based training in the last 12 months which is on the higher side of responses received for this segment in the survey.

Hence, it is evident that most cities which participated in the preparedness survey are doing fairly well in identifying training and development opportunities and encouraging their employees to take different training and certifications.
Technology Resources

Given the requirements of the interfacing with the digital infrastructure of NULP basic technological infrastructure in ULB is the backbone of successful implementation of the platform.

The following graph shows highlighted positioning scored by different cities in this section:

Summary of observations from responses in this section of the survey are as follows:

1. Availability of technological resources are evenly spread across cities in consideration.

2. 5 out of 16 cities have a Learning Management System implemented. The content of the LMS can be migrated to NULP for better content coverage. These 5 cities are Thane, Pune, Chandigarh, Bhopal and PCMC.

3. All the cities have high speed internet in place. This is very important for creating and consuming resources on NULP.

4. All the cities have IT support services in place

5. 13 out of 16 cities have a defined IT plan. Cities with opportunities to develop IT plans are Chandigarh, Namchi and Varanasi.

6. Additional resources highlighted by Pune:
   a. Formulation of The City Digital Strategy to provide a three-year action plan for Pune to emerge as a true Digital City on the global landscape.
   b. PMC CARE (Citizen Assistance Response and Engagement) - a 360 degree framework to extend to its citizens for effective and responsive governance.
   c. PMC mobile app - Pune Connect integrates all its services like grievance registering, property tax payment, water bill payment, contacts directory, tender information, through a single portal. Its social media platform enhances the reach of CARE to the masses.
Content Readiness

Content readiness is the key component of assessing city preparedness in terms of content migration and development capabilities of the ULB. A city with some digital content which can be migrated to NULP will prove to be beneficial for activation and onboarding.

Hence, this section aims to capture program readiness through content availability like SOPs, manuals, research papers, best practices documents in digital/soft copy formats. After analysing the responses captured by the cities the following inferences are deduced:

1. 11 out of 16 cities have ready SOPs and manuals which can be migrated to NULP
2. 13 out of 16 cities have digital learning contents which can be migrated to NULP, which depicts an important aspect to curate digital materials in the coming phases
3. 5 out of 16 cities have research papers and best practices documents which can be migrated to NULP

The following graph shows highlighted positioning scored by different cities in this section:

Summary of observations from responses in this section of the survey are as follows:

1. **PCMC** and **Pune** showcase high number of ready materials for sharing with the remaining ULBs
2. Most of the cities are lacking repositories of research papers, best practices documents and other reference papers.
3. NULP at its early stage will require active support of those ULBs who have already available content.
4. Sufficient training has to be imparted to cities who do not have such important SOP’s and other collections.
City Specific Observations:

1. **NDMC** - Only SOPs available at the ULB for immediate migration to a learning platform.

2. **Ahmedabad**:
   a. High number of SOPs are available at various departments of the ULB but could not be made available in the stipulated time.
   b. There is a large repository of content in hard-copies which would have to be made digital.

3. Initial focus during city onboarding would have to be placed on interdepartmental coordination for creating a knowledge inventory in cities like **Ahmedabad** and **Chennai**.

4. Initial focus during city onboarding would have to be on content development in cities like **Bhubaneswar**, **Shimla**, **Thane**, **Agartala**, **Namchi**.

5. Fair readiness for contribution to NULP is found in **Bhopal**, **Chandigarh**, **Indore**.

6. Clarity on the number of SOPs and Manuals available at the ULB will have to be explored in cities like **Kanpur** and **Ranchi**.

7. Given the number of innovative initiatives taken, there is large scope to develop digital learning materials and best practices documents for **Varanasi**.

8. **Additional learning channels highlighted by Pune**:
   a. eLearning Solution for PMC Schools - Using technology and creation of standardised SOPs for modernised learning through Virtual Classrooms, Digital Classrooms, and Adaptive LMS.
   b. Capacity Building - City Digital Literacy Centre setup as a digital literacy centre to train employees on basic IT skills.
Partnerships and NGO participation are an integral feature of the NULP platform especially with respect to activating the quadruple helix. Hence, higher importance has been placed for cities with partnership opportunities through NGO education institutions and industry actors.

The following inferences are deduced in this section of community participation:

10 out of 16 cities have sectoral tie ups (i.e., formal or informal tie-ups with educational Institutions like collage of Town planning, Climate change, Financial Institution etc., other)
8 out of 16 cities have industry partnerships
8 out of 16 the cities have NGOs participation in various departments

The following graph shows the score attained be each city for community participation:

Key observations from responses in this section of the survey are as follows:

1. Chennai, Pune and Bhopal have showcased stronger initiatives for promoting and sustaining community participation.
2. Lack of information on other aspects of community participation would have to be explored to scope content partnerships for the city of Bhubaneswar
3. The current status of the ULB engagement with respect to community participation is low in Shimla and Agartala.
4. Initial focus during city onboarding in cities like Indore and Namchi would have to be on landscaping partnerships and partnership-based initiatives that can be leveraged for the program.
5. Key city-based partnerships:

1. Bhopal:
   a. Partnerships in the Educational Sector with RGPV and MANIT as well as private companies tie-ups with CISCO, HPE etc.
   b. It has partnerships for Knowledge Sharing and Mentoring.
   c. Support required in Innovative Practices and in other non-financial sectors.
2. NDMC
   a. Higher number of formal partnerships supporting ULB learning strategy aiding the content
development scope of the program.

3. Ahmedabad
   a. Primary support at the SPV level provided to DAY-NULM - Deendayal Antyodaya Yojana-National Urban
Livelihood Mission to support reduction in poverty and vulnerability of the urban poor households

4. Chandigarh
   a. Partnerships in the Educational Sector with IITs, Punjab Engineering College, Punjab University and
College of Architecture.
   b. Community based programs are under social mobilisation and institutional development.

5. Chennai
   a. 25 Partnerships supporting the ULB’s learning strategies
   b. Extensive tie-ups exist with well known academic and non academic institutions like Anna University,
IIT-M, 100RC, ITDP etc.

6. Thane
   a. Partnerships with S.P Jain Institute of Management Research (SPJIMR) for Sustainable Development
Goals (SDG) outlined by the ULB.

7. Kanpur
   a. There is no clarity on the numbers of formal and informal partnerships for the ULB.
   b. Associations with ICT- IIT Kanpur and HBTI Kanpur which could be a starting point for developing
academic coursewares.

8. PCMC’s partnerships with
   a. Quick Heal Technologies - to provide cyber security training to the employees.
   b. Tech Mahindra - to help upgrade the infrastructure of ITI.
   c. Tata Motors, Toyota Kirloskar Motor, FUEL NGO, Hero Motocorp - to provide IT and soft-skills training.
   d. Other partnerships across the quadruple helix - College of Engineering Pune, Pimpri Chinchwad
College of Engineering and Indian Institute of Tropical Meteorology

9. Pune’s partnerships with:
   a. Rockefeller Foundation for 100 resilient Cities
   b. Bernard Leer Foundation for Urban 95 Program for child friendly cities
   c. Pune City Connect for community based skill development under Lighthouse Program, Digital Literacy,
School Improvement Plan.
   d. Birmingham City Council for Smart Nutrition to explore eating habits and understandings of healthy
diets among people in Pune.

10. Ranchi
    a. Partnerships with various NGOs to support them with the National Urban Livelihood Mission (NULM).
    b. Several tie ups in the domains of GIS, Data Analysis and Procurement Management have been outlined.

11. Varanasi
    a. Formal partnership with IIT-BHU for knowledge sharing, technical assistance, workshops and webinars.
Summary

A compilation of all the sections above highlights the following opportunity areas for NULP to further its initiatives for an ecosystem approach of capacity building:

1. The gap for a ‘Learning Management System (LMS)’ highlighted by many ULBs in the study can be fulfilled by the distinct and advanced offering of learning platforms like NULP.

2. Disparities in cities’ formal allocations for capacity building through planning and budgeting can be mitigated by a digital learning platform like NULP to help align with the goals of the ULBs.

3. The ecosystem approach and interactions facilitated by the design of the NULP program will help cities strengthen capabilities with respect to citizen engagement and community participation.

4. Most of the cities have numerous tie ups with institutes and NGOs, these can be leveraged for sourcing a pool of content for multiple domains.

5. Average ICT trained staff for the cities surveyed is 15% out of which most of them are below the average category depicting an urgent gap to be filled.

6. Clarity on contractual and permanent staff allocations for cities that have highlighted the difference would be integral for defining the user base.

7. Technology readiness is observed in all 16 cities which will be helpful for implementation for NULP, however existing initiatives to further build on can be leveraged in only 5 cities.

The survey results showcase a wide variety of city strengths and requirements needed to assess the priorities for selection of pilot cities and early adopter cities for NULP. Collated city insights along with individual city responses will be taken into consideration from decision-making authorities to develop city implementation priorities for the program.
Way Forward

Finalisation of key implementation priorities for the pilot and early adopter cities will entail a set of steps going forward in order to co-create lasting solutions for ecosystem learning. At this stage of program maturity, while the majority of the steps would be helmed at a CPMU level, it will be essential for City Landships and ULB SPOCs to provide adequate support for the successful institution and implementation of NULP.

As management units at the central level, the following activities have been outlined as critical for activating cities on the platform. For the upcoming program phase, NIUA as the anchor institute of NULP will aim to:

1. **Inform** participating cities and stakeholders on the benefits envisioned from creating learning opportunities and users on the growing need for continuous learning and upskilling through NULP.

2. **Assess** the intent and commitment of participating cities to identify contenders for the program, while developing program readiness of others best suited to the plan.

3. **Establish** a governance structure to ensure effective institution of the program with buy-in from City Leadership

4. **Source** high-quality resources in the urban domain in line with city’s development goals

5. **Enable** partnerships for activation of priority verticals as outlined by the Ministry

6. **Implement** continuous changes to the platform to stay relevant and ensure ease of use and value-add

7. **Co-create** platform and platform level key performance indicators for monitoring and evaluation

8. **Drive** participation and adoption among learners by continuous content curation/management to ensure engagement and knowledge exchange on the platform through gamification techniques

City Onboarding of pilot and early adopter cities is envisioned to be a quarter-long engagement with additional efforts outlined for effective monitoring and evaluation of program initiatives. The cycle of onboarding will be deployed through key phases like Outreach & Activation, ULB Onboarding & Program Setup, Content Migration & Development and Partnership Activation. Gathering of feedback from these cities will also be integral to the iterative nature of the program on which adequate focus will be placed once the activities of the quarter are completed.

Both pilot and early adopter cities will pave the way for how the platform is further adopted by other cities in India and learnings will cater to its long-term vision. City Landships will play a pivotal role in defining the way capacity building efforts in city ecosystems are looked at from a central, state and a local level to ensure the cascading benefits reach the intended recipients.
ANNEXURES
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About NIUA

Established in 1976, National Institute of Urban Affairs (NIUA) was tasked to bridge the gap between research and practice on issues related to urbanisation and suggest ways and mechanisms to address urban challenges in the country. For more than 40 years now, NIUA has been the vanguard for contributing to, and at times, building the urban narrative for a fast evolving Urban India. The Institution has been actively working on bringing forth key areas of concern for urban India in order to build the urban discourse at various urban scales.

It has utilised its competencies in research, knowledge management, policy advocacy and capacity building to address urban challenges and continuously striving to develop sustainable, inclusive, and productive urban ecosystems in the country. It has emerged as a thought leader and knowledge hub for urban development in India and is sought out by both Indian and International organisations for collaborations and partnerships in India’s urban transforming journey. NIUA is committed towards aligning its efforts towards achieving Sustainable Development Goals (SDGs) through all its initiatives and programs.
About FCDO

The Foreign, Commonwealth & Development Office pursues the national interests of the UK and projects the UK as a force for good in the world. FCDO promotes the interests of British citizens, safeguards the UK’s security, defends the UK’s values, works to reduce poverty and tackle global challenges with international partners.