NATIONAL URBAN DIGITAL MISSION FELLOWSHIP PROGRAM 2022:
A COMPENDIUM OF INSIGHTS

National Youth Conclave

PLATFORM

PROCESS

PEOPLE

NATIONAL INSTITUTE OF URBAN AFFAIRS
Good Practices in Climate Action: A City Climate Alliance Partners' Initiative
January, 2023

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NIUA
National Institute of Urban Affairs

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National Institute of Urban Affairs
1st floor Core 4B
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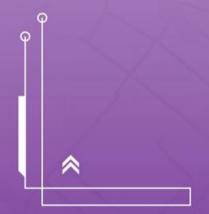Lodhi Road
New Delhi 110003
Phone: 011-24617517, 24617543, 24617595
Fax: 011-24617513
Website: www.niua.org

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NATIONAL URBAN DIGITAL MISSION

FELLOWSHIP
2022-23

National Youth Conclave
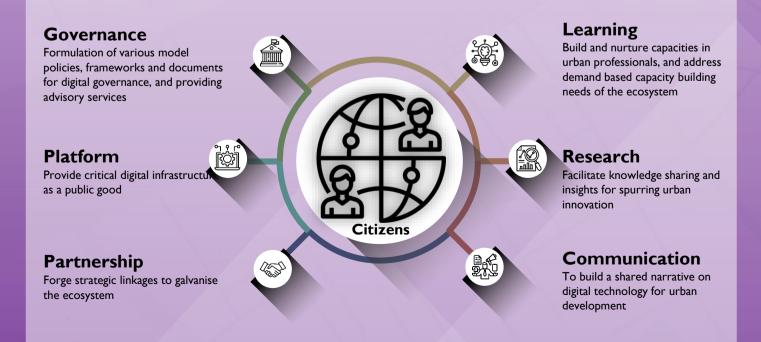
National Urban Digital Mission

National Urban Digital Mission aims to build the shared digital infrastructure that will strengthen the capacity of the urban ecosystem to solve complex problems at scale and speed. It is built as a public good and provides the ecosystem actors the foundational digital building blocks, ready-to-use platforms, standards, specifications, and frameworks.

India is already using public digital infrastructures like JAM (Jan Dhan-Aadhar-Mobile), IndiaStack and UPI to address crucial needs at speed and scale. Using these India has compressed a 47 year journey into a decade, ensuring that nearly every Indian can now access a bank account easily.

With a renewed focus on Atma Nirbhar Bharat, MoHUA has launched the National Urban Digital Mission to streamline and coordinate efforts of the urban ecosystem by harnessing technology to leapfrog our urban transformation journey.

Vision
To improve the ease of living for citizens by creating a national urban digital ecosystem that delivers accessible, inclusive, efficient and citizen centric governance in India's 4400 towns and cities.

Governance
Formulation of various model policies, frameworks and documents for digital governance, and providing advisory services

Platform
Provide critical digital infrastructure as a public good

Partnership
Forge strategic linkages to galvanise the ecosystem

Learning
Build and nurture capacities in urban professionals, and address demand based capacity building needs of the ecosystem

Research
Facilitate knowledge sharing and insights for spurring urban innovation

Communication
To build a shared narrative on digital technology for urban development

Citizens

Acknowledgements

Shri Hardeep Singh Puri

**Minister of Housing and Urban Affairs;
and Petroleum and Natural Gas,
Government of India**

MESSAGE

आवासन और शहरी कार्य मंत्री
पेट्रोलियम एवं प्राकृतिक गैस मंत्री
भारत सरकार
Minister of
Housing and Urban Affairs; and
Petroleum and Natural Gas
Government of India

Message

I commend the Fellows of the National Urban Digital Mission for their dedicated commitment to strengthening digital infrastructure in more than 4,800 urban areas in India. Your work is going to be crucial in realising the objectives of the Digital India Mission which aims to digitally enable 1.4 billion Indians.

Delivering municipal services to citizens across the towns and cities of the country via digital and electronic means will help unlock the potential of our cities and make them more productive. More importantly, digital access and comprehensive interface with their local governments will lead to an informed, inclusive and innovative citizenry.

The National Urban Digital Mission is part of a set of transformational schemes and reforms that the government has implemented to move the country towards '*Su-rajya*'. This will be the period of Amrit Kaal when the hopes and aspirations of all Indians will be realised.

My compliments to the Ministry of Housing and Urban Affairs and the National Institute of Urban Affairs (NIUA) in shepherding the Fellows of this important program as they grow to become leaders of tomorrow.

I congratulate the Fellows in their ongoing endeavours and wish them bigger successes ahead.

New Delhi
28.02.2023

(Hardeep S Puri)

Quotes

Shri Manoj Joshi

Secretary, Ministry of Housing and Urban Affairs, Government of India

"In the backdrop of urban India's municipal architecture aimed at promoting synergistic governance by concurrently sharing the powers and responsibilities among the Union and the States, the National Urban Digital Mission Fellowship internalizes the offerings of our youth at the foundational level by allowing them to brainstorm, develop and test solutions that work for 4800 urban local bodies"

Shri Kunal Kumar

Joint Secretary and Mission Director, Smart Cities, Mission Ministry of Housing and Urban Affairs, Government of India

"The constitutional ideal of Cooperative Federalism is embedded in transformational governance reforms and the National Urban Digital Mission Fellowship Programme provides a unique opportunity to young leaders across India to work within the system in addressing some of the most pressing urban issues in India, and experience what making change happen looks like."

Quotes

Shri Rahul Kapoor

Joint Secretary, Deendayal Antyodaya Yojana - National Urban Livelihoods Mission and Prime Minister Street Vendor's AtmaNirbhar Nidhi, Ministry of Housing and Urban Affairs, Government of India

" As the digitized delivery of municipal services is envisaged at a pan India scale based on good governance principles at its core, embodying participative, transparent, responsive, effective and accountable governance, National Urban Digital Mission Fellowship Programme alludes to deep diving the youth into participatory planning processes, policy thinking, change management and innovation. "

Shri Hitesh Vaidya

Director, National Institute of Urban Affairs

" The Fellowship Programme is a special track of National Urban Digital Mission directed at passionate urban trailblazers who want to digitally scale up with speed the future of municipal transformation in India. The programme successfully evoked ambitious young Fellows to dip their toes and heads at an opportune time when municipal governance in India faces unprecedented challenges. "

Quotes

Nabamalika Joardar

Head – Innovation Unit, National Institute of Urban Affairs

"As the National Urban Digital Mission is being implemented to digitize governance, improving the ease-of-living and ease-of-doing-business in Indian cities, the Fellowship Programme hosts professionals from a broad range of disciplines and a keen interest in urban domain. Equipped with a municipal laboratory to re-orient local-level service-delivery processes at the cusp of cutting-edge technology and administrative advancements, the fellows strive and thrive through overcoming blockers, interfacing with myriad stakeholders to synthesize topical issues better."

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01

Introduction

Introduction

The National Urban Digital Mission Fellowship (NUDMF) is an initiative of the government of India to empower urban local bodies and citizens through the use of digital technologies. The fellowship program aims to attract and groom young and talented individuals who are passionate about using technology to drive positive change in urban areas.

The fellowship program will provide an opportunity for fellows to work closely with urban local bodies and gain hands-on experience in using digital technologies to address various urban challenges such as transportation, housing, waste management, and citizen services.

In addition, NUDM's partnership with state governments has been instrumental in the implementation of smart city projects, where the fellows' expertise in digital technologies has helped to improve the efficiency and effectiveness of servic

The fellowship will offer a stipend, along with opportunities for professional development, networking and mentorship.

- Mission facilitation at the State/UT level
- Supporting NUDM implementation across stages
- Strategic communications with urban stakeholders
- Managing external relations with ecosystem partners
- Understanding the state & ULB needs pertaining to delivery of municipal services, creating and augmenting toolkits, frameworks and other capacity building artefacts in the state.

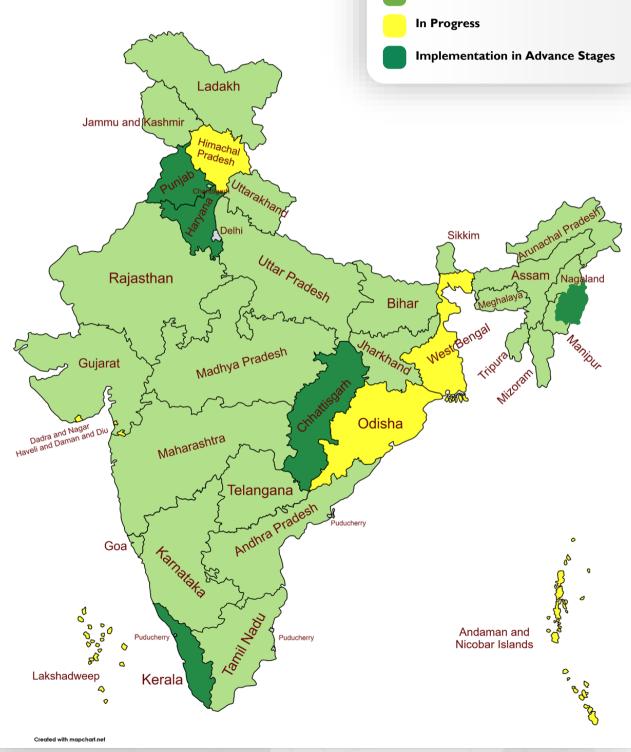- Worked closely with the development teams to ensure that solutions are designed with the customer user experience, scale / performance, and operability in mind,
- Supported in user experience testing and demo creation for new product releases
- Supported the continuous integration and release process of applications in a micro-service based cloud environment.
- Program documentation and technical reporting

MOU SIGNED STATES

- **MOU Signed**
- **In Progress**
- **Implementation in Advance Stages**

Ladakh

Jammu and Kashmir

Himachal Pradesh

Punjab

Chandigarh

Uttarakhand

Haryana

Delhi

Rajasthan

Uttar Pradesh

Sikkim

Arunachal Pradesh

Assam

Nagaland

Bihar

Meghalaya

Manipur

Gujarat

Madhya Pradesh

Jharkhand

West Bengal

Tripura

Mizoram

Dadra and Nagar Haveli and Daman and Diu

Maharashtra

Chhattisgarh

Odisha

Telangana

Andhra Pradesh

Puducherry

Goa

Karnataka

Puducherry

Puducherry

Andaman and Nicobar Islands

Lakshadweep

Tamil Nadu

Kerala

Created with mapchart.net

NUDM Fellowship First Cohort

Inaugural cohort of the NUDM Fellows. The NUDM Fellows will work with the Ministry of Housing and Urban Affairs, state and city #governments to facilitate the delivery of municipal services across India!

MoU signing with Gujarat

Envisioning an urban transformation by utilising digital infrastructure in the state of Gujarat, the Gujarat Urban Development Mission signed a tripartite MoU with Ministry of Housing and Urban Affairs and NIUA

MoU Signing with States

UPYOG & NULP

MoU signing with MP for NUDM and NULP

MoU signed with Govt. of Madhya Pradesh to implement NUDM in the state and NULP to emphasis on training and capacity building of urban local government officials.

03

Fellowship Journey

Fellowship Journey

Inception

2nd March, 2022

State Engagements

April 2022 - Till date

Online Service Assessment

Services gaps and

Services mapping (ULB wise)

at state

April 2022 - Till date

Data integration

June 2022 - Till date

Data gathering, sharing and validation

June 2022 - Till date

04

Articles

MoU signed with Govt. of **Ladakh** to implement NUDM in the state

- **MoU signed with States**

- **Data Diagnostic**

- **Online Service Integration**

- **Department Mapping**

Urban Service Delivery Consultation in Bhopal

The consultation was chaired by Shri Neeraj Mandloi, Principal Secretary, UADD, MP and Shri Kunal Kumar, Joint Secretary and Mission Director, Smart Cities Mission, attended by Shri Rahul Kapoor, Director, Smart Cities Mission (SCM) along with other senior officers from state government and NUDM.

MoU signed with New Delhi Municipal Council to implement NUDM
NUDM aims to envision delivery of common municipal services for citizens through a single platform.

Urban Service Delivery Consultation in Punjab
The consultation was also attended by Shri Rahul Kapoor, Director, Smart Cities Mission, Shri Manpreet Singh, CPO, NUDM-NIUA, Smt. Simarjit Kaur, Manager, E-Sewa and the officials from state government and NUDM.

Second Urban Service Delivery Consultation in Rajasthan
The second state level consultation on urban service delivery was held in Jaipur, Rajasthan. .

MoU signed with Govt. of Uttarakhand
NUDM aims to envision delivery of common municipal services for citizens through a single platform.

Article- 01

Building Capacity for Urban Practitioners through the Implementation of the National Urban Learning Platform

by Shaurya Mall

Building Capacity for Urban Practitioners through the Implementation of the National Urban Learning Platform

- Shaurya Mall

Urbanisation is a defining trend of the 21st century, with over half of the world's population now residing in urban areas. This proportion is expected to increase to two-thirds by 2050, making it imperative that urban professionals are equipped with the knowledge and skills necessary to effectively manage and develop complex urban systems. However, a lack of capacity among professionals working in Urban Local Bodies (ULBs) in developing countries, such as India, poses a significant challenge.

Rapid urbanisation in India has led to a myriad of issues, including inadequate infrastructure and poor living standards for residents. To address these issues, the central government has implemented various policies and missions, such as the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), aimed at enhancing the livability and sustainability of Indian cities. However, the success of these policies and missions is contingent on the ability of urban practitioners working at the grassroots level of governance in the ULBs within states to implement them effectively. It's a challenge that many of these employees lack the necessary knowledge, skills, and resources for effective implementation. They have limited exposure and access to information concerning best practices, case studies, standards, and other guidelines regarding the urban sectors they are involved in. The ULB employees may also be unaware of the latest technologies and innovations that can improve the quality of life in urban areas, resulting in missed opportunities for urban areas to become more efficient and resilient. This can lead to poor project planning, inadequate resource allocation, and a lack of accountability from the stakeholders involved.

Capacity building of ULB employees forms an essential component to enable the effective implementation of government policies and initiatives. The current state of capacity building among ULB employees is hindered by several deterrents, including scarcity of funding for training and development programs, a lack of perceived immediate impact on work, limited access to training opportunities, and a lack of time to attend training and capacity-building programs.

These capacity building initiatives may also not be effectively implemented and monitored, leading to a lack of long-term measurable impact.

To solve this issue, the Ministry of Housing and Urban Affairs (MoHUA) in collaboration with the National Institute of Urban Affairs (NIUA) launched the National Urban Learning Platform (NULP) in 2020. The NULP is designed to be a one-stop-shop for urban professionals, local government officials, and other stakeholders to access bite-sized content on a wide range of topics in the urban domain. It provides access to a variety of resources, including training modules, case studies, best practices, and policy guidelines, The NULP aims to be flexible, user-friendly, and accessible to government officials across the country. The platform is also designed to be easily updatable so that new resources and information can be added when required.

The NULP promotes collaboration and networking among urban professionals and stakeholders through several tools with features that allow users to share information, create content, and ask questions. This paves the way for sharing of best practices, dissemination of new knowledge, and development of new partnerships.

The current phase of implementation of the NULP is focused on scaling up the program to include all the 4800+ ULBs in India. To achieve this goal, the NULP team is conducting workshops in clusters across states, which allows for deeper engagement with the states' officials and speedy adoption among the States and Union Territories. For instance, the interactive workshop held in Jaipur on December 20, 2022, attended by 41 officials from the Urban Local Bodies of the Jaipur and Bharatpur cluster, was a key event for NULP in Rajasthan. The event provided an opportunity for the NULP team to sensitise and raise awareness about the platform among the targeted beneficiaries, and to gain a comprehensive understanding of their specific needs.

Workshops are an integral aspect of the NULP program and have a significant impact on the roll-out and adoption of the platform across India. As more ULB employees start using the platform, they will be better equipped to deliver high-quality services to citizens, leading to improved service delivery and citizen satisfaction. Through such workshops, the NULP is enhancing the existing levels of capacity building of urban practitioners and contributing to the growth of urban development initiatives in India.

Article- 02

Citizen Centric Urban Platforms: An Absolute Necessity

by Sumeet Thakur

Citizen Centric Urban Platforms: An Absolute Necessity

- Sumeet Thakur

There is no doubt how important digitization is. The complex process of solving organisational problems using technical solutions is a new industry standard. The reason this is such an important field is that computer technologies have been integrated into virtually every economic industry, sector and even organisation operating in the modern economy. Everywhere we look, we will find computers and other technological systems or devices powering business decisions and operations. It is virtually impossible to run modern business without utilising computer-driven technology, which is why every organisation is considering IT solutions as of base importance.

What is a Software Platform?

A platform can be defined as a set of software and an integrated ecosystem of resources that help businesses to operate in a non-segregated manner. A platform enables growth through integrated connections of resources across other platforms or resources with ability to connect external tools, data and processes.

Platforms remove the limitations of a single suite of products as we can add or remove applications and tools as the business progresses without having to start from scratch or to even deal with complicated migrations. A software platform coordinates the working of multiple products all together. A platform is a complex environment which can be developed to simplify the ease of accessibility of multiple services on a single source.

Following diagram below illustrates the basic structure of a Platform

Figure 2.1: Platform-as-a-Service model

Urban Citizen Services

e-Governance in urban development is the use of information and communication technology in the operation and maintenance of urban services in an effort to make government services transparent, efficient, effective and productive. Boosting public sector accountability, efficiency and sustainability is the key goal.

Countries worldwide have been reforming their government public service delivery. India is one of the few countries with maximum digitization of government services. ICT based development is being perceived as a major tool in meeting challenges of Indian ULBs. The initiative of using Information Technology in urban management started in the late nineties after adoption of 74th Constitutional Amendment Act (CAA)in 1994 when ULBs became constitutional entities of local governance.

Need and Importance of e-Governance in Urban Domain

Development of knowledge networks is a common goal of many authorities. There are many urban services such as Property Tax, Trade License, Automated building plan approval, Garbage collection management etc. There are over 4,400 towns and cities in India and around 40 crores inhabitants today. According to the World Cities Report 2022 by UN-Habitat, India's urban population is expected to reach 675,456,000 in 2035. Urban citizens need all online services without hassle on the go and on the tip of their thumbs. Indian cities suffer from inefficiencies of service delivery and severe stress on Infrastructure. Quality of Urban services is required to improve across the nation and Platform based approach is the only reasonable way forward.

Challenges in Urban Service Delivery

Urban domain is filled with diverse challenges which need to be dealt with. Our cities have to overcome these challenges in order to realise the true potential of growth and sustainable development. One of the biggest challenges is to include more citizens in the governance process and to educate the citizens for the same. Indian cities suffer from a lot of inconsistencies in service delivery mechanisms such as protecting personal privacy, appropriate security control, maintenance of electronic records, addressing IT human capital control, ensuring uniformity in service delivery mechanism etc. Other factors including weak municipal finances, lack of capacity, weak urban planning and infrastructure deficit also put extra stress on delivery of services. Most of the ULBs in India are struggling to self-sustain themselves. Other challenges which are listed below also contribute heavily to already struggling ULBs

- Need based technology adoption
- Lack of awareness about value of e-Governance amongst citizens
- Lack of Documentation and data availability
- Coordination amongst local, regional and national e-Governance initiatives
- Lack of Standards and performance indicators to access service maturity
- Lack of ICT equipment and availability of stable connection to network

Road Ahead

A platform integrates all digital urban services into a single software. Citizens and all public or private stakeholders can have a common platform for all the services. Urban Platform for deliverY of Online Governance (UPYOG) is one such platform. It works on the principles of open source technology and is freely available for all to customise according to their own need and requirements. This platform aims to assist municipal bodies across India to improve service delivery mechanisms, achieve better information management and be transparent. Some of the features of UPYOG Platform are : integrated approach, cloud-based system, dynamic allocation, customizable, follows common standards etc. As of now UPYOG provides nine reference modules for ULBs to acquire and implement and more Urban modules are in the process of being integrated.

In conclusion a platform-based approach to urban service delivery is much more desirable, efficient and sustainably beneficial for every urban stakeholder. Integrated ICT based solutions are going to ease the life of every citizen to maintain consistency in their own data. With all the benefits, a Platform based approach to urban service delivery should not be ignored.

E- Governance Challenges and Mitigation – Punjab

by Anmol Thakur

E- Governance Challenges and Mitigation – Punjab
- Anmol Thakur

Identifying and Resolving problems in E governance services at Patiala (Punjab).

- NUDM Punjab team prepared a checklist of requirements for every E governance service in Patiala. The stakeholders problems and issues were taken into consideration and with respect to that appropriate measures were provided by the NUDM fellow and team, all the issues were resolved with proposals in a 2 months time period.

- NUDM Punjab team developed branch-wise, category-wise, request/grievance listing in existing PGR application - a refined list of category-wise grievances was formulated by Program fellow, Punjab so that there will be ease to the ULB to channel the requested grievance to the right department for redressal.

- Issuance of Licenses - Rate listing of trade licenses and notification procedure with reference city rates was provided by Program Fellow, Punjab.

- UPIN integration with property details, especially with e-Naksha - with UPIN integration state can easily have access to the property change, mutation and category change of property in both property tax and building plan approval system, here assistance was provided and engagement was done by PF, Punjab between 2 different departments to add this feature in Services.

- Requirements were taken as to customize the old services at state level to fetch the desired data and inputs.

Integration of National Dashboard with State Dashboard for 6 Services of UPYOG.

- Integration of Dashboard was done in 5 months and proper assistance was provided to the state and system integrator by the program fellow, Punjab.

- Issues, gaps and problems were identified and resolved by Program Fellow Punjab with the assistance of NUDM team.

- Stakeholder meetings were arranged by Fellow to avoid conflict and Smooth working while respecting the timelines.

- Data errors were identified by fellow in between the dashboards (National and state) and were further proceeded to the concerned person for resolving.

App development planning for new modules

- New Services to be developed were identified and Standard Operating Procedures (SOP) was created for the same Services.

- Proposals were prepared to provide funds and assistance to the state to develop new and old services.

- Service mapping was done by program Fellow Punjab - Missing data and gaps were identified to achieve the goals of the mission and appropriate support was provided to the state and officials to cater gaps and challengers.

- Requirement of Punjab state were taken as to create new services for citizen

Best Practices - Punjab (M Sewa)-

- WhatsApp as a channel: To make the most of technology, WhatsApp, the widely used application, has been leveraged. Citizens can raise complaints and receive bills and receipts through the application. The launch of this service is in the process and is expected to be launched soon.

- Integration with Finance Module: To improve efficiency and transparency, the receipts and payments flow directly into the finance system.

- GIS integration: The property tax system has been integrated with GIS, which allows officers to monitor the progress of ULBs through a GIS dashboard. The integration with Digit locker is also in progress, enabling citizens to keep their licenses secure. The implementation of a UPI enabled QR code with the BBPS system has also been done, which will increase digital transactions in the ULBs.

- Payments via WhatsApp: In the coming months, the option of paying through WhatsApp will also be available.

The following services are delivered through M Seva:

- Property Tax – Assessment & Payment
- Apply Water/Sewerage Connections
- W&S Billing & Collection
- Apply and Issuance of Trade License
- Miscellaneous/Universal Collection
- Apply and Issuance of Fire NOC
- Double Entry Accounting System
- GIS Application
- Public Grievance Redressal

Public Feedback on M seva Services-

- "Good Afternoon, This is Prabjot Singh from Mohali and as a citizen of Punjab. M-sewa App was very helpful for me , I have a Residential property of 20 marlas and my property tax was yet to be paid and the last day of paying tax was very close . I was outside my city due to official reasons so i used this app and in 15 min everything was done. There was no need to go anywhere carrying Paper. It was very very favorable me and i think it would be helpful to rest of Citizens , Thank you"

- "Good Afternoon, I am Simar Dillon from Amritsar, I am a citizen of Punjab and I am using M-sewa App for getting benefits in E services from Punjab . PGR (Public Grievance Redressal) is one of the services which is helpful to citizens as well as the officials as they can get the status of their city and well get our problem resolved. There was a problem regarding my water supply bill so I raised an issue in PGR. My issue was resolved very quickly and I need not go anywhere for this issue. Thanks for preparing and maintaining this platform which is helpful for the citizens ."

Article- 04

सीखना और अभ्यास, मेरी फेलोशिप यात्रा

by Sumeet Thakur

सीखना और अभ्यास, मेरी फेलोशिप यात्रा

- सुमीत ठाकुर

मेरी फेलोशिप यात्रा जनवरी 2022 में शुरू हुई जब मुझे पहली बार ईमेल मिला कि मुझे चुना गया है। इस फेलोशिप के लिए चुने जाने पर मैं वास्तव में उत्साहित और गौरवान्वित था। अगले कुछ हफ्तों में हमें शहरी क्षेत्र में चल रही प्रथाओं से परिचित कराने के लिए लेख और प्रकाशन दिए गए। प्रलेखन आवश्यकताओं को पूरा करने के बाद, हम सभी को प्रवेश कार्यक्रम में आमंत्रित किया गया जो कि अध्येताओं के लिए आयोजित किया जा रहा था।

मार्च 2022 में, मैं दिल्ली में उतरा। हिमाचल प्रदेश का निवासी होने के नाते, मेरे लिए एक बड़े शहर और वह भी भारत की राजधानी में होना एक बिल्कुल नया अनुभव था। प्रेरण कार्यक्रम का पहला दिन एक शानदार अनुभव था क्योंकि हमें शहरी ज्ञानक्षेत्र में अनुभवी शहरी व्यवसाइओं से मिलने का मौका मिला और उन्होंने अपने अनुभव और विशेषज्ञताऐं साझा की और हमें आने वाले दिनों के लिए तैयार किया। हमें मिशन यानी नेशनल अर्बन डिजिटल मिशन से परिचित कराया गया और हमें NIUA और MoHUA के बारे में भी जानकारी दी गई।

दिन बीतते गए और अंत में मिशन, शहरी ज्ञानक्षेत्र, यूएलबी की संरचना, और बहुत कुछ के बारे में समझने के बाद प्रेरण कार्यक्रम समाप्त हो गया। फेलो को उनके संबंधित राज्यों/केंद्र शासित प्रदेशों को सौंपा गया था जहां उन्हें मिशन का नेतृत्व करना था। फेलो एक-एक करके अपने राज्यों में तैनात होने लगे, जबकि बाकी लोग भी मिशन की गतिविधियों में लगे हुए थे।
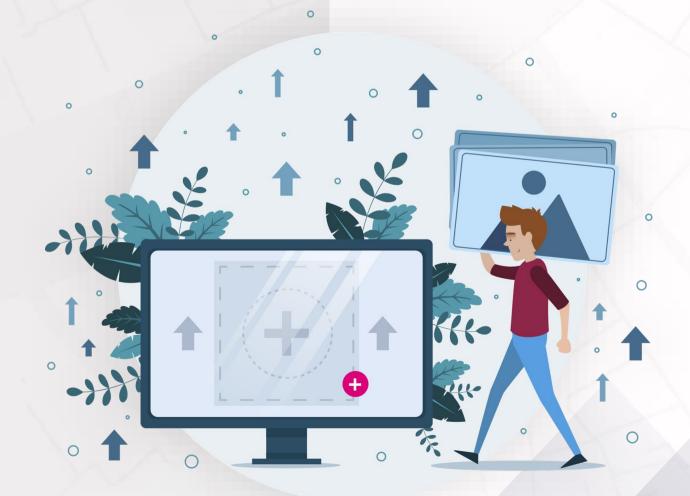
कंप्यूटर विज्ञान पृष्ठभूमि से होने के कारण मुझे विकसित हो रहे वेब प्लेटफॉर्म यानी UPYOG (ऑनलाइन गवर्नेंस की डिलीवरी के लिए अर्बन प्लेटफॉर्म) को समझने के लिए कुछ गतिविधियां सौंपी गई थीं। मुझे मंच के कार्यात्मक पहलुओं का व्यापक प्रदर्शन दिया गया था और विशिष्ट मॉड्यूल के चल रहे विकास में तार्किक बगों की पहचान करने के लिए भी सौंपा गया था। साथ ही चूंकि UPYOG एक ओपन सोर्स प्लेटफॉर्म है, मुझे वरिष्ठ बिजनेस एनालिस्ट श्री मनीष शर्मा और श्री गौरव कुमार के सख्त मार्गदर्शन में प्लेटफॉर्म के प्रलेखन को दोहराने का काम भी सौंपा गया था। मुझे एनआईयूए के प्रकाशित मानकों के साथ मौजूदा मॉड्यूल कार्यक्षमता को मैप करने का अवसर दिया गया। ये मानक देश भर में उपयोगकर्ता और डेटा प्रबंधन के लिए मानक प्रथाओं को निर्देशित और बनाए रखते हैं।

अंत में मुझे मिशन के लिए संलग्नता गतिविधियों को सुव्यवस्थित करने के लिए मेरे विशिष्ट राज्य में तैनात किया गया। साथ ही उत्तराखंड राज्य और केंद्र शासित प्रदेश जम्मू-कश्मीर भी मुझे सौंपे गऐ थे। जहां तक राज्यों/केंद्र शासित प्रदेशों के साथ जुड़ाव का संबंध है, यह एक सतत प्रक्रिया है और विभिन्न राज्य शहरी सेवा वितरण में परिपक्वता के विभिन्न चरणों में हैं। मैं इस तथ्य पर जोर देना चाहता हूं कि विभिन्न राज्यों में तैनात फेलो एक दूसरे के बीच अपने स्वयं के अनुभवों को साझा करने और विभिन्न परिस्थितियों में विभिन्न परिदृश्यों को समझने और समस्या निवारण में एक दूसरे की मदद करने के लिए नोड्स का एक जाल बन गए हैं। हमारी फेलोशिप मैनेजर सुश्री नबामलिका जोआरदार हमारी इस यात्रा के दौरान सभी अध्येताओं के लिए बहुत ही आनंददायक मार्गदर्शक रही हैं, हमारे अनुरोधों को प्राथमिकता देने और प्रबंधक से अधिक एक दोस्त की तरह हमारे साथ व्यावहार रखना , मैं इस अवसर के लिए और और भी बहुत कुछ करने के लिए उन्हें धन्यवाद देने के लिए पर्याप्त जोर देना चाहूँगा ।

जहां तक मेरी सीखने और विकास यात्रा का संबंध है, मैं गर्व से कह सकता हूं कि एनआईयूए में सीडीजी टीम ने मुझे काम के दौरान सीखने के पर्याप्त अवसर दिए हैं और मुझे कार्यभार संभालने और कई मौकों पर उत्कृष्ट प्रदर्शन करने के लिए प्रोत्साहित किया है, लेकिन अभी भी आगे बहुत लंबा रास्ता तय करना है और मुझे उम्मीद है कि मैं इस जुड़ाव के साथ आगे बढ़ता रहूंगा और सीखता रहूंगा। मैं एनआईयूए को भी धन्यवाद देना चाहता हूं कि उसने मुझे इस मिशन का हिस्सा रहते हुए खुद को विकसित करने का यह अद्भुत अवसर दिया।

Article- 05

An Amalgamation: Digitalization & People

by Nukul Sodhi

An Amalgamation: Digitalization & People

- Nukul Sodhi

I believe the pandemic or the COVID-19 has changed the life way of every single person on this planet, be it toddlers getting their online kindergarten classes or the online board meeting taking crucial decisions for the upcoming financial year. The COVID-19 put halt on every feasible single thingy & even a big question mark on whether human race will sustain at certain point but still we came out stronger & healthier. The unprecedented times came to end after couple of years amid tensions & doubts among all age group of people for instance I graduated in the same period wherein most of the companies were laying off their employees & withdrawn of recruitments letters for the new hires but something innovative was baking as we go to the basics & hear "necessity is the mother of invention". The schools, colleges & the businesses were adopting digital mode & a term came popular as #WFH (Work from Home) & few of the businesses saw a hike in their productivity both in financial & management perspective. I too came across a Canadian organization digitizing the mundane construction processes to analytical & graphical appealing numbers & sailed through the experience of digitizing the construction sites in private sector pan India & some of the abroad's projects. Crucial aspect through the journey I realized was the psychology & mindset of people which was reluctant to adopt the digital mode regardless of efficacy & seamlessness but still there was reluctance to adopt & adapt. The approach to this change management at first thought of linear but later realized to run it has to be top-down along with incentive based to at least initiate the journey of digitalization. I realized that regardless of the 'n' number of benefits of Software as a solution, the adoption wasn't there as expected, as people didn't want to incorporate or even had interest to shift a bit from their earlier ways of doing. I grasped it to be by the people & for the people and coined it as "Digitalisation is about people".

Having implemented the Digital modules during & post pandemic in the construction industry, Destiny brought me to the e-governance mission of the Ministry. Young professionals pan India were recruited from diverse backgrounds- Urban planners, economists, engineers & law graduates. I asked myself how I will fit in the software implementation being the core of the tech part & not knowing governance and administrative nuances but the fact & my learning of "Digitization is about people" was partially getting true.

As a part of the mission we were deployed to the states to support the Urban local bodies in compliance with the mission's goal to digitalise the urban services. Here, the roller coaster began & the web of stakeholders (The people) came into picture with my state of deployment having 240+ ULBs for 9 services & that too with amalgamation of 6+ department's involvement. The people's mindset was entirely the same as. I have encountered with my earlier experience of the reluctance to accept innovations & adapting to new approaches. It was necessary for me to sit with them & understand the reason behind the reluctance more emphatically because at every level of hierarchy they have different assumptions as well as challenges in their day to day tasks.

I knew it would take time but the cob web of people here was much denser along with governments pre-set level of marking files & owned processes which you can't even think of jumping into to bring change management (A nightmare). This taught me 'Patience with People & file processes', As we proceeded, the time was to align other concerned departments to bring them all on one single platform. We initiated the integration (one of the tasks) & all departments needed to be together to work for the same,

We aligned & appointed various nodal officers to act as a single point of contact. The technical team for ingestion of data came into the canva & here my belief of 'digitization is about people' became firm concrete, the tech part is essential no doubt but to an extent of less than 10%, It's all about people & their management.

To sum up, the voyage of Govt tech was entirely about stakeholder management & understanding the mindset of the people & reason behind their decisions to neglect the adoption of digital processes. The people at first will always neglect change before embracing as the change begins at the end of the comfort zone but is inevitable & survival isn't mandatory. Out of all other aspects the most crucial is Men, having said that is to have a dedicated team which understands the inclination of Top management towards the digitalization goals.

Article- 06

Leveraging Municipal Finance through NUDM

by Subhash K. Jha

Leveraging Municipal Finance through NUDM

- Subhash K. Jha

Finance is the core strength of any organisation around which all other functionalities revolve. Financial planning and its analysis help the organisation achieve its goal. It also supports the management in strategic decision making.

Local government finance has been a widely debated issue in fiscal decentralisation, with no specific model in the cross-country experience that can be regarded as a best practice. The lack of consolidated data on Local government finances in India pose several challenges for formulating developmental policies at the grassroots level of the three-tier governance structure in our country. In fact, the Reserve Bank of India in its 'Report on Municipal Finances 2022' emphasised the importance of following a sound financial system. The report mentioned the following: "Evaluating the quality of expenditure at the local level and even for determining the nature and the extent of grants that should flow to the Local governments from Central and State government agencies, including Finance Commissions". While a number of best practices for online municipal services for citizens are available in domains such as property tax, trade license, solid waste management, in addition to many, one will rarely find a best practice for Municipal Accounting and Finance. This reflects the complexity in maintaining Municipal Finances.

The Ministry of Housing and Urban Affairs and Comptroller and Auditor General of India drafted a National Municipal Accounting Manual (NMAM), a comprehensive guideline for following the double entry accounting system in the urban local bodies (ULBs). Many of the States and UTs have also issued their own accounting manual to ULBs based on the respective state's bylaws. Accounting and Finance softwares were also developed and implemented in some states, but didn't sustain longer due to varied reasons. Even after the Hon'ble Supreme Court's directions to have a Double Entry Accrual Based Accounting system, ULBs are struggling to implement it and most of them are still on the Single-Entry System. Some of the hindrances are lack of uniformity in accounting policies at both state and its department levels, infrastructure and capacity building problems.

According to the 15th Finance Commission, annual utilisation reports for provided grants, along with the claim for 1st installment of next year, must be submitted by every ULB. By 2024, it is a mandate for all ULBS to prepare and make available online, annual accounts of the previous year and duly audited accounts of the year before in the public domain in-order to avail full grants.

The current scenario is that both the States and Union Territories are in need of a comprehensive accounting and finance solution, The National Urban Digital Mission (NUDM), launched by the Ministry of Housing and Urban Affairs, with its product UPYOG encompasses a Finance and Accounting Module which is developed after taking into consideration all the challenges mentioned above. The Finance and Accounting module of UPYOG is compliant with NMAM and it is created on an open-source platform enabling customisation for both the state and ULB level requirements.
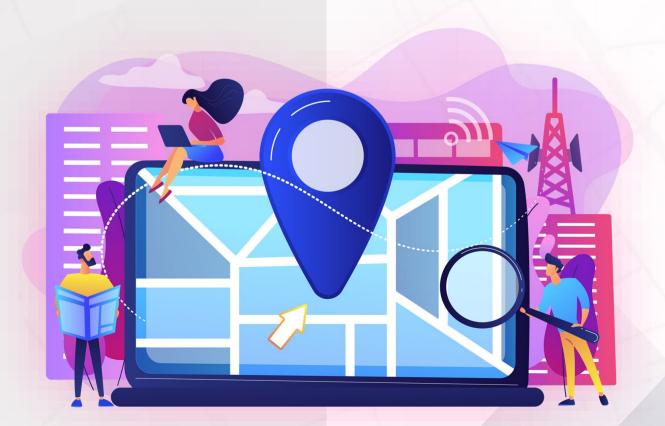
Managing both internal and external funds has become a key challenge for ULBs as the scope of work for them is increasing constantly on a day to day basis. Considering the current pace of digitalisation in India, maintaining accounting and finance in a traditional copy book is quite outdated. UPYOG's Finance and Accounting module is the one step solution for the States and ULBs - one of the reasons why, most of the MoU signed States for NUDM are choosing the Finance and Accounting module enthusiastically.

In my fellowship journey, with the opportunities to work with the State Governments of Jharkhand and Assam, I got very good exposure to understand the system of municipal finance. I feel grateful and privileged to have presented the UPYOG's Finance and Accounting module demonstration to states namely Haryana, Bihar, Uttar Pradesh, Goa and Assam, where I also got the opportunity to interact with states' officials on the Finance and Accounting set-up of their states.

Transforming Urban Governance in Chhattisgarh:

A Deep Dive into NUDM Implementation

by Raj Yamgar

Transforming Urban Governance in Chhattisgarh-

A Deep Dive into NUDM Implementation

- Raj Yamgar

The National Urban Digital Mission (NUDM) is a transformative initiative that aims to use technology to drive efficiency, transparency, and accountability in urban local bodies (ULBs) across India. In Chhattisgarh, the NUDM has been instrumental in enabling state employees to manage urban services more effectively, leading to significant improvements in ease of living for residents.

The Impact of National Urban Digital Mission (NUDM) on Chhattisgarh's Urban Governance:

- Introduction of Urban Platform for delivery of Online Governance platform (UPYOG) to implement digital tools for efficient urban service management

- Chhattisgarh is currently implementing the Building Permission module and plans to implement other modules such as Water & Sewerage, Water and Sewerage Services, Municipal Finance/Accounting System, Property Tax, and Trade License.

- The state aims to go-live for the Online Building Permission System in the state for three pilot ULBs (Bhilai Charoda, Dhamtari, and Birgaon) by March 2023.

- The NUDM has enabled the creation of a dashboard that displays real-time data on the availability of water, electricity, and other essential services in urban areas, helping local authorities identify and address service gaps more efficiently and effectively.

- The single dashboard helps local authorities monitor progress in real-time, identify bottlenecks, and take corrective action where necessary, leading to more informed decisions about resource allocation and more efficient service delivery.

- The NUDM aims to improve the quality of life for citizens by providing them with access to real-time information on urban services and infrastructure, such as data on water supply, waste management, transportation, and other public services.

- Chhattisgarh has shown tremendous progress in its efforts to digitize its urban governance systems and bridge the gap between technology and governance.

Figure 7.1: Portal under development (left), Flow Diagram: OBPAS Plan Scrutiny/ Application Submission System

Citizen Engagement and Efficient Urban Governance in Chhattisgarh under NUDM:

- The NUDM aims to promote citizen engagement in urban governance through Citizen Connect Portal.

- The Citizen Connect Portal enables citizens to register complaints and track their status, increasing transparency and accountability.

- Implementation of Citizen Connect Portal in Chhattisgarh has empowered citizens and improved urban governance.

- NUDM has created a unified system of governance in Chhattisgarh, streamlining decision-making and policy implementation.

- Real-time monitoring and evaluation system under NUDM helps track progress and identify areas for improvement.

- Implementation of NUDM in Chhattisgarh is expected to enhance the efficiency of government processes, provide better services, and increase transparency.

- NUDM is also expected to attract investment and enhance economic growth in the state.

In conclusion, the NUDM implementation in Chhattisgarh is a significant step towards bridging the gap between technology and governance in the state's urban landscape. The initiative is aimed at providing citizens with efficient and transparent governance services through technology-driven solutions. While the implementation of the NUDM presents several challenges, the Chhattisgarh government has taken several initiatives to overcome them. The successful implementation of the mission is expected to bring several benefits to the state and improve the quality of life of citizens.

Article- 08

Innovating Urban Governance: The Impact of NUDM on Local Governments

by Bitan Kishore Pal

Innovating Urban Governance: The Impact of NUDM on Local Governments

- Bitan Kishore Pal

- The National Urban Digital Mission (NUDM) is one of GOI's Digital Initiatives. As a Program Fellow, I am honored to contribute to the mission. Throughout my time as a Fellow, I've learned how to plan, manage, and execute multiple tasks. As a young professional, I am assisting the state in implementing the mission, data analysis and validation, collating, and best practices running in the state. This is enormous. This is a fantastic opportunity to learn and advance our profile and career. Fellows are an essential component of this Mission. Jharkhand, Bihar, Tripura, and West Bengal are my assigned states. Working with four state governments at the same time provided me with insights into how different states plan to transition to an E-Governance system. I also improved my time management abilities. As a developed state, Jharkhand will integrate its existing services with the National Dashboard. UPYOG is being implemented in Bihar. Tripura is considering using UPYOG to digitize its Finance and Accounting. In accordance with NUDM, West Bengal is considering launching a "State Urban Digital Mission" in the state.

- NUDM has had a significant impact on local governments, prompting a shift in the way they think about urban governance and leading to the adoption of new policies and practices that are more in line with NUDM's principles. NUDM has enabled the creation of a unified digital infrastructure for cities, including a common data platform, geographic information system (GIS), and city dashboards. This infrastructure has helped local governments to gather and analyze data on a range of urban issues, enabling them to make informed decisions and develop effective policies and programs.

- NUDM has also encouraged local governments to innovate and experiment with new technologies, such as the Internet of Things (IoT), Artificial Intelligence (AI), and Blockchain. This has led to the development of new solutions for urban challenges, such as smart parking systems, automated waste collection, and intelligent traffic management.

- One of the key impacts of NUDM on local governments has been the adoption of more collaborative approaches to urban governance. Local governments are now engaging with a wider range of stakeholders, including NGOs and private sector organizations, instead of relying solely on traditional top-down decision-making processes. NUDM has enabled local governments to provide digital services to citizens, such as e-governance, online payment systems, and citizen feedback mechanisms, improving the overall quality of service delivery.

- NUDM has also focused on capacity building for local governments through the National Urban Learning Platform (NULP), which provides training and support in digital technologies and urban governance. This has helped local governments to build the skills and knowledge necessary to manage digital transformation effectively.

- Finally, NUDM has fostered collaboration between local governments, startups, and technology companies, prompting local governments to explore new models of public-private partnerships. By working more closely with the private sector, local governments are able to leverage additional resources and expertise to address complex urban challenges.

- Overall, NUDM has had a positive impact on local governments, driving innovation and change in the way cities are governed. By embracing the principles of NUDM, local governments are better equipped to address the complex challenges facing urban populations and to create more inclusive, sustainable, and resilient cities.

Article- 09

E-governance service delivery in the North-East Region

by Vinay Dwivedi

E-governance service delivery in North-East Region

- Vinay Dwivedi

The concept of urban governance encompasses the process of managing cities or urban areas, including transportation, housing, water supply, waste management, land use, zoning, and building regulations. It is important to understand that, the soundness of urban governance will vary greatly depending on a specific city and its political, economic, and social context.

Figure 9.1: Kumbi Municipal council

Working in North-East region of India for e-governance service delivery is a challenging but rewarding experience. The region, consisting of eight states, has a unique cultural, linguistic, and geographic landscape that presents both opportunities and obstacles for e-governance initiatives. I have had the pleasure of working in the North-East Region of the country in the delivery of e-governance services. Mainly in the state of Manipur, Arunachal Pradesh, Nagaland, and Sikkim. In order to effectively provide digital services to communities with limited technology access and resources, specific skills and strategies are required.

The following are some of the key challenges involved in delivering e-governance services in the North East region:

- **Limited infrastructure:** North-east India is characterized by poor road connectivity, limited access to electricity and internet connectivity, and challenging terrain that can make it difficult to deliver e-governance services.

- **Cultural and linguistic diversity:** The region is home to a diverse range of ethnic groups and languages, which creates challenges for communication and delivery of services in local languages.

Figure 9.2: Bridging the Gap

- **Political instability:** The region has a history of political unrest, insurgency, and conflict, which creates challenges for implementing e-governance initiatives.
- **Limited awareness and education:** Mostly, limited awareness exists about e-governance and its potential benefits among the general public and government officials in the region.

There are a number of potential learning experiences that can be gained from working in North-East India in the e-governance service delivery arena, such as:

- **Understanding the local context:** North-east India has a diverse population with unique socio-cultural and linguistic characteristics. Working in this region would require understanding and adapting to the local context to effectively deliver e-governance services.
- **Overcoming infrastructure challenges:** The region's rugged terrain and limited access to infrastructure and services can pose significant challenges for e-governance service delivery. Working in such an environment would require innovative approaches to overcome these challenges and deliver services to citizens effectively.
- **Developing local partnerships:** Building strong partnerships with local government officials, civil society organizations, and community leaders can be critical to the success of e-governance service delivery in the region. Working in North-east India would require building these relationships and collaborating with local stakeholders to deliver services effectively.
- **Leveraging technology:** Technology can be a powerful tool for e-governance service delivery, particularly in areas with limited access to infrastructure and services. Working in North-east India would require leveraging technology to overcome infrastructure challenges and improve service delivery.
- **Promoting citizen engagement:** Citizen engagement is critical to the success of e-governance service delivery. Working in North-East India would require developing strategies to engage citizens and empower them to participate in the governance process.
- **Potential for leapfrogging:** North-east India is relatively underdeveloped in infrastructure and services, which creates opportunities for leapfrogging to newer and more efficient technologies for service delivery.

A commitment to collaborative efforts with local stakeholders and a deep understanding of the local context is necessary to improve e-governance services in the North-Eastern region. This can include working with local communities, government officials, and private sector partners to co-design and implement e-governance solutions that are relevant, accessible, and effective for the local population. It can also involve investing in building the necessary infrastructure and capacity to support e-governance service delivery, such as improving internet connectivity and providing training and education to government officials and the general public.

Article- 10

The Potential of National Urban Digital Mission

by Indhumadhi S

The Potential of National Urban Digital Mission

- Indhumadhi S

The National Urban Digital Mission was conceptualised with a motive to augment the revenue generation of 4800+ urban local bodies of India and to make them self sustainable. Last mile citizen service delivery is the mission's other vision. It would not take long enough to get to know from citizens of India the amount of hours spent in government offices for availing basic services such as birth and death certificates, payment of bills for water and sewerage services etc. Introduction of digital systems in the government paved the way for enabling transparent, efficient, and timely delivery of services. NUDM went a step further and envisioned a digital infrastructure established across the country, wherein the services are built based on standards and best practices available in e-Governance systems.

While the mission is rolled out across the country, there are certain regions which can substantially benefit. For instance, the regions of the northern and north-eastern states of India could adopt the 9 readily available municipal services offered under NUDM. While digital penetration is high in most of the southern states of India, the same is not the case for northern states. Adoption of NUDM could be a starting point for their e-Governance journey towards developing digitally mature systems.

Challenges that are encountered in building a digitally mature system are manifold, including lack of financial and human capital and inadequate infrastructure. Urban local bodies require funds, support for change management, and sound technical expertise while implementing the system. Setting up a strong in-house IT team by the state governments with intake of subject experts from industry, as required on a periodic basis, could address some of the challenges.

Both intra-state and inter-state disparities exist in the availability of e-Governance services. For example, in the case of Tamil Nadu, the Greater Chennai Corporation, an urban local body, is advanced in its e-governance service delivery when compared to the other entities offering municipal services. In such instances, states can consider leveraging the support provided by NUDM for bridging existing gaps and strengthening their overall e-Governance ecosystem.

An interesting exercise carried out by the fellows, deployed in different parts of the country, as part of the NUDM fellowship programme is the diagnostics assessment study.

The assessment study includes a set of questionnaires, which are curated based on resources such as the NeSDA framework, standards published by the NIUA for municipal governance services, and best practices available in the e-Governance domain. In 2022, the NUDM team visited Mumbai for two days to coordinate with state officials and conduct the study. Field visits such as this helped to gauge the capacity of online governance services, which enabled to channelise the man-power support and resources available under the NUDM accordingly. In the states including Uttar Pradesh and Tamil Nadu, the findings of the study was presented to the Principal Secretaries of the concerned departments, wherein they were apprised of the e-Governance capacities in their states from the NUDM perspective.

The diagnostics assessment study is a fruitful exercise for states and union territories of India to undertake, as it informs officials of their states' performance in light of the latest trends in digital technology. In particular, it presents a platform to identify the hurdles faced in qualitative data collection for monitoring and evaluation purposes by the state officials. The two-day span makes the study feasible to conduct, thereby addressing the paucity of time generally experienced by government officials.

Creation of National Dashboard is another endeavour which aims to bring in all the states and union territories onboard, where select KPIs of all of the ULBs will be available. States such as Kerala and Punjab, which will be in top rungs could be benchmarks to identify the process flows and practices followed in their governance systems for states lagging behind. Also, the processes involved in the data sharing for NUDM's common platform such as the National Dashboard allows insights on the technical capabilities of the IT team in the respective states and union territories.

Overall, for states and union territories looking for options to enhance their existing e-Governance setup, the features of NUDM with its support system can be considered for implementation. The benefits derived could range from bringing in crucial functionalities such as the Financial Accounting system to following a standards based approach, which in the long term would save significant time for activities related to data sharing and building other functionalities on an existing platform. It is this potentiality the states and union territories should look into while approaching the adoption of the National Urban Digital Mission.

Article-11

Digitalizing Urban Services for Inclusive and Equitable Cities: NUDM's Mission

by Gautami Ghumatkar

Digitalizing Urban Services for Inclusive and Equitable Cities: NUDM's Mission

- Gautami Ghumatkar

The National Urban Digital Mission is a flagship initiative launched by the Ministry of Housing and Urban Affairs to assist states in adopting standardized digital platforms to deliver citizen-centric services in the urban domain. This initiative aims to improve urban services in the states by increasing efficiency in the delivery of citizen-centric services and enhancing user experience with the help of advanced technological solutions. By leveraging the features of the National Dashboard, the central government can monitor, assess, and strategize planning and policy-making, proposing befitting interventions in urban e-governance across the country. Digital platforms have tremendous potential for engaging citizens and creating government services online.

Why is digitization of urban services necessary?

Data in digital form is beneficial in multiple ways as it provides accuracy and real-time availability. When stored in a standard format, it becomes easily accessible and portable. This data can be strategically used towards urban reforms and policy interventions at the city as well as the state level. The urban services provided by local governments to citizens hold great importance towards planning cities and local area development. Services covered under NUDM, such as Property Tax, Water & Sewerage, Trade License, and Online Building Plan Approval System, are essential for a better quality of living and play a major role in urban governance. Digitizing such services has played a vital part in not only organizing the data but also establishing significant interconnections between these services. Introducing newer digital technologies and updating databases through surveys and Geographic Information Systems (GIS) has benefitted urban planning and the visionary development of the nation. Adopting digital solutions has improved the revenue generation and fiscal status of local governments. Dashboards and data monitoring mechanisms have made it easy for administrators to recover bad debts from citizens and stakeholders involved in providing services. Technology has enabled citizens to get municipal services faster and more efficiently.

Challenges in the digitization of urban services

The objective to digitize citizen-centric services is a long-term goal and requires universal digital literacy among citizens. To attain this, the government has launched numerous programs under the umbrella of 'Digital India,' which aims to make the nation digitally empowered.

The foremost challenge to be addressed is achieving digital literacy for citizens. To make this transition easier, local governments should make contributions by introducing mandates and reforms towards the adoption of digital services.

Gathering legacy data and digitalizing it is one of the biggest challenges faced by local governments, where data may be unavailable, misplaced, inaccurate, or inaccessible. Such instances make it difficult to organize decades-old data in a digitized manner, often impacting development strategies and visionary perspectives towards the development of the nation.

Therefore, a paradigm shift is necessary where institutional setups and structures are challenged positively to strive for attaining basic digital infrastructure for citizens.

Article- 12

The 3D's of the Urban Governance

by Mazeed Shaik

Digital Transformation

Dashboard

Decision Making

The 3 D's of the Urban Governance

- Mazeed Shaik

Urbanization is one of the most significant phenomena of the 21st century. Currently, there are over 4,700 urban local bodies, also known as municipalities, in India. As India becomes the world's most populous country, governments must implement policies that meet citizens' expectations for public infrastructure and service delivery. However, this poses challenges to urban governance in terms of service delivery. In this dimension, the urban area can be considered a fundamental unit for framing policies regarding service delivery. The following three D's can be considered key measures to transform urban governance into urban smart governance.

- **Digital Transformation:** Municipalities mainly depend on a paper-based work culture, known as the pen culture, where citizens planning to build a house have to physically submit their applications to the office and obtain all necessary approvals from officials to commence construction. In this process, citizens have no idea about the duration of the approval process, and there is no mechanism in place to track their application's status. Therefore, there is a need to transform this working culture from physical to digital, allowing citizens to submit their applications online. This physical-to-digital transformation will help municipalities overcome daily traffic of citizens visiting offices for services.

- **Dashboard:** A visual representation of data that is easy to analyze, compare, and identify gaps in existing data. Once municipalities adopt digital infrastructure in service delivery, a dashboard can be built on top of the data. This helps administrators understand the ground reality of scheme implementation and service delivery status to citizens without going to the field. The dashboard provides a complete overview of the existing situation at the district, block, and even ward levels. This helps officials and public servants retrospect their policies, and citizens can track the status of their applications from their mobile phones using the dashboard data without visiting municipal offices.

- **Decision Making:** The outcome of dashboard visualization will help urban local bodies make policy decisions based on data collected from citizens. Citizen-centric data is critical before drafting any policy and can be considered an essential aspect of decision-making. In a way, citizens are the driving force behind these decisions. It can be considered data-driven governance based on dashboard data that is an outcome of digital transformation.

In this era of globalization, data is the driving force. Urban local bodies should undergo phygital (physical + digital) transformation to meet citizens' demands regarding service delivery. In India, ULBs are considered as the third tier of government, with funds, functions, and functionaries in place. With the help of the Union and state governments, ULBs must adopt the 3 D's to make the shift from physical to digital. If ULBs are successful in citizen-centric, data-driven e-governance, India will transform into a new digital era.

05

Testimonials

Ajith
P Suresh

Web Developer

State Engagement

- Kerala (Deployed)
- Lakshadweep

LSGD, Kerala

> " One year of being a National Urban Digital Mission Fellow gave me the opportunity to learn and work in the Municipal e-Governance sector which has a direct impact on the lives of citizens. Being in the team, which is leading the entire nation to adopt a new platform with the latest technology available, was an experience that I could proudly mention as the best as an Information technology graduate.
>
> NUDM Fellowship gave me a chance to work with the Information Kerala Mission under the Local self Government Department of Kerala. It enabled e-Governance services in local bodies for the past 20 years. Here, I got an opportunity to work with people who were enthusiastic about bringing the entire municipal e-Governance into a mobile screen with which the citizens don't have to visit government offices anymore. The exposure to bringing in reforms, government process re-engineering, various domain-level workshops, and technology boot camps gave me a fully packed knowledge base.
>
> I am proud to be a part of the Nation Urban Digital Mission and would dedicate myself to the success of the mission which is promising to bring a better future for the Nation. "

Ankit
Dwivedi

Civil Engineer, Urban Planner

State Engagement

- Madhya Pradesh (Deployed)
- Maharashtra

UADD, Bhopal

"

There is simply no other organization that brings together this level of resources and caliber of thought leaders to tackle the issues hindering the growth of our country. NUDM fellowship offers a chance to a young talent to shine by showcasing their analytical skills and leadership quality at their deployed states.

I started my journey as a NUDM Program Fellow at NIUA in March 2022. Where I got a chance to closely deal with the senior level state officials and coordinated with the NUDM team with respect to the mission objectives. It was really a career-enhancing experience.

The experience helped in broadening my knowledge of Govt. Digital Initiatives, Policies, Standards, and more. I will always cherish the working relationships and personal friendships developed through this program and I am planning to continue working in this area for many years to come.

"

Anmol
Thakur

Urban Planner, Civil Engineer

State Engagement
- Punjab (Deployed)

PMIDC, Chandigarh

> National Urban Digital MIssion (NUDM) is one of the Digital Initiatives by GOI. Under this Mission I am working as a Program fellow and have learned how to plan, manage and operate multiple tasks. As a young professionals i am performing various tasks in the state such as State engagements, conducting stakeholder meetings, preparing various documentations such as probable new services in municipal governance, SOP for these services, best practices in these services, minutes of meetings etc, providing assistance to the State in implementing the mission, conducting gap analysis through understanding state profile and services, data analysis and validation, collating and best practices, State assigned tasks, Data Sharing and Management, learning new tools and skills and much more. As a young professional this is a huge opportunity to learn and build our profile and career. Here fellows in the assigned state are the face of the Mission. Also, fellows are an integral part of this Mission. I as a fellow of Punjab has showcased my best skills and worked hard to functionalize and implement this Mission. As part of the mission along with Punjab state officials we have completed integration of 6 reference modules/services under UPYOG namely Property Tax Assessment and Payment, Public Grievance Redressal, Trade License Issuance and Payment, No-Objection Certificate (NOC) Issuance, Water and Sewerage Connection Management, Miscellaneous Connections with National Dashboard which are now ready to go Live. As next steps we are looking forward to going Live with the remaining 3 reference modules/services to achieve the desired goal of this Mission.

Bitan
Kishore Pal

Electronics and
Communication Engineer

State Engagement

■ Bihar (Deployed)
■ West Bengal
■ Tripura
■ Jharkhand
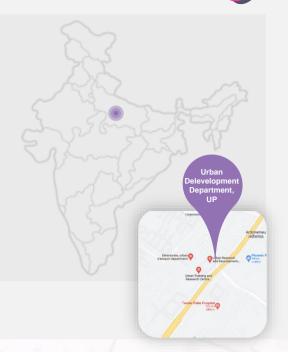
UDHD, Patna

"

The National Urban Digital Mission (NUDM) is one of the GOI's Digital Initiatives. As a Program Fellow, I am honoured to contribute to the mission. Throughout my time as a Fellow, I've learned how to plan, manage, and execute multiple tasks. As a young professional, I am assisting the state in implementing the mission, data analysis and validation, collating, and best practises running in the state. This is enormous.

This is a fantastic opportunity to learn and advance our profile and career. Fellows are an essential component of this Mission. Jharkhand, Bihar, Tripura, and West Bengal are my assigned states. Working with four state governments at the same time provided me with insights into how different states plan to transition to an E-Governance system. I also improved my time management abilities. As a developed state, Jharkhand will integrate its existing services with the National Dashboard. UPYOG is being implemented in Bihar. Tripura is considering using UPYOG to digitise its Finance and Accounting. In accordance with NUDM, West Bengal is considering launching a "State Urban Digital Mission" in the state.

"

Gajendra
Bhansali

Lawyer

State Engagement
Uttar Pradesh
(Deployed)

Urban
Delevelopment
Department,
UP

> " NUDM Fellowship has fascinated me with the ring-side experience of how Federalism works in India - whether from within the state institutions or from the perspective of business or citizens. It is a hands-on opportunity to operate as a grout which brings people closer to the process of governance. On a lighter note, the fellowship will open possibilities of inane conversations which could make something one has been wondering about for days click into place! "

Gautami Ghumatkar

Architect, Urban Designer

State Engagement

- Uttar Pradesh (Deployed)
- Maharashtra
- Goa

Urban Delevelopment Department, UP

> The NUDM Fellowship Program introduced by the Ministry of Housing and Urban Affairs has allowed me to explore my capabilities and skills to a great extent.
>
> Being a part of this fellowship program, I have attained a certain level of inter-domain perception where urban centric solutions are envisaged with the help of newer technology and digital infrastructure.
>
> Working closely within the purview of the Urban Development Department, getting acquainted with the digital initiatives and various missions in the State is one of the significant experiences gained from the fellowship.
>
> I can surely say that the knowledge and experience achieved through a year-long tenure of fellowship will definitely help me to excel in the long run of my professional life.
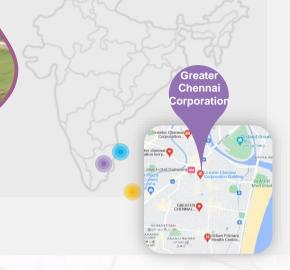
Indhumadhi

Civil Engineer

State Engagement

- Tamil Nadu (Deployed)
- Andaman and Nicobar Islands
- Puducherry

Greater Chennai Corporation

"

As someone who is interested in working with the government and understanding its functions and processes, NUDMFP placed me in a good platform to access such opportunities and to become a part of it. My interactions with diverse stakeholders including industry, ULB employees, and government officials enabled me to gain a comprehensive understanding of the role of each of them involved in implementing government initiatives. Through the meetings I got to attend, I understood how decision making at leadership level in the ULBs and State occurs - particularly, the processes that go behind it. The highlights from my fellowship journey are conducting a diagnostics assessment study, coordinating a state level workshop, and assisting the state of Tamil Nadu for signing of an MoU. Stakeholder management, bid document preparation, and a familiarity with the e-Governance system in Tamil Nadu are some of my learnings from the fellowship. Discussion with fellows from my cohort who are stationed across India, brought in insider insights on the capacity of digital governance across states and also, on the variations in governance system among the states. Starting from a DO letter at Ministry level traversing from New Delhi to a state and its ULB offices, I witnessed the steps involved in policy implementation for a flagship initiative such as the NUDM. The magnitude of resources, both human and financial capital, that goes into the mission for materialising its objectives is something I am able to comprehend owing to my experience of being in the fellowship. I think NUDMFP played an important role in my career as to ascertaining where my interests lie.

"

Mazeed
Shaik

Electronics & Communication
Engineer

State Engagement

- Karnataka (Deployed)
- Andhra Pradesh
- Telangana

KMDS,
Bengaluru,
Karnataka

"

In the era of urbanization, service delivery will become a challenge to the administrative departments at union & state levels and even tougher at district, block & ward levels. In this regard, the National Urban Digital Mission is a handholding support from the ministry of housing & urban affairs to the urban local bodies to build digital infrastructure which facilitates citizen centric e-service delivery.

As part of the NUDM Mission, as a Fellow, I have got an opportunity to work with the state of Karnataka, which is a digitally mature state. Initially it was a herculean task for me to convince the officials to onboard & to adopt the mission offerings which are scalable & durable in terms of technology. Later after submitting the analysis of existing citizen applications in the state which are working on legacy technologies, the officials are considering the NUDM Mission as a remedy. Besides Karnataka govt. agreed to share & integrate the data with a national dashboard, which acts as a catalyst in the decision making process.

NUDM Mission provided me a platform to work with a wide range of officials with diverse backgrounds like the bureaucrats, tech-savvy and business analysts. This mission has a potential to change the service delivery pattern of the urban local bodies & I can happily say that the citizens of the country surely reap the benefits of this mission in coming days through citizen centric applications which are offered by the mission & I am happy to be part of it. Cheers!

"

Nukul
Sodhi

Civil Engineer

State Engagement

- ■ Haryana (Deployed)
- ■ Chandigarh
- ■ Rajasthan
- ■ Delhi

DULB Panchkula, Haryana

"

In pursuit of myriad learning! led me to emerge from an engineering to development sector & catalyst in this was NUDMFP. The urge to grasp & outgrow my own bubble is something that drives me & made me apply for the NUDM fellowship as I came across it.

Being an engineering graduate & experience in the implementation & sustenance of software were something that made my way to this but at the same time not knowing nuances of the government structures, methodologies, stakeholders scalability & vast domains of governance were something I was looking forward to & NUDMFP has justified to the same pursuit. From day one it has been an enriching experience with co-fellows, seniors & States/UT's officials, having said that-fellowship bestowed entire India to my encounter, as all the associates were from diverse culture & educational backgrounds which hasn't only aided me with professional growth but also at personal level. The NUDMFP has paved my way to understand any grassroots level challenges along with the execution & alimentation of mission which includes aspects of assorted domains that can only be inculcated through field experience of this fellowship. In the fullness of time, It has been a gratifying & fulfillness occurrence which I'll cherish throughout my life.

"

Raj
Yamgar

Architect, Urban Planner and
Web Developer

State Engagement

■ Chhattisgarh (Deployed)
■ Ladakh
■ Madhya Pradesh

Indravati Bhavan, Raipur

"

I have had the privilege of being a part of the National Urban Digital Mission (NUDM) fellowship program from last one year. The experience has been incredibly fulfilling and has allowed me to make a tangible impact on the cities I've had the opportunity to work in.
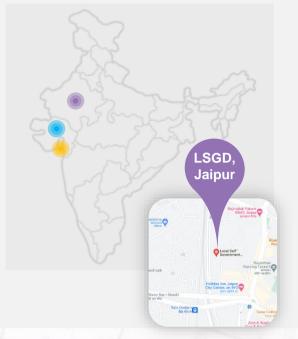
As a NUDM fellow, I was deployed in Madhya Pradesh for 6 months where I worked on various urban development projects, gaining invaluable hands-on experience in using digital technologies to address urban challenges. I am currently in Chhattisgarh supporting the state in implementing the OBPAS (Online Building Permission Approval System) module and facilitating NUDM implementation. This experience exposed me to the on-the-ground realities of implementing a programme at the state level and introduced me to a diverse group of experts and urban practitioners committed to improving the lives of citizens. Working with government officials and understanding government decision-making has been invaluable in my personal and professional growth.

The NUDM team provided me with mentorship and guidance throughout my fellowship, which helped me to further develop my skills as an architect, urban planner, and web designer. I am grateful for the opportunity to be a part of the NUDM fellowship program, and the experiences I've had while working in different states. I am excited to see the positive impact that NUDM will continue to make in urban development in the future and would highly recommend the program to anyone interested in using technology for urban development.

"

Shaurya
Mall

Urban Planner

State Engagement

- Rajasthan (Deployed)
- Gujarat
- Dadra & Nagar Haveli and Daman & Diu

LSGD, Jaipur

"

As a National Urban Digital Mission Fellow, I have had the unique opportunity to be a part of a transformative movement that is shaping the future of municipal service delivery in our country. The fellowship experience has been incredibly enriching and has provided me with valuable insights into the latest technology and innovation in e-governance.

The NUDM fellowship program offered me the chance to work with the state departments of Gujarat and Rajasthan. This experience exposed me to the on-ground realities of implementing a program at the state level and introduced me to a diverse group of experts and urban practitioners who are dedicated to improving the lives of citizens in urban areas. The hands-on experience of working with government officials and understand government decision-making has been invaluable in helping me grow both personally and professionally.

I am proud to be a part of such a dynamic fellowship program that is making a real impact on the lives of people in cities across India. The National Urban Digital Mission is truly leading the way in promoting digital transformation in urban areas and I feel honoured to be a part of this movement.

"

Subhash
K.Jha

Accounting and Finance

State Engagement

■ Assam (Deployed)
■ Mizoram
■ Meghalaya

H&UA, Guwahati

> "The National Urban Digital Mission Fellowship Program (NUDMFP) is an amazing experience for me. I learned so much about urban digital initiatives, attended seminars and workshops, and participated in networking events. As an avid learner I always look for new ways to improve my skills and this fellowship came with tons of opportunities.
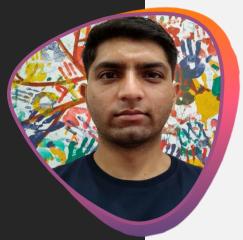
In my fellowship journey, with the opportunities to work with the State Governments of Jharkhand and Assam, I got very good exposure in implementing public policy initiatives and understanding the urban services. I feel grateful and privileged to have presented the NUDM's Finance and Accounting module demonstration to states namely Haryana, Bihar, Uttar Pradesh, Goa and Assam, where I also got the opportunity to interact with state officials on the Finance and Accounting set-up of their states.
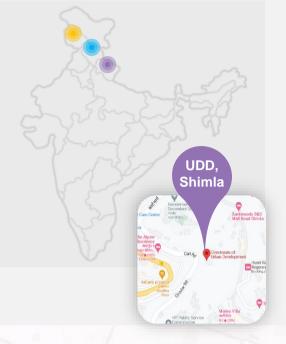
The mentors are incredibly knowledgeable and helpful, and the networking opportunities are invaluable. I would highly recommend this program to anyone looking to gain a better understanding of digital initiatives and how to use it to their advantage. Grateful !

Sumeet
Thakur

IT, Computer Science

State Engagement

- 🟪 Uttarakhand (Deployed)
- 🟦 Himachal Pradesh
- 🟨 Jammu & Kashmir

UDD, Shimla

"

From its inception, the NUDM Fellowship program has given me a once-in-a-lifetime chance to get an insider's view of how the governance works and how decisions are made in India. As a Computer Science trainer, my exposure to different state government workings was fairly limited and now I have gained extensive exposure to how IT and other IT resources can be leveraged to derive growth. Throughout the Fellowship program, I had exceptional exposure to the State government and acquired a deeper understanding of State workings and also its culture. While India has changed greatly since I became a Fellow, much of what I learned remains very valid today. In the future of my career, I am fairly certain that I will be able to draw extensively from the insights and expertise gained during my Fellowship—both in facilitating cooperation as well in negotiations with State agencies and stakeholders.

"

Vinay
Dwivedi

IT, Public Policy and
Project Management.

State Engagement

- Manipur (Deployed)
- Arunachal Pradesh
- Nagaland
- Sikkim

MMPTB , Imphal, Manipur

"

As part of the program, I had the opportunity to participate in the nation-building exercise in the farthest north-east region of the nation, While keeping in mind the concept of a shared digital infrastructure in urban development. In addition to introducing me to a wide range of cultural diversity and challenges for the program implementation in the hilly north-east region, it also provided me with a great deal of experience in navigating linguistic barriers.

In collaboration with the State's Urban Development Department for the Urban Platform for Delivery of Online Governance (UPYOG), the program provided me with a great opportunity to meet multiple stakeholders from government to individuals organizations and to learn how to leverage resources, building an ecosystem for greater transparency and shared digitized infrastructure for urban services and to contribute toward the future direction of urban planning, project implementation and E-governance.

"

"Transforming Cities,

Empowering Communities"

Innovative solutions for urban challenges, collaborative approach, and empowering citizens through digital technologies.

NUDM Fellowship

06

Way Forward

Way Forward

The way forward for the NUDM fellowship is to continue providing support and training to the state and urban local bodies in their digital transformation journey. The fellows can focus on the following key areas:

1. Knowledge sharing: Encourage fellows to share their experiences, best practices and learning with the urban local bodies.
2. Continual improvement: The fellows should strive to continuously improve their skills and knowledge by keeping themselves updated with the latest developments in the field of urban governance and technology.
3. Partnerships and collaboration: The fellows can work with other stakeholders such as academia, private sector, and civil society organizations to bring in fresh perspectives and ideas.
4. Monitoring and Evaluation: The fellows should monitor the progress of the urban local bodies and evaluate their impact on the ground. They should also provide regular feedback to the NUDM team on the effectiveness of their interventions.
5. Innovation: The fellows should encourage innovation and experiment with new ideas and technologies to improve urban governance.

By focusing on these key areas, the NUDM fellowship can make a meaningful impact and contribute to the goal of creating smart and sustainable urban centres in India.

NUDM Fellows

NUDM Fellows

Ajith P Suresh   **Ankit Dwivedi**   **Anmol Thakur**   **Bitan Kishore Pal**

Gajendra Bhansali   **Gautami Ghumatkar**   **Indhumadhi**   **Mazeed Shaik**

Nukul Sodhi   **Raj Yamgar**   **Shaurya Mall**   **Subhash K.Jha**

Sumeet Thakur   **Vinay Dwivedi**

National Institute of Urban Affairs