ACCELERATING INNOVATION for Urban Transformation

The WRI Approach
INDIA’S URBAN CHALLENGE

India’s cities and towns are expanding voraciously, with the urban population set to hit the 800 million mark by 2050. However, 75% of the infrastructure required to serve this population is yet to be built. With development happening on the peripheries of cities, services are being self-provisioned - an added burden on households. This also bears indirect costs to the community, society and the environment in the form of ecological degradation, resource depletion, human stress, ill-health from pollutants and lost hours of productivity – all of vital consideration to the economics of urban sustainability. Therefore, providing quality essential services like water supply, sewerage and sanitation, energy and transportation at affordable costs is of utmost concern in cities. Also, given the urgency and magnitude of the problem, cities need to explore non-traditional sustainable solutions and find ways to mainstream them.

INNOVATION TO BRIDGE THE GAPS

Innovation in urban service provisions bridges existing gaps by offering novel solutions for efficient, equitable and sustainable delivery. Be it through product innovation in efficient water, mobility and energy systems or the use of Information and Communications Technology (ICT); private enterprises not only have the potential to solve critical urban issues but also bring financing which can be leveraged to scale the solutions.

ROLE OF INNOVATION ACCELERATORS IN DEVELOPMENT

Accelerator programs play a key role in the ecosystem that supports entrepreneurs. They offer a platform for business leaders, state actors and entrepreneurs to collaborate on various social innovations. They help entrepreneurs with branding, operational hand holding and business models, and foster principles of co-creation and partnering for social change. On the other hand, accelerator programs help policymakers adopt vetted innovative ideas and solutions to solve longstanding service provisioning and capacity problems.

GOVERNMENT SUPPORT FOR INNOVATION

The Union and State government have recognised the potential for private innovation to solve public-sector and urban service problems. They have ramped up their support for entrepreneur incubation through initiatives such as Startup India, NITI Aayog (Atal Innovation Mission) incubation centres and states’ individual accelerators. Additionally, in just the last couple of years, Government’s policy measures and incentives have made India the 3rd largest startup ecosystem in the world. India is also climbing up in the World Economic Forum’s Global Competitiveness and World Bank’s Ease of Doing Business rankings.
WRI India has developed a unique methodology for accelerating innovation in cities by creating platforms for stakeholder interaction and dialogue. These platforms provide mentoring, capacity building on business models and familiarity with the policy and regulatory environment. The aim is also to give visibility to these solutions, so they may find leverage with investors and consumers. WRI India therefore, acts as a pivot platform that helps analyse the viability of solutions, bridges the gaps between various stakeholders and enables adapting them for quicker and easier adoption, so that these innovations can be mainstreamed and scaled.
Better operational efficiency, driver and customer experience, and reduced emissions through scalable, tech-led solutions

Rickshaw Rising Challenge: Transforming The Auto-Rickshaw Sector

Objective
Better operational efficiency, driver and customer experience, and reduced emissions through scalable, tech-led solutions

Solutions
- Rickshaw aggregation through platforms
- Financial innovation to promote purchase and use of sustainable electric rickshaws

Neighbourhood Improvement Partnership Challenge

Objective
To enable an ecosystem for ground-up, neighbourhood level, innovative problem solving, developed and driven by the neighbourhood citizens themselves. This aims for a collaborative approach to city planning

Solutions
- Environment & Lakes
- Mobility
- Off the grid - energy & water
- Public Safety
- Public Spaces
- Waste & others

New Mobility Accelerator: Providing Commuters With Choice

Objective
To make urban transport more sustainable.

Solutions
- Smart employee transportation & office shuttle services
- Easy bike rentals
- Tech-driver carpooling solutions
2016

**New Mobility Lab:**
Unlocking The Power Of Apps for Urban Mobility

**Objective**
To rapidly and systematically validate business models for new mobility ventures solving commuting challenges

**Solutions**
- Encouraging shared mobility
- Improving commuter experience
- Product innovation
- Enabling data-driven decision making

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2017

**The Station Access & Mobility Program (STAMP):**
Improving Last Mile Connectivity

**Objective**
To provide high quality last-mile connectivity to urban mass transit

**Solutions**
- Feeder services
- Trip planners
- Parking management & aggregation
- Product innovations in manufactured products & payment solutions

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2017

**Smart Streets Lab:**
Data For Road Safety

**Objective**
Capacity building, mentoring and assisting entrepreneurs to pilot

**Solutions**
- Collecting & using data on road quality to target improvements
- Conducting safety audits for neighbourhoods for women’s safety
Better Bus Challenge: Innovation In The Indian Public Bus Sector

Objective
To improve the quality and operations of public bus systems in Indian cities

Solutions
- Operations & maintenance
- Commuter experience
- New service models

Gender Inclusion In Mobility: Towards #MobilitySheNeeds

Objective
To promote innovative mobility solutions incorporating women-centric travel patterns & related issues

Solutions
- Increased numbers and safety of women commuters
- Female employment and entrepreneurship in mobility

TheCityFix Labs: Accelerating Innovation in Water, Waste & Energy

Objective
To scale solutions in urban service provisioning through exposure to key stakeholders including government, private consumers and investors

Solutions
- Energy: Building energy efficiency; Renewable energy & Construction materials
- Water: Water efficiency; Water and waste water management & Water quality
- Waste: Waste management (Reduce, Reuse, Recycle) & Waste to energy
To promote innovative and out-of-the-box emerging solutions in the space of construction technology & materials that can positively change the future of affordable urban housing in India

Global Housing Technology Challenge India (GHTC):
Led By Ministry Of Housing & Urban Affairs (MoHUA) With WRI India as Primary Knowledge Partner

Objective
To promote innovative and out-of-the-box emerging solutions in the space of construction technology & materials that can positively change the future of affordable urban housing in India

Solutions
- Construction systems, materials and components
- Solutions that improve efficiency of natural resources
- Self-help & self-build innovations
- Digital technology and Internet of Things based innovations

Innovate to Inspire:
Led By Energy Efficiency Services Ltd. (EESL) Under The Ministry of Power, With WRI India as Knowledge Partner

Objective
To support innovative technologies, process and business models that can sustain clean energy supply & responsible consumption

Solutions
- E-mobility
- Improved grid management systems
- Energy efficient technologies
- Financial instruments for energy

2018

2019

WRI SUPPORTED ACCELERATORS
WRI’s New Mobility Lab (2015) helped transform this technology from concept to product. Soon after the accelerator, they began working with the government, across 16 districts of Maharashtra. Working again with WRI’s Smart Streets Lab (2017), they completed a pilot in Telangana too.

Now, RoadBounce is working with 3 private road contractors and a number of city municipalities. They have also graduated to working at a national scale with the Mumbai-Pune Expressway authorities and the National Highway Authority of India.

Thus far, they have successfully captured data and analysed conditions of over 40,000 km of road network and have even begun pilots in the US and Scotland. They have also introduced an app for individual private consumers, and have over 1000 downloads, and have assessed 1000 km.
Commut and Shuttl are app based bus shuttle service providers for stress-free commute to work.

They have served over 70,000 customers and brought 400 driver partners on board. As of September 2018, they were acquired by a Middle East Unicorn - Careem for an undisclosed sum. Commut’s local operations - customers and drivers - have been taken over by a fellow graduate of the New Mobility Accelerator - Shuttl. Gurugram-based bus shuttle service provider Shuttl, recently raised $11 Mn in a Series B funding round led by Amazon, Amazon Alexa Fund, and Dentsu Ventures. At present, Shuttl operates in seven cities including Hyderabad, Delhi-NCR. They have also launched pilots in Pune and Kolkata. Shuttl services 45,000 rides every day, through 800 buses along 150 routes.
Bounce is a mobility operator of two-wheeler rentals for intra-city commuting.

Through WRI’s STAMP Accelerator (2017), Bounce developed the use-case for two-wheeler rentals to provide last-mile connectivity to mass transit networks. They piloted their one-way rental operations at one metro station in Bengaluru with support from STAMP. Based on their learnings, Bounce won the tender from Bengaluru Metro Rail Corporation to run last-mile operations from 37 metro stations across the city. Today, the service operates over 3000 motorized two-wheelers in Bengaluru and has expanded their operations to Hyderabad, by providing last-mile services for the Hyderabad metro. In addition, they have also developed IoT technology for keyless access and are actively experimenting with electric bikes and bicycle sharing services.
LEARNINGS

one
The current public procurement system needs to be revised in order to acquire, incorporate and mainstream innovation.

two
WRI Accelerator Platforms vet solutions for governments which enable them to adopt innovative solutions with minimal risk and structural changes.

three
WRI Accelerators help break siloes by bringing together multiple stakeholders looking to solve a common problem.

four
Challenges and accelerators increase the number of public problem-solvers and solution providers by enabling more participation that can be leveraged by cities.

five
Accelerator platforms have enabled cities to better address problems in real time.

six
Accelerators can support the changing role of government from service provider to facilitator and regulator, & enable trust-building between government and innovators.
ABOUT WRI INDIA

WRI India is a research organization with experts and staff who work closely with leaders to turn big ideas into action to sustain a healthy environment - the foundation of economic opportunity and human well-being. We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.

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