GOVERNMENT OF RAJASTHAN
LOCAL SELF GOVERNMENT DEPARTMENT

No.F3(201)(15)(5)/RUIDP/PMU/Ph-III/UD Policy/ 9771   Jaipur, ~~September 13~~, 2017
                                                        3 -10-17

OFFICE ORDER

Approval of Rajasthan Urban Development Policy

Rajasthan Urban Development Policy, which provides a direction and course of action to support urban development in the State, is hereby approved.

The Policy envisions at developing cities and towns by enhancing productivity, livability and prosperity for the citizens. It provides an overarching framework to deal with the important and critical issues of urban services such as water, sanitation, drainage, mobility, housing etc., and other cross cutting aspects related to urban development including planning, finance, governance and smart solutions, and environment sustainability.

The Policy shall be disclosed at DLB, RUDSICO, UDH, LSGD and RUIDP websites.

This bears approval of Hon'ble Minister, UDH & LSG.

(Dr. Manjit Singh)
Principal Secretary to the Govt

No.F3(201)(15)(5)/RUIDP/PMU/Ph-III/UD Policy/ 9772 - 78   Jaipur, ~~September 13~~, 2017
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Copy to the following for information and necessary action and disclosing on website: -
1. S.A. to Hon'ble Minister, UDH & LSG, Government of Rajasthan, Jaipur.
2. P.S. to Additional Chief Secretary, UDH , Government of Rajasthan, Jaipur.
3. P.S. to Principal Secretary, LSG Department, Government of Rajasthan, Jaipur.
4. Project Director, RUIDP, Jaipur.
5. Executive Director, RUDSICO, Jaipur.
6. Director, Local Bodies, Rajasthan, Jaipur.
7. Country Director, Asian Development Bank, New Delhi.

Project Director

RAJASTHAN:
URBAN DEVELOPMENT POLICY

September 2017

Introduction to the
Rajasthan Urban Development Policy

As part of its efforts to address challenges emanating from rapid urbanisation and develop a vision for future development in Rajasthan, the Government of Rajasthan has prepared an Urban Development Policy after due consultation with relevant departments and stakeholders.

The policy covers the following sectors: Urban transport, urban water supply, wastewater management, storm water drainage, solid waste management, affordable housing, slum redevelopment, urban governance, urban planning, inclusion and urban poverty, economic development and investments, eco-friendly cities, ICT and smart cities, environment sustainability and disaster resilience. This document details each of the policy objectives with key interventions and action points.

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List of Acronyms

ADB	Asian Development Bank		NDMA	National Disaster Management Authority
AMRUT	Atal Mission for Rejuvenation and Urban Transformation		NMT	Non-Motorised Transport
			NPDM	National Policy on Disaster Management
DAs	Development Authorities		NRW	Non- Revenue Water
DEWATS	Decentralized Wastewater Treatment Systems		NULM	National Urban Livelihood Mission
DLB	Directorate of Local Bodies		NUSP	National Urban Sanitation Policy
DMA	District Metering Area		NUTP	National Urban Transport Policy
DMIC	Delhi Mumbai Industrial Corridor		PPP	Public Private Partnership
DPR	Detailed Project Reports		RHB	Rajasthan Housing Board
EWS	Economically Weaker Section		RO	Reverse Osmosis
FSI	Floor Space Index		RPCB	Rajasthan State Pollution Control Board
GDP	Gross Domestic Product		RUIDP	Rajasthan Urban Infrastructure Development Project
GIS	Geographic Information System			
GOR	Government of Rajasthan		RUIFDCo	Rajasthan Urban Infrastructure Finance & Development Corporation
GWD	Ground Water Department			
HQ	Head Quarter		SCADA	Supervisory Control And Data Acquisition
HRIDAY	Heritage City Development and Augmentation Yojana		SDMP	State Disaster Management Policy
			SLNA	State Level Nodal Agency
HRD	Human Resource Development		SPV	Special Purpose Vehicle
ICT	Information and Communications Technology		TDR	Transfer of Development Rights
IEC	Information, Education And Communication		TNA	Training Needs Assessment
INR	Indian rupees		UDH	Urban Development & Housing
IPC	Interpersonal Communication		UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
IPT	Intermediate Public Transport			
ITS	Intelligent Transport system		UIT	Union Territory
LIG	Lower Income Group		UITs	Urban Improvement Trusts
LPCD	Litres per Capita Per Day		ULB	Urban Local Body
LSGD	Local Self Government Department		UMTA	Unified Metropolitan Transport Authority
MIS	Management Information System		UTTM	Urban Transport and Traffic Management
MLD	Million Litres/ Day		ULD	Urban Local Department
MRTS	Mass Rapid Transit System		WRD	Water Resources Department
NCR	National Capital Region			

Part 1   INTRODUCTION

1 | Background

1.1 Urbanisation in India

Urban India is growing faster and bigger.

After decades of rapid economic growth, urbanisation in India is finally beginning to catch up with the rest of the world. Compared to other major developing countries such as Brazil, Mexico or even China, India is still relatively less urbanised (87%, 78% and 45% of the population in Brazil, Mexico and China, respectively, is urban). However, evidence suggests that India is on the brink of rapid urbanisation and could even overtake urban growth in other countries. This urbanisation is explicit in the growth of population of existing cities (mostly **"Class 1"** Cities[1]) and increase in the number of towns (new **"Census Towns"**[2] added[3]).

As per the Census of India 2011, the total urban population of India is more than 377 million (Growth rate of 2.76% per annum during 2001-2011). The level of urbanisation in the country as a whole increased from 27.7% in 2001 to 31.17% in 2011, with an increase of 3.3% points during 2001-2011 compared to an increase of 2.1% points during 1991-2001. It was observed that for the first time, the absolute growth in urban population has been more than the absolute growth in the rural population. India's urban population will grow to 600 million by 2031[4], which is more than double of what it was in 2001. Further, India will continue to benefit from the demographic dividend, as a large chunk of India's population will continue to fall within the working-age group of 15-59 years.

Figure 1: Change in proportion of population in various categories of settlements

Increasing economic contribution of cities

India is one of the fastest growing economies in the world. Its registered GDP growth rate was 7.7% during 2001-2011. Rapid growth accompanied with the expansion in the number and size of Indian cities entails that the economic structure will also transform significantly. The share of agriculture in the GDP has declined from 34% in 1983-84 to about 15% in 2009-10. However, the urban share of the GDP has been rising consistently, ensuring that the urban sector will become the driving force behind future national economic growth. The urban share of the gross domestic product is projected to be as high as 69% by 2030[5].

Figure 2: Rural/Urban share of India's GDP

[1]**Class 1:** Statutory towns with population greater than 0.1 Million.
Other Towns: All statutory towns with population less than 0.1 million.
Large Villages: Statutory villages with population greater than 5000.
Other Villages: All statutory towns with population less than 5000.
Urban India 2011, Indian Institute of Urban settlements.

[2]**Census Towns:** A town is one that is not statutorily notified and administered as a town, but whose population has attained urban characteristics. They are characterized by the following: Population exceeds 5,000 , At least 75% of male working population is employed outside of the agricultural sector , Minimum population density of 400 persons per km^2

[3]Census 2011, Census Towns number is 3,894 and Census 2001, Census Towns number is 1,362.

[4]High Powered Empowered Committee(HPEC) on urbanization report, Planning Commission

[5]Source: India Urbanisation Econometric Model; McKinsey Global Institute analysis

1.2 Urbanisation in Rajasthan

As per Census 2011, Rajasthan's total population is 68.54 million, while its urban population is 17.04 million that is 24.8 % of the total population. Urbanisation level in Rajasthan is lesser than the national averageurbanisation level.

Figure 3:   Census 2011, percentage urbanisation
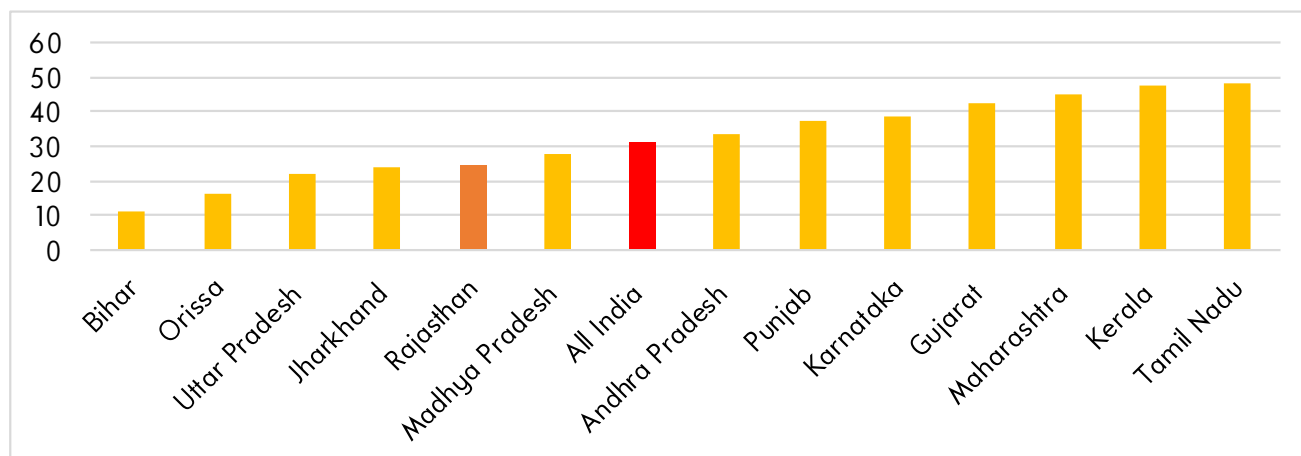
Within Rajasthan, there is little variation across districts. Out of the 33 districts in the state, only the five major districts of Kota, Jaipur, Ajrmer, Jhodpur, and Bikaner have a level of urbanisation that is higher than the national average. All the other 28 districts have below national average level of urbanisation.

The total number of urban centres in Rajasthan is 297 (185 statutory towns and 112 census towns). Evidently, the number of smaller urban centres or urbanising villages in Rajasthan that satisfy the basic criteria of being urban is on a constant rise. There has been no increase of census towns in western districts of Hanumangarh, Churu, and Jaisalmer. It clearly shows that spatially, the growth of urban areas is skewed towards eastern Rajasthan[6].

Figure 4:   Increase in census towns
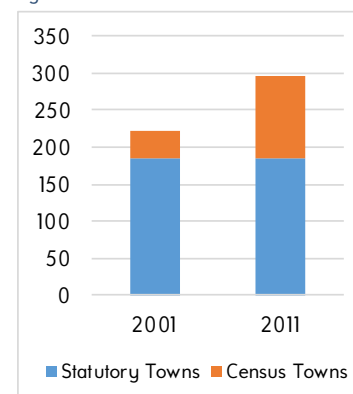
Figure 5:   Increasing level of urbanisation in Rajasthan
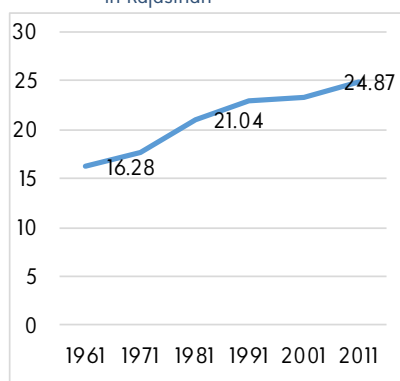
However, the more important trend to observe is that the urban population has been growing at a relatively faster rate and has experienced a CAGR of 3.19%, which is also higher than the national average. Further, due to various developments and initiatives in the state, a more rapid rate of urbanisation is expected to set in the near future. These developments include the thriving tourism industry, Delhi-Mumbai Industrial Corridor project, Dedicated Freight Corridor initiative, setting-up of a refinery at Barmer, and the Metro & BRTS initiatives at Jaipur. These large-scale developments will induce rapid change in the urbanisation process, boost the urban economy, and lead to overall economic growth

Urbanisation is not a simple demographic change but it involves a profound social, economic, environmental, and cultural transformation. Evidence from international experience suggests that it is not just the movement of people from rural to urban areas but how well urbanisation is managed which ensures that fast growth rates are achieved[7]. In order to maximise the benefits from rapid urbanisation, fast economic growth and increasing per capita income and demographic dividend, the state needs to capture the moment to make urbanisation an opportunity for growth and development rather than a missed opportunity which will prove to be a challenge in the future.

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[6]Volume I, State Commission on Urbanisation Report   [7]Cities and the Wealth of Nations (1984)

1.3 Need for an urban development policy

According to the UN Habitat, an Urban Development Policy is vital to provide a direction and course of action to support development. The policy provides an overarching framework to deal with the important and critical issues of urban services such as water, sanitation, mobility, and housing. Approved at the highest levels of government, the policy gives a set of guidelines for public and private interventions and a reference document for sectoral ministries and service providers. It is also a key reference for legislative institutional reforms and judicial interpretations. It will also give a chance for involvement of multiple stakeholders involving citizens, NGOs, and private sector players in urban development discourse.

Figure 6: Need for an urban development policy

URBAN DEVELOPMENT POLICY

- Identification of urban development priorities.
- Guidance on future development.
- Better Coordination among National, State and Local governments.

Urban Development Policy for Rajasthan

The policy will be a key input to prepare for the expected economic growth and ensuing urban development in future. This economic growth of the state will be driven by industrial development of DMIC and tourism industry in the state.

Delhi-Mumbai Industrial Corridor (DMIC)[8] is India's most ambitious infrastructure project that aims at developing new industrial cities. It aims to expand India's manufacturing and services base and develop DMIC as a "Global Manufacturing and Trading Hub". In Rajasthan, the alignment of DMIC will cover 22 districts. The total area covered in Rajasthan by DMIC is 20,137 sq. km, which is 58% of the state's total area and 39% of the DMIC length.

Tourism sector: Rajasthan has a thriving tourism industry that acts as a major economic driver contributing to development of the state. In 2012, 28.61 millio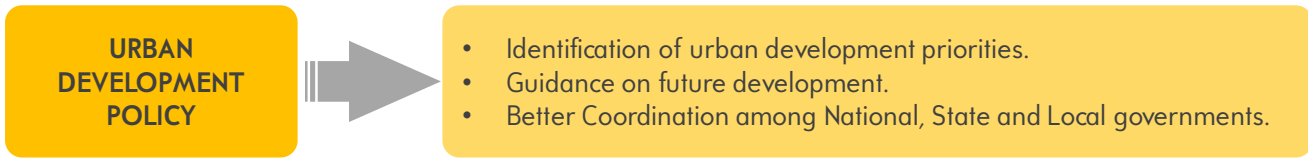n tourists visited Rajasthan showing a growth of 5.52%[9]. Almost every fifth international tourist visits Rajasthan. Tourism development in the state has not only given rise to urban economy but has attracted rural populace to undertake economic activities and has played a crucial role in rural – urban continuum.

The Policy will steer the increasing investments and resources allocated by the central and state government towards urban development through the centrally sponsored schemes[10], and ensure that investments have maximum intended impact.

Smart cities: Four cities viz. Jaipur, Udaipur, Ajmer, and Kota have been included in the initial shortlist of smart cities. The initiative aims to provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of technology driven 'Smart' Solutions. The initiative will be driven by the cities themselves with funding support from central and state government subjected to the development plan and reforms.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT): Cities with population greater than one lakh will be part of this mission. Thirty cities from Rajasthan are eligible for funding. The purpose is to ensure basic infrastructure and service delivery (Water, sanitation, urban transport, social infrastructure, etc.) in every household in urban areas and achievement of the Ministry of Urban Development set benchmarks. The funding will be subjected to approval of state empowered committees.

Housing for All: The scheme aims to provide a pucca house for all with basic amenities for water, electricity, etc. This scheme will cover all 185 statutory towns of the state with initial focus on 30 Class 1 towns. The key components include slum rehabilitation, credit subsidy for affordable housing and private partnership.

Heritage City Development and Augmentation Yojana (HRIDAY): The scheme focusses on holistic development of heritage cities by creating æsthetically appealing, accessible, informative, and secured environment. It will support the development of core heritage infrastructure around heritage assets. Ajmer is one of the important heritage centres to be developed under this scheme.

National Urban Livelihood Mission (NULM)[11]**:** To reduce poverty and vulnerability of the urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor.

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[8]http://www.dmicdc.com/
[9]Interim Report of State Commission on Urbanisation.

[10]http://moud.gov.in/
[11]http://nulm.gov.in/

National Urban Transport Policy, 2006: The policy focusses on movement of people rather than cars as focus of the infrastructure. It integrates land use with transport planning, land to be utilised as a resource for transport infrastructure development, parking cost proportional to value of land and promotion of pedestrian and non-motorised transport infrastructure.

National Urban Sanitation Policy, 2008 envisions all Indian cities and towns become totally sanitised, healthy, liveable, and ensure and sustain good public health and environmental outcomes for all their citizens, with a special focus on hygienic and affordable sanitation facilities for the urban poor and women.

Chief Minister's Jan Awas Yojana, 2015 was drafted in line with Government of India's "Housing for All" policy in order to provide all the possible incentives to the beneficiaries. The policy aims to reduce the shortage of urban housing and attract private investments in EWS/LIG housing segment through appropriate incentives to private developers and facilitating fast tract approvals. There is a 100% waiver on EWS/LIG component for land conversion / land use change charges for private developers. EWS/LIG will be provided with credit link subsidy for procurement or construction of house.

Rajasthan Urban Areas Transferable Development Rights (TDR) Policy – 2012: Under the TDR Policy — 2012 in affordable housing and slum development scheme, TDR is allowed to the developer as under:

In case of the Affordable Housing Project, the permitted FSI on the project land shall be double for the prevailing FSI, but the unutilised FSI up to a limit of 1.5 times of total plot area can be used as TDR. The TDR certificate in case of affordable housing projects in lieu of flats for EWS/LIG surrendered shall be issued in phases as per the provisions laid down in the Affordable Housing Policy and changes therein from time-to-time. It can also be a major tool in slum rehabilitation. TDR is also allowed in city level infrastructure development as per the master plan proposals. It can also be effectively utilised in road widening schemes, establishing parking lots and development of green spaces such as parks, open spaces, playgrounds, and water bodies.

Rajasthan Township Policy (Above 10 Hectares of Land), 2010:
This policy permits the sick industrial units having area more than 10 hectare to utilise affordable housing subjected to terms / conditions and incentive as applicable under model-2 of the Affordable Housing Policy. It also promotes planned and integrated development of residential plots and houses with provision of basic infrastructure facilities. It also encourages developers for taking up integrated township schemes that could be self-sustainable in terms of infrastructure and services provision. The policy also aims at qualitative physical environment with identification of roles and responsibilities of all the stakeholders besides developing a mechanism to monitor the progress and quality of work undertaken.

The Rajasthan State Water Policy, 2010 provides recommendation on drinking water as given below: Adequate drinking water facilities shall be provided to the entire population both in urban and in rural areas. Future irrigation and multipurpose projects shall invariably include a drinking water component wherever there is no dependable alternative source of drinking water. Drinking water needs of human beings and animals shall be the first charge on any available water and following actions shall be taken to fulfil this need.

National Policy on Urban Street Vendors, 2009: The Lok Sabha passed **Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act** in lieu of the policy. The act makes provision for registration and issuance of vending certificate to street vendors, defines role of the state government and the local authority in managing the affairs of street vendors, setting up of Town Vending Committees, provides for eviction and relocation of street vendors, and specifies penalty, and grievance redressal mechanism. The Act provides for the constitution of Town Vending Authorities with minimum 40% vendors' representation including women, SC, ST, OBC, minorities, and persons with disabilities. The Act serves as a major breakthrough to protect the interest of vendors and do away with arbitrariness on the part of authorities.

National Policy on Disaster Management (NPDM), 2009, sets a vision "To build safe and disaster resilient India by developing holistic, proactive, multi-disaster oriented and technology driven strategy through a culture of prevention, mitigation, preparedness and response." In view of construction boom and rapid urbanisation, NPDM lays down that municipal regulations such as development control regulations, building byelaws and structural safety features should be reviewed periodically to identify safety gaps from seismic, flood and other disasters and curb undesirable practices that tend to compromise with safety.

State Disaster Management Policy (SDMP), 2014, lays emphasis on preparedness and proactive role of the government not only for providing relief to the people affected by disaster and rehabilitate them but also for taking preventive

measures by predicting disaster through scientific studies based on GIS and other available modern technology. The policy also lays stress on training SDRF personnel and strengthening the SDRF with modern equipment and implements. Rajasthan Urban Land (Certification of Titles) Act, 2016, provides the urban residents a certificate of ownership of their lands by paying a nominal fee to the government. According to the Act, the state government shall constitute an Urban Land Title Certification Authority for receiving applications, scrutinising the documents, verification from relevant official records including the records kept by the local urban bodies, and issuance of certificate of title in such form and in such manner as may be prescribed.

The Act provides a clear title over a chain of documents and enables hassle free transactions of urban lands. This will result in greater transparency and shall create a sense of confidence among landowners. Disputes and frauds in land deals will be brought to a stop through its implementation.

The Rajasthan Apartment Ownership Act, 2015: The flat owner will have undivided proportionate rights on the land where the apartment is constructed and will get land ownership deed at the time of possession. The promoter has to declare all information to the concerned authority concerning land, number of floors, build up area, and details of common areas. The promoter has to declare the date of completion of building along with the possession date. If the deadlines are missed, the builder might have to pay penalty. The promoter shall also be responsible to pay common expenses for unsold apartments until the apartment is sold by the promoter. Other features of the Act include maintenance of a common account of funds collected from the apartment owner until the association is formed, the apartment shall be heritable and transferable when the complete payment is made.

Rajasthan Land Pooling Act, 2016 will facilitate realignment and readjustment of small land parcels for public infrastructure development. Under this, the land required for the proposed development shall be acquired by the landowners in return of a share of the developed land. The developed land shall be allotted to the owners at the nearest possible location to where it has been actually acquired. The value of the land developed will be many times higher to the actual land value and hence it could be advantageous for all the stakeholders involved. As a whole, this process shall fasten the pace of infrastructure development, thereby benefiting both the government and landowners. This also avoids the tricky challenges posed due to normal land acquisition process by saving time and resources.

The Policy will give a uniform direction to the efforts of multiple agencies involved in urban development.

The Urban **institutional structure**[12] in Rajasthan involves multiple institutions with varied roles and responsibilities -

Institutions at state level

- **Department of Urban Development, Housing and Local Self Government (LSG):** The mandate of the Urban Development Department in matters related to powers of UITs, urban & rural planning, schemes related to regional planning, land acquisition development scheme in UIT areas, and all establishment matters.

- **Town Planning Department:** The department is entrusted with the task of urban planning, preparation and revision of master plans of cities and towns, developing planning norms & standards and their revision from time-to-time and technical support to municipal bodies for various schemes & projects.

- **Directorate of Local Bodies (DLB):** The Directorate monitors and co-ordinates functions for all ULBs at the state level. The main functions of the Directorate include processing ULBs' cases related to sale/allotment of land; approval of ULBs' budget under various components such as special grant, general grant, State Finance Commission, Thirteenth Finance Commission (in lieu of octroi) and state/central sponsored schemes; implementation of various programmes/schemes of state/central government, extension and exclusion of municipal boundaries, and preparation of annual plans for ULBs.

- **Rajasthan Urban Infrastructure Development Project (RUIDP):** Established with the assistance of ADB to provide integrated quality infrastructural facilities in selected regions. The sectors covered under RUIDP are water supply, wastewater management, roads, bridges and flyovers, slum improvement programme, drainage, solid waste management, fire-fighting, emergency medical services, and heritage.

- **Rajasthan Urban Infrastructure Finance and Development Corporation Limited (RUIFDCO):** It is established to work as a facilitator and coordinator besides serving as a link between various urban schemes operated by the Government of India and their implementation in the state. It is the state level nodal agency for all urban related centrally sponsored schemes.

- **Rajasthan Housing Board (RHB):** A state government enterprise to deal and satisfy the need of housing accommodation in the state. RHB, through its act, is empowered to plan, develop, and construct houses and schemes for housing, commercial, commercial-cum-residential schemes, industrial housing schemes, etc.

Institutions at the regional level

- **Development Authority:** Established in Jaipur, Jodhpur and Ajmer with the responsibility of urban planning including preparation and implementation of the master development plan and zonal development plans,

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[12]*Volume I, Revised interim report of State Commission on Urbanisation*

formulation, sanction and execution of projects and schemes for development of Jaipur 's regions, housing activities, preparation of master plan for traffic control and management for the region.

Institution at the city level

- **Municipal bodies:** At the city and town level, the state has democratically elected municipal bodies that are categorised primarily in three classes, i.e. Municipal Corporation, Municipal Council and Municipal Boards based on the population and other related criteria. The State Government introduced a new Act (Rajasthan Municipalities Act 2009) for ULBs incorporating the provisions of the 74th CAA.
- **Urban Improvement Trusts (UITs):** 15 UITs are constituted in main cities with jurisdiction on the regional level. The main functions assigned to UITs include formulation of various schemes for development of the city, matters related to preparation of the master plan, land acquisition and disposal, preparation of land layout, formation of open areas, provision of infrastructure facilities and sanitary arrangements, construction of buildings, streets and other public amenities such as water supply, street lighting, drainage, etc.

2 | The Policy Framework

2.1 Vision statement

The vision of Rajasthan Urban Development Policy is:

"To develop cities and towns which enhanced productivity, liveability, and prosperity for the citizens."

Traditionally, cities and towns were centres of trade and commerce. The location of urban areas was at the ports or intersection of roads and rivers. People from hinterland migrated to urban areas with the hope of economic and social wellbeing. Cities and towns provided the necessary infrastructure, services to carry out trade and connectivity through roads, ports and rails; opportunities for growth like education; and services like health and sanitation. The urban areas had a pull effect on people. However, as cities grew in size, the infrastructure and the services came under stress due to a large population pressure. The towns started to decay due to overutilisation. The migration became distressed migration and the major reason now was not the pull effect of the urban areas but the push from the rural areas. The cities lost their original character of bringing prosperity and enhancing productivity and promoting health of its citizens. Cities became a challenge rather than an opportunity to the policy makers.

In this context, the policy for urban development aims to achieve a high standard of life that fulfils the potential of every citizen. The Urban Development Policy sets the future course and objectives for the cities in the coming decades. It recognises the role played by the cities in development of the nation and impact on the region as a whole.

2.2 Guiding principles

The policy follows a certain principle in setting its objectives and action points. These principles are –

Inclusion: It is a broad term that includes many aspects. Some of the aspects of inclusion are poverty reduction and affordability, equal opportunities for all vulnerable groups, regional balance in development, women, and children safety, accessibility to senior citizens and differently abled, etc. Urban centres assimilate diversities and create a culture of their own. Hence, inclusion is one of the foremost guiding principles of the policy

Transparency: Transparency is the hallmark of an ethical, efficient, and accountable system. The development process in a democratic framework requires transparency in public institutions to ensure objectivity, neutrality, integrity, honesty, accessibility, and credibility. Hence, the Urban Development Policy aims to achieve a transparent governance system. Sustainability: As experience shows, unsustainable usage of natural resources and environmental degradation will result in severe consequences unless appropriate corrective steps are taken at earlier stages. The policy, hence, emphasises environmental concerns at the forefront in creation of all infrastructure and services.

Innovation: The challenges of urbanisation will require out of box solutions that minimise the stress on environment and resources and at the same time make life of citizens more productive. The policy will not restrict adoption of new technologies and solution in solving urban problems but rather facilitate them.

Gender equity: The policy would ensure gender equity in the use and benefits of urban space by making provision for: (i) accessible and affordable infrastructure and services for water supply and sanitation, waste disposal, electricity, transport, and housing; (ii) security of tenure; (iii) employment and income-generating opportunities through formal and informal labour markets; and (iv) safety and security for all citizens in growing urban neighbourhoods.

2.3 Framework

The policy document attempts to address the urban sector comprehensively. Issues related to urban development as a whole such as land, planning, finance are addressed at the state policy level. Sector specific policy objectives and key interventions are divided in three sections, namely (1) Infrastructure and Services, (2) City competitiveness, and (3) Cross cutting Enablers such as governance, planning, use of ICT in smart solution, gender and environment sustainability.

The global experience of city competitiveness highlighted effective city governance and administrative setup, good public infrastructure services, quality of life, and human resources development as the major driving forces. Hence, a

comprehensive city planning approach is key for building vibrant and sustainable cities. Therefore, it is imperative to improve the city level basic infrastructure facilities such as water supply and sanitation, transport infrastructure with last mile connectivity, affordable housing and high quality electronic and telecommunication systems. The city development process should also give importance to conserving its heritage monuments in order to retain the city's identity and in attracting tourists. To achieve this, there is a need for greater support to city governments from the state to enhance city revenues in order to maintain and scale up the infrastructure services to the growing demand. This needs reforms at various levels: updating the planning rules and regulations, improving urban planning process with a metropolitan governance model and effective collection of user charges.

Enablers	Infrastructure and services					Competitiveness	
	Urban transport	Water and sanitation	Solid waste management	Housing	Drainage	Economy and investments	Heritage and culture
Governance							
Planning							
Sustainability							
Inclusion							
Information and Technology							
Resilience							

All these reform initiatives and actions will directly affect the city competitiveness. This shall make cities integrate at the regional level and globally competitive. This will also facilitate in ease of doing business criteria, thereby attracting several national and international players to invest in the city, thus resulting in employment creation and revenue generation.

Goals of the policy:

There is a need for an integrated planning approach to achieve the overall goal of city development. To improve the city productivity, it is essential to focus on the urban planning process, telecommunication infrastructure, ensuring the quality of living by providing proper housing services and improving the city mobility and logistics systems through the development of mass transit systems. Liveability standards mainly rely on the provision of qualitative municipal services and making the city resilient to natural disasters. The prosperity goals depend on attracting private investments, thereby generating employment opportunities and in ensuring employment opportunities particularly for the poor and vulnerable sections.

Figure 7: Goals of policy

Goals	Sectors
Productivity	Urban transport Housing Planning ICT
Liveability	Water and sanitation Solid waste management Environment management Resilience. Slum redevelopment
Prosperity	Economy and investment Heritage conservation Inclusion and poverty alleviation

2.4 Implementation strategy

RUDSICO shall anchor the implementation of the Policy at state level.

A state-level task force comprising members of all the departments working in urban areas may be appointed to monitor the implementation of the policy. The proposed task force shall be responsible for ensuring inter-departmental coordination on various aspects of the Policy.

To implement the policy at the district level, it is suggested that a District Urban Development Committee (DUDC) under the chairmanship of District Magistrate may be formed. The proposed DUDC may conduct periodical meetings with the ULBs in the district for the implementation of the Policy. RUDSICO shall provide support and guidance to the state-level task force and DUDC for implementation of the Policy.

Part 2   INFRASTRUCTURE AND SERVICES
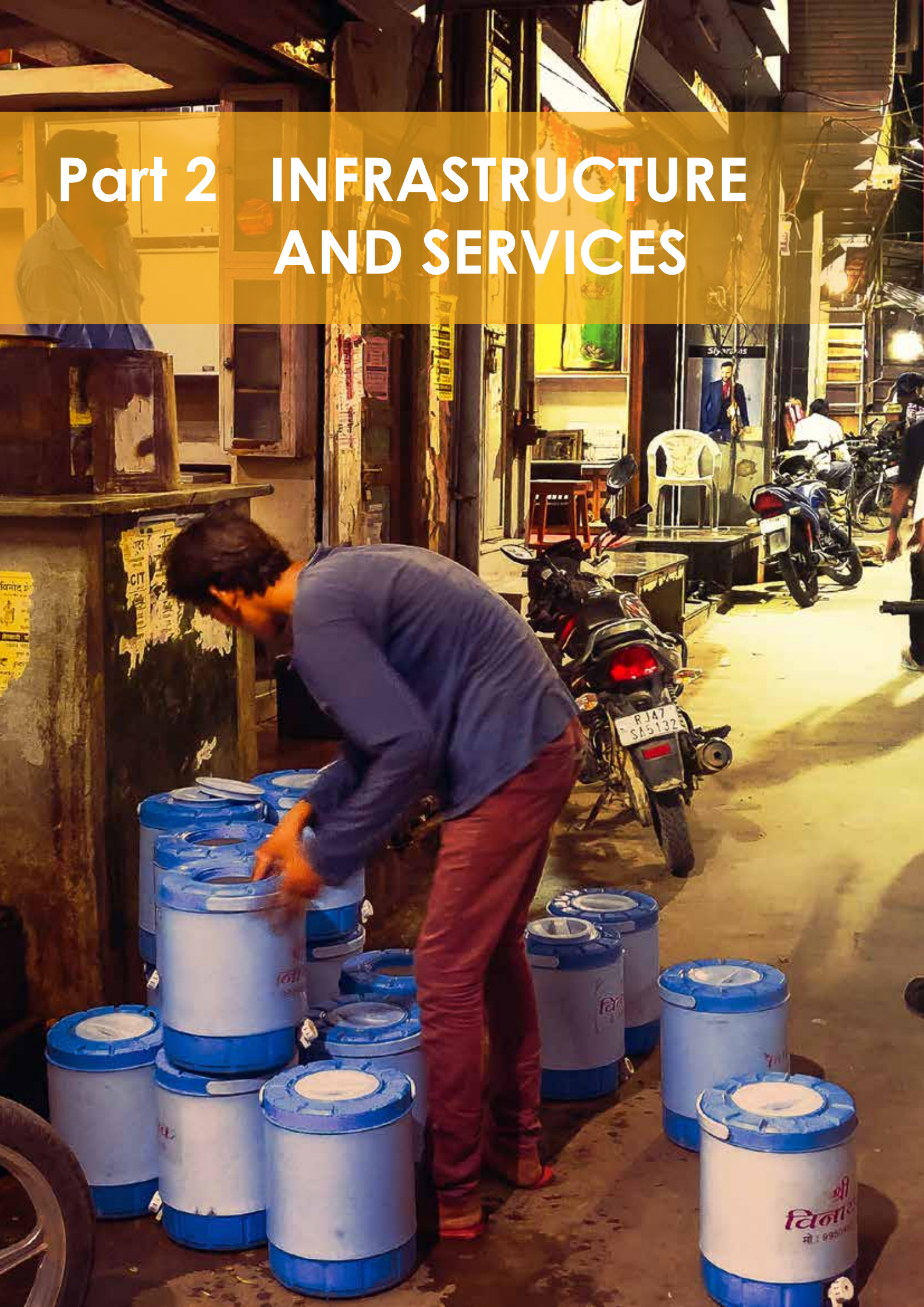
3 | Urban Transport

Policy objectives
- To reduce the travel demand by integration of land use and transport planning.
- To promote an affordable, accessible and assured multi-modal public transport system with physical integration of various modes for seamless transfer and last mile connectivity.
- To encourage the usage of cleaner technologies and non-motorised transport through upgrading the city's infrastructure comprehensively.
- To establish institutions for coordination, management and development of urban transport and traffic.

3.1 Overview

Urban transport includes all modes and ancillary infrastructure that facilitates mobility not only within the city limits but also for inter-city travel. The urban development process has a strong co-relation with the transport networks. Major transport lines are often used by urban planners to give direction to the growth of the city. The connecting nodes such as railway stations and bus terminals become the center of development and economic activity. Hence, urban transport is one of the most crucial determinant of the growth and economic viability of the city.

Traditionally, the infrastructure has been built around to facilitate the movement of private vehicles. Urban investments have neglected public transportation system for long. This approach has resulted in exponential increase of private cars and subsequent problems of congestion, pollution, road accidents, and exclusion of the poor.

Good urban transport systems reduce travel demand and travel time that increases the productivity of the citizens. Affordable, accessible, and safe public transport enables participation of all sections of the society in economic activity making cities inclusive, thus enhancing prosperity.

Current situation in Rajasthan
Historically, urban centres in Rajasthan were fort towns where economic activity was restricted in a certain area known as walled city. With the influx of people, the towns expanded in a planned/unplanned manner. Most of the expansion was based on availability of land in the vicinity. This resulted in ad hoc urbanisation that did not address the travel needs of the people. The consequence of such development resulted in narrow lanes, reliance on private vehicles and unviability of public transportation systems.

Three cities (Jaipur, Jodhpur, and Ajmer) have organised public transport systems. The share of public transport in Jaipur is 22%. This share is bound to increase with the introduction of metro in Jaipur.

Intermediate Public Transport (IPT) is the principal mode of transport in Rajasthan in small and medium towns. In large towns, IPT acts as feeder system to provide last mile connectivity. **"Alwar Vahini"** is an encouraging example, where IPT is organised by the administration.

As per Comprehensive Mobility Plans (CMPs), the share of NMT is 31 % in Jaipur (2009), 45 % in Jodhpur (2009) and 61 % in Ajmer (2007). Due to lack of infrastructure facilities such as cycle lanes, footpaths for pedestrians, FoBs, road crossings, etc., the share of NMT is continuously falling over the years.

3.2 Emerging challenges

Inadequate road space in the cities: The planning process does not adequately take into account the integration of transport plan with the land development plan leading to unplanned and unregulated land use. This leads to lack of adequate road space in cities. The demand outstrips the supply manifold, which results in a situation of chaos. The trend is expected to with economic growth in the future.

Disproportionate increase of personalised vehicles: In the absence of efficient public transportation system, commuters are left with little option but to resort to personalised modes of transport, which has given rise to disproportionate increase in number of vehicles on our roads and subsequently other problems such as traffic congestion, parking shortage, pollution, road accidents, etc.

Urban planning: Neglect of the transportation plan in the land use planning is a major concern and root cause of transport problems in the city. Transportation systems are developed after uncontrolled urban sprawl has already taken place. Unplanned development has resulted in increased travel demand and consequent problems.

Institutions and governance: Traffic management and transportation is taken care by multiple organisations- The Transport Department, Traffic Police, Urban Development, and Housing Department. There is lack of coordination and single point of responsibility on issues related to urban transport. This results in shifting of responsibility and delay in execution of the projects.

3.3 Implementation strategy

Implementing agencies: Urban Development and Housing Department Development Authorities, Urban Improvement Trusts, and Urban Local Bodies.

Supporting Agencies: Town and Country Planning, Transport Department, Traffic Police.

Implementation roadmap:
> **Short term (0-5 years):** Focus will be on towns that have population greater than ten lakhs and a functioning organised public transport system. At the state level, preparation of legislations, bylaws, policy guidelines and framework. Preparation of Urban transport roadmap based on CMPs and CDPs.
> **Long term (5-20 years):** Based on guidelines, implementation in remaining towns in a phased manner depending on needs of the sector and feasibility studies.

3.4 Key interventions and action points

Policy objective	Institutional	Physical
To reduce travel demand by integration of land use and transport planning.	Adopt Transit Oriented Development (TOD) principles in all master plans and zonal plans. Increase in FAR along transport corridors to encourage vertical growth and control horizontal sprawl.	Public transport nodes to have mixed land use by private investments encouraging commercial, institutional, and residential development.
To promote an affordable, accessible and assured multi-modal public transport system with physical integration of various modes for seamless transfer and last mile connectivity through organising IPT	Comprehensive Mobility Plans (CMPs) for cities with population greater than one lakh and route rationalisation for all the cities. Enforce congestion tax in dense city area. Differential parking charge proportional to time and value of land. Affordable user charges to encourage public transport use. Utilisation of land as a resource for capital financing of urban transport infrastructure projects. Creation of a dedicated fund for operations and maintenance of transport facilities.	Organised city bus service in all the towns with population greater than one lakh and MRTS for all the towns with population greater than 10 lakhs. Intermittent public transport (IPT) as feeder to main transport system and as main mode in small and medium towns. Integration of Intelligent Transport system (ITS) in all public transport and traffic infrastructure. PPP in multi-level parking cum commercial centres. Fare integration and smart cards across different modes. Universal accessibility for differently abled and senior citizens. Safety features such as GPS tracking and panic buttons in all public transport modes.
To encourage usage of cleaner technologies and non-motorised transport by upgrading the city infrastructure comprehensively:	Develop and sustain road networks to improve system capacity, quality, and safety with focus on pedestrians and non-motorised transport. Encourage initiatives like Rahagiri (no motor vehicle) days, bike sharing schemes and electric vehicle mobility. Developing a planning and a regulatory framework for promoting NMT.	Develop and sustain road networks to improve system capacity, quality, and safety with focus on pedestrians and NMT. Ensuring dedicated cycle lanes in master plans. Developing existing footpaths/sidewalks for safe and easy access. Integrating NMT facilities with existing transport services. Removal of encroachments on pathways and public roads to increase walkability. Install accident response system for road user safety.

Policy objective	Institutional	Physical
To establish institutions for coordination and management of urban transport and traffic.	The Urban Development and Housing Department to be declared as the nodal department for urban transportation services and a separate Urban Transport and Traffic Management (UTTM) wing with experts, which should assist the urban local bodies to develop and implement urban transport in an organised way. A Unified Metropolitan Transport Authority (UMTA), with legal backing to the authority to be made active and functional at the city level.	Constitution of City Level Special Purpose Vehicle (SPVs) for operating organised public transport systems. Establishment of Dedicated Urban Transport Fund (DUTF) at the city and state level. Establishing service level benchmarks for urban transport services to measure the performance standards.
Ensure gender equity and social safeguard	Projects designed and implemented to improve transport infrastructure and services cannot be assumed to benefit women automatically. Improvements to transport systems may affect men and women differently and not always positively. Insufficient consideration of gendered needs in transport programme can inadvertently exclude or further constrain the access of some groups if projects are not designed to be gender and socially inclusive. Hence, the policy would take measures to improve transport service accessibility, safety and security, convenience, and affordability to men and women.	Separate buses or sections for female passengers. Take steps to make the buses more women friendly by ensuring that the steps to climb onto buses and the handrails are not too high for the women. Ensure well-lit stations, bus stops, and surrounding areas for security and safety. Ensure separate male and female toilets at bus stations. Consider bus schedules that meet the needs of both men and women (during both peak and off-peak hours).

4 | Urban Water Supply

Policy objectives
- To provide 100 % coverage of 135 LPCD treated tap water in all the households where water is supplied through 24 X 7 piped metered connections.
- To ensure availability, quality and sustainability of water supply through source conservation, increasing efficiency, reducing losses and development of new sources.
- To improve the institutional capacity and inter-departmental coordination of water supply utilities.
- To encourage user participation in all aspects of water management.

4.1 Overview

Urban water supply is one of the most critical elements of urban infrastructure. Water is a necessity of life that directly affects health and well-being of the society as a whole. More than 50% of past investments in urban infrastructure have been in the water sector. The sector has evolved over time and dependence on ground water is reducing with municipalities shifting to surface water. Similarly, there is a shift from intermittent supply to 24 X 7 water supply projects.

"24x7 supply is achieved when water is delivered continuously to every consumer of the service 24 hours a day, every day of the year, through a transmission and distribution system that is continuously full and under positive pressure[13]."

The liveability of a city is greatly impacted by the availability of safe drinking water and sanitation facilities, which in turn impact the competitiveness, economic growth, and prosperity of the city. The economic impact of clean drinking water is huge. Every dollar invested in drinking water and sanitation reaps up to eight dollars of profit[14]. If clean water is available within the premises, it reduces the burden of women who fetch water from distant sources. Due to non-availability of clean water at the tap, people have to install water treatment equipment at home based on inefficient technologies, which waste up to 70 % of water.

According to Census 2011, coverage of water supply in urban areas is about 71 % at national level, out of which 62 % receive treated water. In Rajasthan, coverage is about 82 %, of with treated tap water is provisioned to about 75 %, clearly above the national average for urban areas. According to the State Planning Department[15] data, 10% of ULBs are able to provide more than 100 lpcd; 35% of the ULBs provide 60-80 lpcd of water and 33% of the ULBs provide 40-60 lpcd of water as against a service level benchmark of 135 lpcd. On the other hand, frequency of water supply is another major focus area with 73% ULBs providing water once every 24 hours. During the summer months, water is often transported to towns in trains and tankers.

The Public Health Engineering Department (PHED) is the primary entity responsible for planning, designing, building, operating, and maintaining urban and rural drinking water supply in the state. Driven by recent reforms initiative under the 73rd and 74th Constitutional Amendment Act, the responsibility of operation and maintenance of selected urban water supply schemes has been transferred to the ULBs.

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[13]https://www.wsp.org
[14]http://www.wpro.who.int/mediacentre/factsheets/fs_201203_water/en/
[15]Chapter 22, Mid-Term Review, Eleventh Five-year Plan (2007-12), Planning Department, Government of Rajasthan

4.2 Emerging challenges

Operation and maintenance: Lack of adequate manpower and requisite skills at the local level to operate and maintain water utilities are one of the major limiting factors. Other factors include archaic infrastructure that needs urgent upgradation and rehabilitation, high life cycle cost of assets and equipment, minimal use of technology for leak detection, burst repairs, and lack of focus on customer complaints and redressal, metering and billing, user charge collection, and financial accounting.

Diminishing surface water resources and quality: Rajasthan is one of the most water-deprived states in India with respect to rainfall and per capita water availability. According to the Vyas Committee Report (2009), the average per capita availability[16] is said to be under 800m3 as against a general accepted requirement of 1,000 m3. With the state's surface water resources being just 1% of the total in the country, the state housing resources are 6% of India's total population. There are significant considerations related to ground water level in Rajasthan (declining by more than 4 meters in the last decade[17]) and quality (on national scale, 74% of all habitations with multiple quality issues in the country are located in Rajasthan which includes 51% of all fluoride affected areas, and 42% of all saline affected areas).

Non-Revenue water (NRW) and user charges: NRW results in commercial and physical losses to the water service provider. High level of NRW hinders coverage expansion and service level improvement. In Rajasthan, the NRW levels are very high, averaging 50% as compared to acceptable service level benchmark of 15%. Monitoring of NRW levels requires metering and collection of user charges based on volumetric usage. Udaipur has the highest (87%) metered connections; Jaipur is next with 65%. For rest of the towns, metering is either low or non-existent.

4.3 Implementation strategy

Implementing agencies: Urban Development and Housing Department, ULBs and PHED.
Supporting agencies: Development Authorities, UITs, and RUIDP.

Implementation roadmap:
> **Short term (0-5 years):** Focus will be on technology upgradation and reduction in NRW in towns with emphasis on towns having surface source based water supply and having population greater than one lakh. Preparation of bylaws and guidelines for tariff setting, compliant redressal and service improvement. Rehabilitation and augmentation of water supply infrastructure in all ULBs.
> **Long term (5-20 years):** Focus on implementation of technology in all ULBs and robust service delivery in all towns. Metering of all consumers and extension of water supply to all households with adequate provision of drinking water supply for institutions and industries.

4.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To provide 100 % coverage of 135 LPCD treated tap water in all the households supplied through 24 X 7 piped metered connections. Adequate provision for drinking water supply should also be made for institutions and industries.	Preparation of a roadmap by all the ULBs and water utilities for covering the entire population with piped water supply with special emphasis on targeting the urban poor.

Development of technical guidelines to ensure implementation of the 24x7 water supply.

Follow a pro-poor connection charge policy through subsidies, rationalising or block tariff.

Undertake regular revision of tariff by a transparent, accountable, and participatory process.

Establish a mechanism allowing water utilities to pursue appropriate legal action against defaulters, provided the defaulters can economically afford to pay the bill. | Prioritise connections to poor households at an affordable cost.

Conversion of intermittent supply to 24 X 7 and all new schemes to be 24x7 water supply based.

Ensure 100% metering of connections by service providers.

Use of technological interventions such as computerised customer databases, SCADA, online billing, etc. that would encourage a higher bill collection rate.

Establishment of District Metering Areas (DMAs) for effective management of billing and collection mechanisms.

Development of user-friendly web portal for online application of water and sewerage connections, status of applications, complaints, and grievance redressal. |

[16]*Vyas Committee Report, Government of Rajasthan, 2009*
[17]*Source: http://wrmin.nic.in/forms/list.aspx?lid=304*

Policy objective	Institutional/Legislative	Physical
To ensure availability, quality and sustainability of water supply through source conservation, increasing efficiency, reducing losses and development of new sources.	Establishment of a strong government and financial framework to monitor the levels of NRW and directly link to the efficiency of the service provider as an organisation. Development of a proper framework to set quality standards and address defiance of quality rules or pollution of water resources. Establish appropriate independent monitoring mechanisms to keep a check on all water resources, and water supply systems for ensuring standards of quality. NRW reduction measures shall be a part of the reorganisation, rehabilitation, and extension of existing water supply schemes and an integral part of O&M of new water supply schemes. Adoption of GIS technology for ground and surface water mapping and conservation, and mapping of all assets of water supply infrastructure.	Harness economically utilisable surface water through improved, integrated, and comprehensive planning, design, and construction for river basin, and interlinking of rivers and potential water bodies. Reduce dependence on ground water resources by establishment of water grids where surface water source is not available nearby. Undertake projects, which highlight the importance of water in a dessert, highlighting key traditional ways of water conservation like khadin. Encourage the use of alternative cost-effective technologies for WTPs, ensuring clean potable water at the point of use. Use of GIS technology to map the accurate status on lifespan, usability, and the levels of maintenance needed for proper operation of assets for water supply.
To improve the institutional capacity and inter-departmental coordination of water supply utilities	Integration of water distribution and wastewater management systems with town development mechanisms. This will include stronger communication between the town planning department, urban development department, and the water resources department.	Efficient and adequate human resources development and institutional infrastructure for adopting new technologies/practices and innovative approach.
To encourage user participation in all aspects of water management.	Undertake massive IEC activities and campaigns for sensitisation of people regarding the economy of water use. Incentives to colonisers and developers for recharge of groundwater, rainwater harvesting, efficient, and judicious use of water.	Involvement of private sector and local communities in development and O&M of sustainable water resources.
Ensure gender equity and social safeguard	Projects designed and implemented to improve water supply and sanitation cannot be assumed to benefit women automatically. Improved access to water supply and sanitation may affect men and women differently and not always positively. Insufficient consideration of gendered needs in these programmes can inadvertently exclude or further constrain access of some groups if projects are not designed to be gender and socially inclusive. To avoid this, the policy would undertake gender specific actions.	Consider women's needs in accessing water points; number, types, and location of facilities; and child safety. Consider women's preferences of technology (community taps or pumps, household connection, and wells), and individual or shared facilities. Design water infrastructure to be women-friendly, e.g., hand pumps or taps that can operate easily. Prioritise location choices for water supply and sanitation facilities that reduce the heavy work burden of women and girls, and consider their needs for privacy and security. Improve water supply operations and services by introducing ways to make utilities accountable for gender inclusiveness and responsiveness by ensuring customer service departments target women-consumer groups.

Policy objective	Institutional/Legislative	Physical
		Establish sex-disaggregated consumer database,
		Target women's groups for hygiene and sanitation. Include women in public consultations on water connection charges and pricing.
		Set female targets or quotas for new recruitments in utilities (e.g., customer services, meter readers, water quality testing), including more women in management. Subcontract to women's self-help groups for meter reading, billing, and collection, and address affordability concerns among low-income households and those headed by women.
		The policy should also take measures to deal with the social safeguard issues and impacts that may arise during the implementation of projects to be taken up by ensuring positive social development outcomes, thus avoiding/minimising and mitigating adverse social impacts, including loss of livelihood that may result from loss of lands and common property resources, ensure participation of local communities and stakeholders in the whole process of project development.
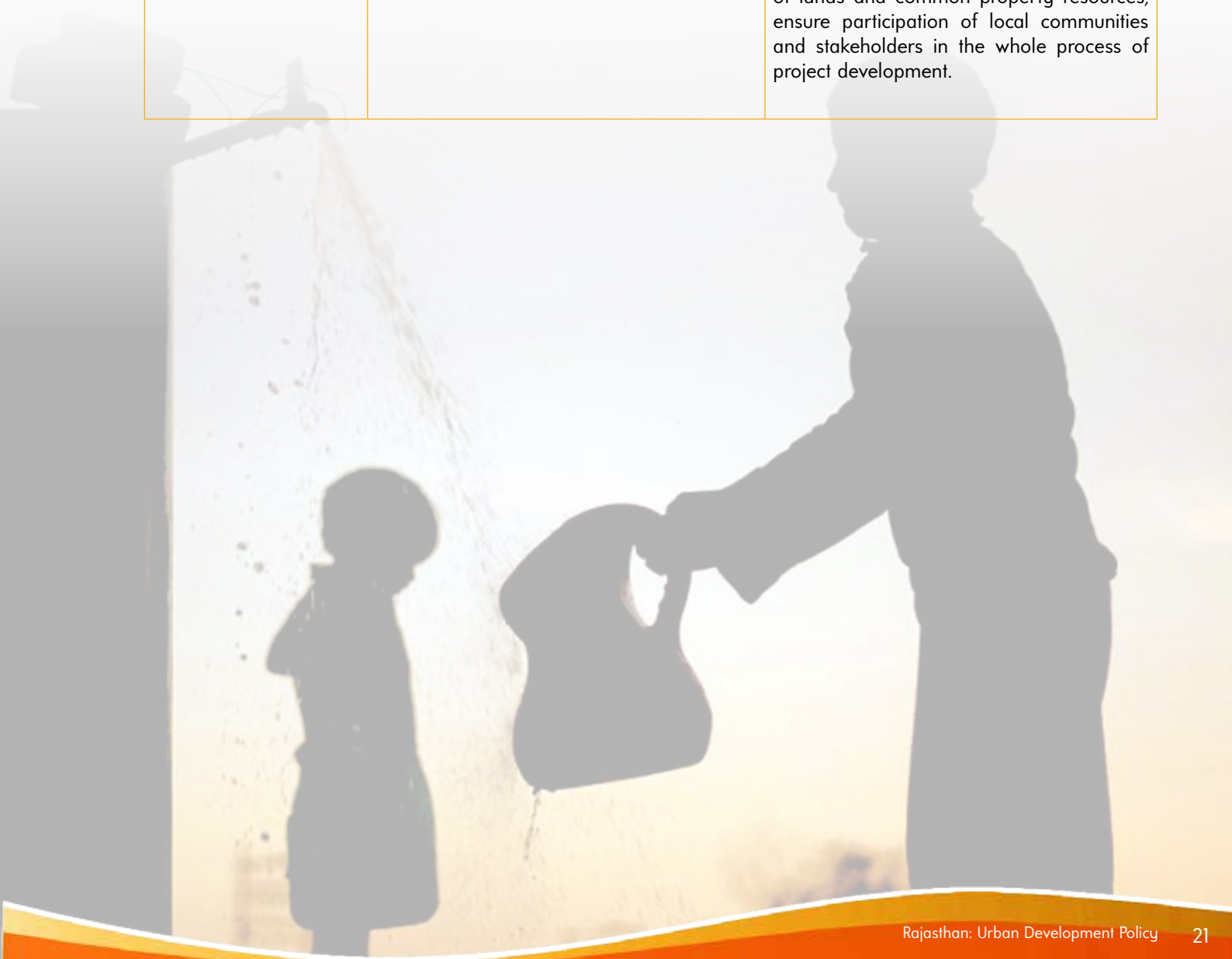
5 | Municipal Wastewater Management

Policy objectives
- To ensure 100% coverage of sanitation services with proper collection, transportation, treatment, and disposal.
- To eliminate open defecation by providing sanitation services to the urban poor on a priority basis.
- To incentivise private sector participation for implementing innovative technologies in sanitary waste management focusing on treatment for maximum recycle and reuse of wastewater.
- To implement "polluter pays principle" for management of wastewater.

5.1 Overview

Sanitation involves prevention of human contact with waste and proper treatment and disposal of sewage or wastewater. The sewage and wastewater value chain begins from the source of generation to the final disposal or reuse. This was one of the most neglected and crucial aspects of urban management in India. Lack of hygienic wastewater management increases the incidence of diseases and associated economic burden that has disproportionate impact on daily life of the poor and vulnerable. . This situation is aggravated by the on-going densification in the urban areas, the impact of climate change, and the increasing groundwater pollution due to sewage infiltration[18]. Investments in sanitation infrastructure and services secure higher gains for public health and strengthen the economic competitiveness of cities.

Census 2011 classifies types of toilet as either water closet, pit latrine and other latrine types. The statistics for Rajasthan is similar to all India average. With 73% households having water closets, almost 18% do not have access to toilet facilities[19].

With respect to wastewater situation in Rajasthan, the state lags as compared to the national average. With only 25.6 % households connected to piped sewer system, almost 17 % dispose the sewerage in open. For treatment purpose, there are 63 sewage treatment plants (STPs) with a capacity of 865.92 MLD. Out of 63 STPs, 11 STPs of capacity 149.3 MLD are under construction and 36 STPs of capacity 322.12 MLD are proposed[20].

The responsibility of sanitation in urban areas vests with ULBs. The capital investments in sewerage and other sanitation sector are mainly done by the state government. The responsibility of operation and maintenance lies with the respective ULBs.

5.2 Emerging challenges

Public awareness: One of the foremost reasons for the low penetration of toilets in the households is low priority given to sanitation by people themselves.

Infrastructure: At the basic level, the infrastructure for wastewater collection and transmission is lacking in most of the towns. Due to low priority given in the past to this sector, creation of sewerage, system in brownfield areas is difficult. More so due to lack of point source of collection of sewerage the system for treatment is also not functional. Most of the wastewater flows through open drains in to nearby water bodies, thus polluting them.

5.3 Implementation strategy

Implementing agencies: Urban Development and Housing Department, Urban Local Bodies and Public Health and Engineering Department.
Supporting agencies: Development Authorities, UITs, and RUIDP

Implementation roadmap:
> **Short term (0-5 years):** Coverage of sewage facility in all towns that have a piped water connection on priority basis. Ensure that all wastewater undergoes secondary treatment before being released into the natural water bodies. State level planning and framework for making all towns defecation free. State policy to encourage the implementation of water reuse technologies.
> **Long term (5-20 years):** Coverage of sewage services in all the towns of the state. Tertiary treatment technologies in water stressed areas for wastewater recycle and reuse through PPP.

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[18]Volume I, Interim report of State Commission on Urbanization   [19]Census 2011, House Hold Sanitation Survey   [20]Central Pollution Control Board (CPCB) review

5.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To ensure 100% coverage of sanitation services with proper collection, transportation, treatment, and disposal.	Increase in investments in wastewater management and reuse from the state and local government and allied with the clean up of polluted surface water and groundwater. Preparation of city sanitation plans for all the ULBs. Adoption of cascading modular systems for installations in new cities and retrofitting of older systems. Ensure that water supply projects include a meaningful sanitation component to allow a balanced approach to total water service delivery. Penalise using legal provisions in Municipal Act, 2009, those households who do not take sewer connections and dispose wastewater in open.	Support stand-alone sanitation investments, where there is a need for them, and where a sound and sustainable business case can be made. Develop effluent disposal standards and earmark sites for sewage treatment facilities. Prioritise connections to poor households at an affordable cost, and follow a pro-poor connection charge policy. This can be done through subsidies, rationalising or block tariff. Undertake IEC and incentivisation methods for encouraging people to connect to a sewer network. Undertake beautification and landscaping around large open drains. Make house connectivity as part of the sewerage infrastructure.
To eliminate open defecation by providing sanitation services to urban poor on priority.	Incentivise the private sector to invest in community toilets by developing appropriate PPP models.	Develop community and public toilets especially near slum areas. Adopt low cost and low maintenance technology for subsiding and encouraging individual households to build toilets. Install community toilets near construction sites, temporary markets places, and events.
To incentivise private sector participation for implementing innovative technologies in sanitary waste management focusing on treatment for maximum recycle and reuse of wastewater.	The state government will help ULBs in deciding different options for wastewater recycling, beneficial reuse of sludge by-products that best suits the needs. Proposals for commercial or industrial development may be permitted; subject to intended wastewater, disposal arrangements are acceptable.	Adoption of appropriate technology, which meets differentiated end needs at costs that attract investments. Identify the options and agreement for regional wastewater recycle and reuse plants, if more than one municipality can be gainfully combined for the system.
To implement "polluter pays principle" for management of wastewater.	Recognition of the principle of "the polluter pays", i.e. recovery of the financial liabilities being undertaken for the system.	Strict enforcement for developers and builders to install wastewater treatment for housing apartments and societies.

6 | Storm Water Management

Policy objectives
- To make storm water management system an integral part of urban planning and development process with the municipal body responsible for compliance of the same.
- To ensure regular maintenance and operations of the drainage system throughout the year, especially during the monsoon season.

6.1 Overview

Storm water runoff occurs when the rainwater falls over impervious land surfaces such as roads, buildings, and roofs that prevent it from percolating and getting soaked into the ground surface. With urbanisation and the rise of built environment, the proportion of impermeable surface to the permeable surface has increased which in turn has increased the run off and reduced deep infiltration. The impact of this change is depletion of ground water, clogging of drains and water logging on roads, open areas, etc. During monsoons, there is a sudden rush of water in the drains, which leads to water logging in low-lying areas, usually slums. Since storm water carries with it pollutants from one place to another, it can lead to flooding, erosion, and pollution. This is, therefore, a major cause of stream impairment in urban areas.

Cities have separate sewer and drainage pipes, but due to various reasons, in India, the outflow from the two are mixed together in open drains which flow into 'nallas' and finally into nearby water bodies, thus polluting them. Storm water management, if efficiently managed, acts as a source of supply for non-potable uses of water such as flushing, irrigation and washing. In addition, it can make urban environments self-sustaining in terms of water.

Under the provisions of the Environment (Protection) Act, 1986, Municipality shall, within the Municipal area, be responsible for the implementation of the rules that instigate the exercise of powers to regulate the management of storm water drainages and water bodies in their respective jurisdiction.

In Rajasthan, the existing network coverage of drainages in urban areas is computed as 43.38%[21]. Rainwater harvesting in the state is mandated by the law (Municipal Act, 2009) and has been added in the building permission by-laws. It needs to be enforced and implemented especially in industrial and institutional buildings that have a large footprint.

6.2 Emerging challenges

Planning: Storm water drainage system is often neglected in the overall planning of urban areas. The regional development plans, master plans, and zonal plans fail to take into account the natural flow of water, which becomes the part of the built environment. The effects are realised later when investments in the infrastructure are already in place. Lack of enforcements of the prepared plans, often encroachments are built on the drains, which obstruct the flow of storm water.

Design and construction: Most of the drains are left uncovered due to which municipal garbage mixes with water. Hence, they are prone to choke owing to unregulated solid waste dumping by the people. This leads to stagnant puddles of water, which lead to health hazards, unhygienic conditions and act as breeding ground for mosquitoes. These drains carry both storm water and wastewater during monsoon, in the absence of storm water drainage system, thus putting more pressure on the sewer network and mixing of storm water with grey water. Due to faulty design and inferior material used in construction, the linings in the drains are damaged, thus raising the risk of contamination of groundwater.

Maintenance: There are multiple agencies involved and due to lack of coordination among all the responsible authorities, entire drainage system remains unattended. Garbage and road sweepings are dumped on the roadside that easily find its way into the adjacent drains. There is lack of awareness among people about the health hazard of mixing of storm water with sewer and solid waste, due to which storm water drainage does not find priority in the scheme of things.

[21]State Commission on Urbanisation

6.3 Implementation strategy

Implementing agencies: Urban Local Bodies

Supporting agencies: Urban Development and Housing Department, Development Authorities, UITs and Public Works Department.

Implementation roadmap:

Short term (0-5 years): Storm water retrofitting in all areas prone to water logging. Clearing and maintenance of existing drains. State level guidelines and framework for all future construction of roads for storm water drainage. Development of uniform design standards for all agencies.

Long term (5-20 years): All arterial and sub-arterial roads to be adequately designed/retrofitted for storm water drainage. Implementation of annual maintenance plan of the drainage infrastructure.

6.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To make storm water management system an integral part of urban planning and development process with municipal body responsible for compliance of the same.	Development of master drainage plan by municipalities in conjunction with the city master plans and zonal plans. Drainage system to be a mandatory part for all arterial and sub-arterial roads. Standardisation and unification of design standards used by various agencies involved in the construction and maintenance of the urban roads.	Undertake appropriate retrofitting for existing roads. Enhance green areas to increase percolation of water beneath the surface, allowing only the extra water to flow into drains. Design of slopes, kerb parking, and intersections (rain gardens) that do not permit water to stagnate but to absorb and flow. Adoption of new technologies and material, which are permeable in the construction of pavements.
To ensure regular maintenance and operations of the drainage system throughout the year especially during the monsoon season.	Preparation of an annual plan for cleaning and maintenance of drains by skilled manpower and machinery along with budgetary proposals. Increase public awareness about the health hazards of improper storm water drainage. Establishment of a customer complaint cell and pro-active clearance of encroachments to unblock the drainage systems.	All drains to be covered and to ensure that no municipal solid waste is dumped in the drains by provisions of penalty. Strict measures by the municipalities to remove encroachments on the drainage system. Construct water-harvesting units where water stagnation occurs due to natural gradients.

7 | Solid Waste Management

Policy objectives
- To prepare and implement integrated waste management plans for all the towns and cities, including related statutory regulations and byelaws ensuring effective collection, disposal, and treatment of all categories of waste.
- To encourage and introduce technological interventions across the waste supply chain with an objective to maximise the recycling and minimising of waste going to landfill for disposal.
- To create public awareness through information, education and communication about cleanliness, recovering cost through user charges, and imposing penalties and fines for non-compliance.

7.1 Overview

Municipal Solid Waste (MSW) is waste consisting of everyday items discarded by the public in urban areas. It differs from rural areas in terms of composition as it contains higher proportions of recyclables and plastics than organic content. Waste management is one of the core functions of the ULBs and foremost determinant of cities' æsthetics. As compared to developed nations, which generate about 1-1.25kg/capita waste, waste generation in the towns of India is very less at 0.3-0.4 kg/capita. In spite of low waste generation, owing to various institutional and technological challenges, waste management is one of the most poorly rendered services in India. The liveability and productivity of a city is directly dependent on effective waste management.

MSW management in **Municipal Solid waste management rules, 2000**, provide most comprehensive policy guidelines for management of municipal solid waste. The rules mandate that every municipal authority is responsible for collection, segregation, storage, transportation, processing, and disposal of municipal solid wastes in their respective jurisdictions. Penal action was prescribed against municipal, district and state level authorities and even dates were prescribed as limits for actions to be taken. The **State pollution Control Boards (SPCBs)** have been entrusted with the responsibility to oversee the implementation of the Act.

Total municipal waste generated in Rajasthan is 5,037 TPD, out of which 2,491 TPD is collected and 490 TPD is treated. As per the Rajasthan Pollution Control Board Annual Report 2012-13, two scientific landfill sites exist in the state, and primary door-to-door collection exists in one city.

7.2 Emerging challenges

Primary collection: Waste management investments are currently planned in a piece-meal manner and do not take into account the full cycle of safe confinement, treatment, and safe disposal. Lack of primary collection results in disposal of waste on ad hoc dumpsites, which are breeding grounds for disease causing viruses and bacteria.

Secondary collection: The secondary collection is done in metal bins kept at various places in the cities. Most of these bins are small and not adequate in number. Hence, waste over spills most of these bins. The bins are also not covered, due to which rag pickers, tend to collect potential recyclables from secondary collection points and in the process tend to spill the waste making secondary collection by municipal authorities more difficult. Most of the secondary collection points are in open.

Street sweeping and drain cleaning: Street sweeping is not done on a regular basis. The waste swept is piled on the roadside, and due to lack of coordination for its removal, the waste again is spilled back to the road.
Transportation: The vehicles involved in transportation of waste are either old or outdated. Most of the vehicles are uncovered. Due to lack of vehicles and equipment, waste transportation is done by private contractors that are unregulated.

Processing of waste: There are three waste processing plants in the state. Due to inefficient primary and secondary collection, processing of waste is difficult. Technological options are limited in case of non-segregated waste.

Disposal: Most of the disposal is done in an unscientific manner. The disposal sites emanate foul smell and have become breeding grounds for flies, rodents, and pests. Liquid seeping through the rotting organic waste called leachate pollutes underground water and poses a serious threat to health and environment.

Bio-medical waste: Rajasthan is facing a massive problem of bio-medical waste management and disposal. According to Rajasthan State Pollution Control Board (RSPCB), gross generation of biomedical waste in Rajasthan is 16,000 kg/day with a generation rate of 232 gm/bed/day. Out of the total generated biomedical waste, only 12,000 kg/day is treated, which means that almost 25% of the waste is left untreated and not disposed properly.

E-waste: Solid waste management, which is already a mammoth task, is becoming more complicated by the invasion of e-waste, particularly computer waste. This sector is still unorganised. At present, six recycling industries for e-waste are running in Rajasthan.

Slaughterhouse: Due to rapid urbanisation in urban centres, a large number of unauthorised meat and fish market have developed without any provisions for collection and processing of generated waste. Due to lack of proper collection system, waste is directly disposed of in the nallahs or open space near the market, which is mixed with municipal solid waste.

Construction and demolition waste: In absence of any defined rules for Construction and Demolition waste handling and disposal, people dispose this waste openly on streets, roads outside their houses/ shop/sites, etc. This is creating a big nuisance in the waste management system in urban areas, thus requiring a big amount of land for disposal. There is no separate system for the collection and processing of construction and demolition waste. The construction and demolition waste is mixed with municipal waste, thus reducing options for recovery/processing of municipal solid waste and increasing the weight and expenditure on transportation of solid waste.

7.3 Implementation strategy

Implementing agencies: Urban Local Bodies
Supporting agencies: Urban Development and Housing Department and State Pollution Control Board..

Implementation roadmap:
    Short term (0-5 years): 100 % door-to-door collection and scientific disposal in all towns with population greater than one lakh. Development of PPP model for regional integrated solid waste management, and its implementation in towns with population greater than five lakhs. Undertake massive IEC campaigns for creating public awareness about source segregation and its benefits.
    Long term (5-20 years): Integrated solid waste management in all towns of the state with 100% processing and scientific disposal. Setting of waste to energy plants based on environmental and financial feasibility.

7.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To prepare and implement integrated waste management plants in all the town and cities for effective collection, transport, disposal and treatment of all categories of waste.	Establish institutional mechanism with dedicated staff and funds at the state and city level responsible for solid waste management. Encourage and support municipalities to engage private contractors either on a standalone or on a regional basis depending on the scale and viability of the project.	Adoption of integrated approach to municipal solid waste that addresses all essential activities in a coordinated manner. Implementation of 100% door-to-door collection of source segregated waste. Engagement of rag pickers and street sweepers in the door-to-door waste collection. All workers involved in waste collection to be provided safety equipment (gloves, boots, masks, etc). Coordination of all the collection and transport vehicles through GPS tracking to minimise piling of the waste at the secondary collection points. Ensure that all vehicles involved in waste transport are covered and manned by trained personnel. Development of regional landfill sites for small and medium towns.

Policy objective	Institutional/Legislative	Physical
To encourage and introduce technological interventions across the waste supply chain with an objective of maximising the recycle and minimising the waste going to landfills for disposal.	Development of legislations and policies for encouraging reuse and recycle of waste.	Adopt new and innovative technologies for management and processing of waste to maximise reuse and recycle. Establish waste to energy plants on a regional basis. Utilise plastic waste for the construction of roads.
To create public awareness through information, education and communication about cleanliness.	Use of incentives and penalties backed by legal provisions to ensure compliance by all the citizens.	Utilise electronic, print, and social media and undertake massive communication campaign to raise awareness about issues concerning waste management.

8 | Affordable Housing

> **Policy objectives**
> - To provide affordable housing in all the urban areas, with focus on EWS and LIG category.
> - To implement innovative housing finance and strategies that benefit LIGs.
> - To encourage technology and innovation for modernising the housing sector focussing on efficiency, productivity and quality.

8.1 Overview

Housing is the basic need of every individual that provides economic and social security to individuals in the society and is a reflection of a nation's economic and social well-being. Safe, secure, and affordable housing implies an increase in employment and educational opportunities for individuals and enriches communities leading to a better quality of life and a better civil society.

Housing is a significant engine for growth and development of any economy. The impact of housing on economy occurs in two phases. One during construction and other during occupancy. Local and state governments benefit from tax revenue generated during both the construction and residential phases[22]. Due to escalating price of land, housing in urban areas is not affordable. This leads either to horizontal sprawl of the city or development of slums. Hence, affordable housing is a pressing issue of urban development and appropriate measures need to be taken by the government at all the levels.

As per the 2011 Census, the number of households in urban areas of Rajasthan is 3,216,243, which is 25% of the total households in the state. Housing stock calculated as per the number of census houses is 30, 69,072. A shortage of 5, 02,605 units exists in the state. As per Census 2011, a total of 3, 94,391 households are residing in slums with 73,236 population. Hence, the total number of housing units to be provided is 8, 96,996 units.

8.2 Emerging challenges

Existing housing situation and the rate of supply: Pressure exerted on infrastructure and social services countrywide by rapid population growth (compounded in the case of urban areas by migration from the countryside for the urban areas), has been most felt in the housing sector. There is substantial unmet housing demand as the supply side, constrained by a number of different bottlenecks, has been unable to produce new housing in sufficient quantities to meet the needs of a growing population.

Infrastructure: Decent housing cannot be achieved without the simultaneous development of infrastructure services such as water supply, sanitation, roads, storm water drainage, electricity and others. The inadequacy of infrastructural services has been caused by: (a) lack of adequate finances to develop and maintain these infrastructure services; (b) lack of planning capacity and inability to implement land use plans; (c) lack of co-ordination by local authorities and other service delivery companies to implement land-use plans; and (d) inability of planning and local authorities to enforce planning and building regulations resulting in uncontrolled development; this trend has tended to produce substandard housing, which has not included infrastructure services. Lack of established procedures for improving or redeveloping unplanned settlements.

Finance: There is little capital readily accessible today for either home improvement loans or long-term mortgage financing at low or subsidised interest rate. Therefore, many households cannot afford adequate housing.

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[22]The Effects of Housing on the Local Economy, Housing Virginia, www.housingvirginia.com

8.3 Implementation strategy

Implementing agencies: ULBs, Development Authorities, Urban Development and Housing Department
Supporting agencies: Town and Country Planning, and Housing Board.

Implementation roadmap:
>   **Short term (0-5 years):** Implementation of State policy on Affordable Housing and emendation of legislations for implementation. Regulation of the real estate sector to provide appropriate stock for low cost housing. Development of housing finance market for low cost housing byers.
>   **Long term (5-20 years):** Integrated planning for affordable housing by planning opportunities for livelihood and public transportation.

8.4 Key interventions and action points

Policy Objective	Institutional/Legislative	Physical
To provide affordable housing in all the urban areas, with focus on EWS and LIG category.	Single window clearance and facilitation for private sector participation in the sector.	Ensure availability of land for affordable housing projects through demarcating areas in master plans. Create access to affordable transport and other services like education and health.
To implement innovative housing finance and strategies that benefit LIGs.	Capital/Interest subsidies to the poor to bridge the affordability gap in housing. Ensure adequate financing to LIGs through loans from private/public funds by necessary interventions and guarantees.	Development and expansion of key financing institutions to enable short/medium/long term financing for the development, renovation, extension, and purchase of housing.
To encourage technology and innovation for modernising the housing sector focussing on efficiency, productivity, and quality.	Continuous review of housing and development standards to ensure affordability of housing while not compromising key health and safety concerns, nor compromising environmental conditions. Encourage and adopt innovation in design, materials, and energy efficiency.	Encourage use of latest technologies for developing affordable housing such as pre-cast and hollow pre-cast construction.
Ensure gender equity in affordable housing space	While women belonging to EWS and LIG category have access to land and housing, they often do not have property rights and control over resources, which limit their asset base, decision-making power on housing location and design, productive and/or income-earning activities. Further, they have limited access to housing finance due to lack of property rights. Hence, this policy would address these issues.	Provide ownership of land and housing in women's name or joint titles for husbands and wives in all the housing developments. Gender sensitive land tenure context mapping at urban level to get the base line figures for land rights. Involve women and men through community-based organisations (including women's groups) to determine housing designs and locations. Provision for getting home loan to women irrespective of their marital status. Consider mixed-use zoning (residential and commercial) allowance in low-income housing settlements to promote women's home-based enterprises. Providing night shelters for working women. Legal remedies through improved access to information and legal support available for women. The policy should also take measures to deal with the social safeguard issues and impacts that may arise during the implementation of projects to be taken up by ensuring positive social development outcomes, avoiding/minimising and mitigating adverse social impacts, including loss of livelihood that may result from loss of lands and common property resources, ensure participation of local communities and stakeholders in the whole process of project development.

9 | Slums Redevelopment

Policy objectives
- To create slum free cities through provision of affordable housing and in-situ slum rehabilitation.
- To provide security of tenure to slum dwellers in the slum redevelopment projects.
- To ensure provisions for basic services such as water and sanitation in all the slum areas.

9.1 Overview

The word "slum" is often used to describe informal settlements within cities that have inadequate housing and miserable living conditions. They are often overcrowded, with many people crammed into very small living spaces. Slums are not a new phenomenon. Slums are generally the only type of settlement affordable and accessible to the poor in cities, where competition for land and profits is intense. The main reasons for slum proliferation are rapid and non-inclusive patterns of urbanisation catalysed by increasing rural migration to urban areas[23]. Some of the probable reasons for development of slums are rapid, unorganised, and haphazard urbanisation, industrialisation, and large-scale migration due to push from the rural areas and critical inadequacy of housing, public utilities, and congestions.

A Slum, for the purpose of census, has been defined as a residential area where dwellings are unfit for human habitation because of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of street, lack of ventilation, light, or sanitation facilities or any combination of these factors which are detrimental to the safety and health. As per UN Habitat, a slum is characterised by lack of durable housing, insufficient living area, and lack of access to clean water, inadequate sanitation, and insecure tenure.

As per Census 2011, Rajasthan has 185 statutory towns out of which 107 are slum reported towns. The total slum population in Rajasthan is 20,68,000 and all of them are residing in identified slums.

The State Government of Rajasthan is committed towards improving the quality of lives of slum dwellers. It has articulated its commitment through a series of policy statements, key among these relate to its policies on land tenure/titles to slum dwellers, livelihood promotion and urban housing and habitat development.

Rajasthan Township Policy 2010: The main objective of this policy is to promote the integrated townships in private sector. The policy makes the following provisions for affordable housing:

- 15% of plots to be reserved for affordable housing in each of the township scheme.
- Government land falling within the township area can also be allotted if 75% of land is under the possession of the developer.
- Clubbing of two or more adjoining schemes is permissible.

Mukhya Mantri Shahari BPL Awas Yojana: The main objective of this scheme is to fulfil social commitment of providing housing to the persons below poverty line. For construction of one room unit, a direct subsidy of 75,000 INR to BPL family is admissible. Plots measuring 30 sqm each can be allotted free of cost under this scheme.

Slum Development Policy 2012: A private developer may take up the redevelopment project on any slum identified by the local body or interested developer may also identify other suitable slum/slums that can be taken up for redevelopment after obtaining consent from slum dwellers. Slums situated on private lands can also be taken up subject to consent from slum dwellers and private landowners. Projects can also be taken up on mutually agreed terms with landowners and the local body.

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[23]*State of Slums in India, A State Compendium 2013, Ministry of Housing and Urban Poverty Alleviation*

9.2 Emerging challenges

Tenure issues and access to land for the urban poor: Populations living in irregular urban settlements are all confronted with the same set of inter-related problems: they have no access – or limited access only – to basic services, and they have no security of tenure. Their situation is precarious as they usually belong to the poorest segment of the urban population.

Improving the livelihoods of the slum dwellers: There is an immense need for improving the livelihoods of the slum dwellers thorough poverty reduction, effective governance, and empowerment of slum dwellers.

Mobilising finance for slum upgrading and shelter development: The current challenge is financing slum upgrading and shelter development. There is a need for improving municipal finance for investment in low- income houses.

9.3 Implementation strategy

Implementing agencies: ULBs, Development Authorities, Urban Development and Housing Department
Supporting agencies: Town and Country Planning, Development Authorities, Revenue Department and Housing Board.

Implementation roadmap:
> **Short term (0-5 years):** Implementation of State policy on Slum redevelopment and amendment of legislations for security of tenure. Provide basic facilities like water and sanitation in the existing slum areas.
> **Long term (5-20 years):** Use low-cost construction technology for in situ slum redevelopment to create slum free cities. Implementation of affordable housing policies and ensuring that no new slums are created.

9.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To create slum free cities through provision of affordable housing and in situ slum rehabilitation	Provide financial assistance to beneficiary-led individual house construction or enhancement[24].	Facilitate private sector participation for providing houses to eligible slum areas through in situ slum rehabilitation.
To provide security of tenure to slum dwellers in the slum redevelopment projects.	Formal recognition of the existing slums by enlisting or notifying the slums.	
To ensure provisions for basic services such as water and sanitation in all the slum areas.	Coordination among various agencies for basic services to the poor. De-legalising the water and sewerage connection bills, as a proof of residence, address, or ownership, should be explored as a solution to the problem of providing water connections in slum and non-authorised areas, where water theft and illegal connections are prevalent.	

[24]In the beneficiary – led individual house construction or enhancement of Pradhan Mantri Awas Yojana – Housing for All (Urban) Scheme of the Ministry of Housing and Urban Poverty Alleviation will provide assistance of INR 1.5

Part 3   COMPETITIVENESS

10 | Heritage and Tourism

Policy objectives
- To protect, conserve, and revitalise the heritage sites and buildings in the urban context that appeals to residents as well as visitors.
- To promote balanced conservation and development efforts in public interest, which involve both the people and private property owners.

10.1 Overview

India is one of the few countries of the world with such a unique and variant cultural heritage. Hence, it is the national focus to protect this identity. Since heritage has always been one of the intrinsic facets of Indian tourism, recognition of the significance of heritage assets and ensuring their protection is essential for sustainable tourism. This not only serves as the purpose for protection of our cultural heritage, but also attracts tourism and promotes the economy of the place. Thus, important tourist destinations are also major urban centres and it is essential to protect the urban identity. There are, in total, 31 World Heritage Sites in India, out of which three are in Rajasthan.

Tourism contributes to 6.8% of India's GDP with US $ 18.13 billion in foreign exchange earnings. Rajasthan is one of the major tourist destinations in the country because it has a large cultural resource. A total of 14,37,162 foreign tourists and 3,02,98,150 domestic tourists visited Rajasthan in 2013[25]. Major cities such as Jaipur, Ajmer, Jodhpur, and Jaisalmer are important tourist destinations. Any urban policy without tourism and heritage conservation will not be complete since heritage tourism makes historic preservation economically feasible.

Fast paced urbanisation and infrastructural requirements often lead to a neglect of cultural heritage. An apparent tradeoff is often seen between cultural preservation and development. Good Heritage conservation will attract tourists, thus increasing the economy and investments in the city. Similarly, good urban infrastructure will attract more tourists; hence, the value of heritage structures will also increase whereas bad urban infrastructure or neglect of conservation will drive the tourists away. Urban cultural heritage is the physical representation of community identity that needs to be preserved.

Heritage includes the monuments that are landmarks and non-monumental buildings that are a part of the urban fabric. These monuments are conserved and taken care by either private property holders or special organisations like the Archæological Survey of India. Traditionally, the issues of conservation have only dealt with landmark monumental buildings, but recently, the principle of conservation has extended to the overall urban fabric. The historic buildings and infrastructure in this scenario have to face the brunt of development, and need the most attention. In short, cultural heritage has acquired economic value as well as locational condition in the shape of urban tourism.

10.2 Emerging challenges

Private properties: One of the foremost challenges in Rajasthan is the ownership of the historical heritage sites. Many of the important buildings fall under private ownership that leads to a situation of uncertainty with regard to conservation effort, funding, incentives, etc. A clear policy and direction is not available which complicates the situation. Due to this, many places of public interest continue to decay.

Urban and heritage planning: The departments responsible for urban planning and heritage conservation work in silos. The two are seen as anti-thesis to each other rather than complementing each other's efforts. There is involvement of agencies at the central, state, and local levels. Private properties complicate the situation further. This needs correction through institutional changes.

Involvement of people: Heritage conservation efforts often exclude people. People participation right from the beginning, i.e. the planning stage, not only increases acceptability of the project but also helps in the implementation.

[25]India Tourism Statistics at a glance, 2013

10.3 Implementation strategy

Implementing agencies: ULBs, Urban Development and Housing Department, Department of Tourism and Archæological Survey of India.
**Supporting agencies:** Town and Country Planning, Development Authorities, UUITs.

Implementation roadmap:

Short term (0-5 years): Identification of heritage sites in the urban context and bring clarity about their ownership. Establish clear policy guidelines for development of heritage areas.

Long term (5-20 years): Heritage conservation to be a part of urban planning and be implemented in all the towns.

10.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To protect, conserve and revitalise the heritage sites and buildings in the urban context that appeals to residents as well as visitors.	Establishment of Heritage Authority and Council to undertake functions as are necessary and conducive to conservation and preservation of heritage in the state as decided by the government. Identification and recognition of heritage sites and buildings, in the city Master Plan by municipal and town planning bodies. Establishment of a specialised cell within the municipalities, which will help in the formulation of heritage conservation plans, and involvement of people and experts.	Development of a GIS based map of all heritage sites and their conservation status made available online. Development of ancillary infrastructure and management such as water, parking, etc. at the heritage sites by municipal bodies and charge user fee for the same as additional source of revenue.
To promote balanced conservation and development efforts in public interest, which involves both the people and private property owners.	Encourage and promote investments in the tourism industry in a sustainable manner that increases livelihood opportunities and protect the built and natural environment as well.	Incentivisation to private property owners with heritage tag in terms of tax, transferrable development rights, FAR, etc. for conservation efforts of the government.
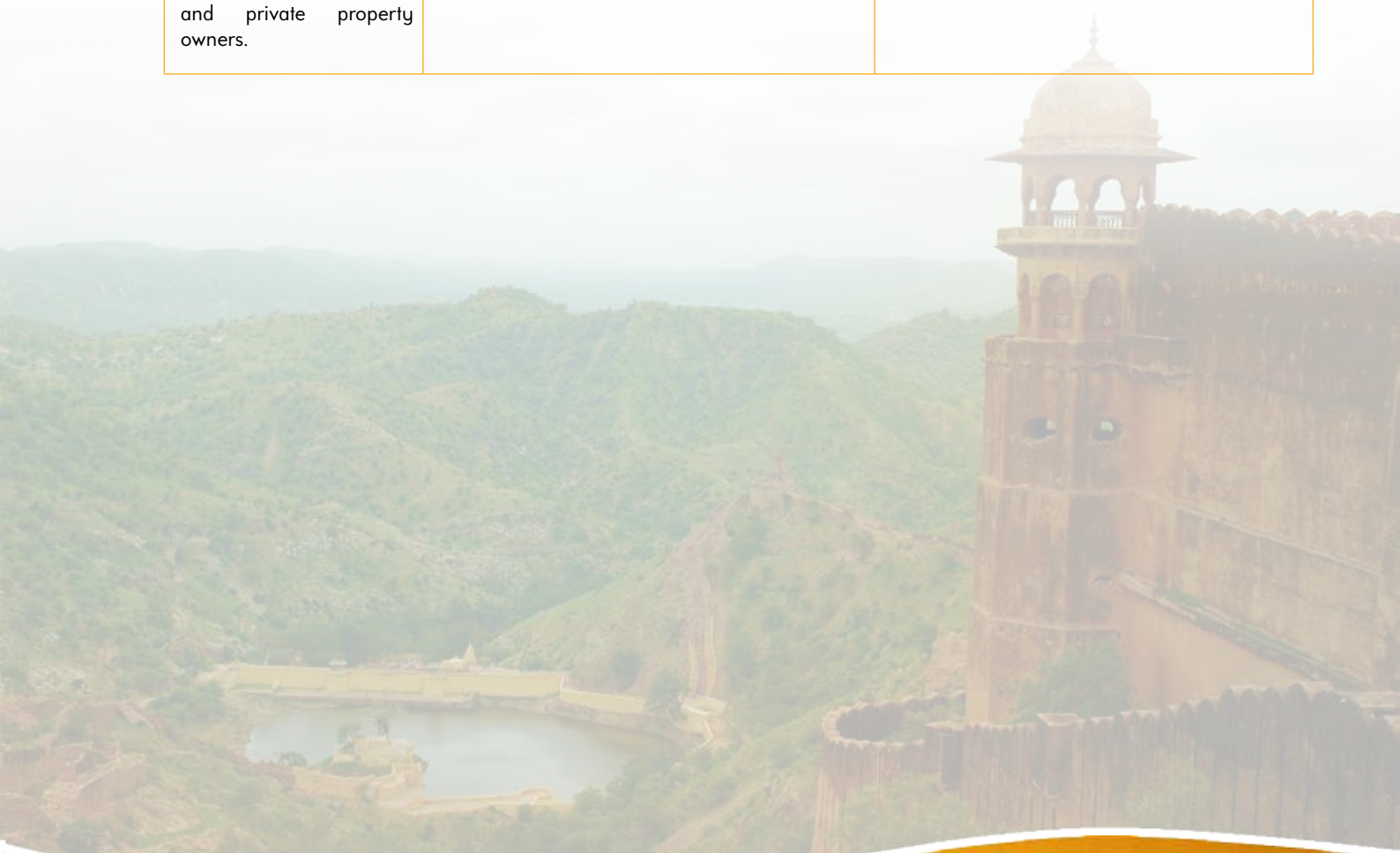
11 | Economic Development and Investments in the Cities

Policy objectives
- To improve urban services and infrastructure to support economic development and attract investments to increase competitiveness of the cities.
- To recognise the contribution of the informal enterprise and thus increase operational and financial support for the informal economy.
- To promote industrial development in a sustainable manner and in consonance with urbanisation.

11.1 Overview

Historically, cities have been the center of economic development and growth. Cities have attracted entrepreneurs, skilled work force, and business investments to create the scale and opportunities for economic growth, and urbanisation tends to move in close sync with this growth, as has been observed in the past. The changing structure of the economy from primary to tertiary has also initiated a shift of labour force from low to high productivity sectors in urban areas. Growth of economic potential of cities will not only affect the urban centres but also have spill over effects to the surrounding regions. The urban areas will have the capacity to absorb the surplus labour from agriculture, which will be generated due to higher levels of education and use of mechanisation and technology in the farm.

However, the thriving of cities depends on their potential to keep attracting investments in economic activities. At present, the contribution of the cities to the GDP of India is 68 %. To ensure urban economic development, the city should support economic development and service industrial production. One of most important driver of economic activity in Rajasthan will be the upcoming Delhi-Mumbai Industrial Corridor, which passes 39% of its total length through the state.

11.2 Emerging challenges

Loss of traditional economic base: Every city has a unique character and economic functionality. As it expands and grows, the functions are diversified. Due to technology obsolescence, shift of market and influx of population, cities lose their traditional economic base and fail to generate new avenues for economic activity and livelihood creation.

Concentration of infrastructure and services: Due to inertia of existing market forces, economy of scale, aggradation of infrastructure and services in one place, the economic forces tend to concentrate in few primate cities that grow and expand at a faster rate than the surrounding areas. This results in problems arising due to over utilisation and underutilisation.

Management of industrial areas: Due to overlapping jurisdictions and no clear policy guidelines, there is often a conflict of responsibilities. Many industries come up within municipal areas and at the same time urban areas expand into land designated for industries.

11.3 Implementation strategy

Implementing agencies: ULBs, Urban Development and Housing Department, Department of Revenue.
Supporting agencies: Town and Country Planning, Development Authorities, UUITs.

Implementation roadmap:
　　Short term (0-5 years): Preparation of economic roadmap for the cities. Identification of formal and informal sectors of employment generation in urban areas. State level policy and planning for creating economic centres of growth within the cities.
　　Long term (5-20 years): Create sustainable centres for service at regional level for uniform spread of economic activity across the whole landscape.

11.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
Improve urban services and infrastructure to support economic development and attract investments to increase competitiveness of the cities.	**Planning** Prepare economic development plan for urban areas that identify the key economic drivers of the past and potential drivers in future. The plan will be one of the key inputs in the master plan preparation process by allocating land and other infrastructure facilities. Undertake comprehensive studies of the local areas covering industry, tourism, commerce, services and the related and labour, capital and land requirements.	**Infrastructure** Identify and address infrastructure gaps in different urban areas that relate to its economic development potential. Mobilisation of resources to initiate economic development in the identified sectors by encouraging public private partnerships, innovative financing and reducing the costs of business by eliminating the institutional bottlenecks.
To recognise the contribution of the informal enterprises, thus increasing operational and financial support for the informal economy.	Undertake regular consultation with the operators in the informal and unorganised sectors. Incorporate provisions in planning and legislations that facilitate the growth of the informal sector in an organised way.	Provide the small and medium scale business commercial operating spaces in strategic locations with necessary urban facilities and services. Capacity building of the informal sector through financial support mechanism, skill training, and education encourage the informal sector to adopt efficient production methods and explore market potential in new thriving areas for global competitiveness.
To promote industrial development in a sustainable manner in consonance with urbanisation.	Planning of industrial areas to be approved under the proposed Town Planning Act. Segregation of the role of different agencies with respect to planning, development, regulation of industrial centres. Prepare specific guidelines prescribing planning of industrial areas, development specifications for drains, and capacities and quality of treatment plants.	Identification of industry wise zones across the state based on the potential, availability of water, power and other resources so that private industrial areas and industries could come up and set up in a planned manner and without hassles. Provisions of providing municipal services and their maintenance through declaring such areas as industrial townships.

Part 4   ENABLERS

12 | Urban Governance and Institurions

> **Policy objectives**
> - To establish clear roles and responsibilities of all agencies involved in urban planning, development and management.
> - To strengthen grass root democracy and citizen engagement in governance.
> - To increase transparency and accountability in the urban institutions.
> - To ensure high quality service delivery with effective grievance redressal and continuous monitoring and evaluation of work.
> - To build capacity of institutions and people to tackle the complex and emerging issues in city management.
> - To strengthen financial capacity of municipalities to fulfil their functions effectively.

12.1 Overview

The key to successful urbanisation lies in effective urban governance with emphasis on city management. The emergence and identification of cities as engines of growth and their competition with each other at the national and international level for investment is another powerful driving force leading to calls for improvements in city management.

The 73rd Amendment for Panchayats and **74th Amendment** for Nagarpalikas are landmark legislations for creating the third level of government at the local level. In Rajasthan, the mandatory provisions with relation to the 74th Amendment Act were inserted in the Rajasthan Municipalities Act 1959 in 1994 and later certain other provisions were included in the **Rajasthan Municipalities Act 2009**.

The objective of the policy is to provide a **citizen centric** and **technology driven** administration through **good governance** and **accountable institutions**.

Rajasthan government has taken various initiatives to provide good governance in the state. Some of the initiatives are:

- **Implementation of Right to Information Act, 2005:** Constitution of State Information Commission and appointment of Public Information Officers in all the departments and agencies.
- **Rajasthan Guaranteed Delivery of Public Services Act, 2011:** To ensure quality and timely delivery of services to the citizens through legal backing. The act is enforced for 152 services across 18 departments of the state government that includes urban governance agencies also.
- **The Rajasthan Right to Hearing Act, 2012:** This Act provides for establishment of information and facilitation center including citizen care center and help desk for effective implementation. Basic objective is timely customer grievance redressal by the government authorities.
- **Rajasthan Transparency in Public Procurement Act, 2012:** This Act ensures highest standards of transparency and accountability in public procurement processes and enhances the public confidence in it. It gives guidelines for all public procurements in local bodies and mandates the e-tendering process.
- **E-Governance initiatives in the state:** E-Mitra, to provide an online system to pay utility bills and lodge complaints and GRAS (Government Receipt Accounting System), with the aim to streamline the collection of tax or non-tax revenue in both online mode as well as manual mode.

12.2 Emerging challenges

Multiplicity of agencies: At present, the state has three development authorities (Jaipur, Jodhpur, and Ajmer) and 15 UITs. They are supposed to carry out functions at the regional level for planning and development. However, in practice, they function parallel to municipalities operating with the same territorial and functional jurisdiction. Similarly, there are multiple agencies at the state level with overlapping functions.

Capacity building of institutions and human resources: With increasing population and services in urban areas, the agencies face acute shortage of staff at the middle and senior level. The municipal department dœs not have a regular cadre and institutionalised recruitment process for continuous fulfilment of vacancies. In addition, there is absence of experts/staff for important aspects such as environment planning, urban design, landscape architect, urban transport, heritage conservation, GIS experts, etc. Regular training and workshops for skill enhancements is also required.

Local participation: Citizen participation in the governance process is increasing and the state needs to reinvigorate and establish a mechanism to encourage the participation. Ward committees have to be established in all the towns for grassroots representation of the concerns of the citizens. Use of social media by the government bodies need to be organised for more engagements with the citizenry.

Financial resources: The municipalities find themselves often in a situation of financial crunch; hence, they are dependent on central and state governments for financial devolutions. The tax base and compliance of municipal taxes is very low. The user charges have to be levied and regular tariff revisions are required. With increasing urbanisation, the municipalities have to ensure sufficient revenue mobilisation of revenue expenditure for sustainability and quality of service delivery.

Accountability and transparency: With increasing middle class in urban towns and citizen awareness, the expectations from the government has increased manifold. The authorities have to not only be but also appear to be transparent and accountable. The governance system has to transform its processes to increase transparency, establish clear procedures to decrease discretionary powers and enable effective redressal of grievances.

12.3 Implementation strategy

Implementing agencies: ULBs
Supporting agencies: Urban Development and Housing Department, Directorate of Local Bodies.

Implementation roadmap:

Short term (0-5 years): Development of municipal cadres at the state level and training plan for municipal functionaries. Enhance sources of revenues and use technology such as GIS for better assessment and collection of taxes to enhance revenue of ULBs. Implement service delivery and acts related to transparency and accountability. Establishment of an effective grievance redressal mechanism in all ULBs.

Long term (5-20 years): Establishment of clear roles and responsibilities of all agencies to reduce overlapping of work. Establishment of primacy of elected functionaries in decision-making.

11.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To establish clear roles and responsibilities to all agencies involved in urban planning, development and management.	Extend the territorial and functional jurisdiction of ULBs in designated urban areas with full responsibility and authority. Delineate functions between state parastatal agencies and municipalities in case of overlapping and transitional areas through executive and legal actions.	Changing the status of census towns to new statutory towns.
To strengthen grass root democracy and citizen engagement in governance.	Establish the primacy of elected functionaries and suitable demarcation of powers between the nominated and elected officials. Set standards of service delivery through citizen charters and seek citizen feedback on monitoring and evaluation of set standards.	Enhance citizen participation through social audits, M Governance, and Customer complaint Cells. Constitution of ward committees in all towns as per the constitutional provisions of 74th Amendment and Municipal Act giving them management functions and resources to carry out the functions with autonomy.
To increase transparency and accountability in the urban institutions.	Practice an open data policy and strengthen the implementation of Right to Information Act in all the departments. Appointment of a statutory Ombudsman to take cognizance of all grievances of citizens and their groups.	Make all public procurements transparently through online resources such as e-tendering and e-payments.

Policy objective	Institutional/Legislative	Physical
To ensure high quality service delivery with effective grievance redressal and continuous monitoring and evaluation of work.	Undertake research, monitoring, evaluation and impact studies of all schemes and projects. All departments to establish an Outcome Delivery Framework to set measurable targets, performance evaluations system for employees, and a project management system to track implementation of schemes and projects.	Establish an effective online grievance redressal mechanism and customer complaint cell in every office. Conduct Social Impact Assessment (SIA) of all development works.
To build capacity of institutions and people to tackle the complex and emerging issues in city management.	Formulate knowledge partnerships with the private sector, industry association, advisory firms, multi-lateral funding agencies, NGOs, etc. Establish mechanisms to utilise services of external service providers, and experts as and when necessary. Establishment of a training institute for urban development and governance issues.	Undertake capacity building of people and institutions related to urban development through training, workshops and skill development. Establish a municipal service cadre for new recruitments in engineering, administration, and revenue. Hire experts on a permanent or ad-hoc basis to fulfil the technical knowledge gaps.
To strengthen the financial capacity of municipalities to fulfil their functions effectively.	Enhance tax collections through legal and financial reforms, expansion of tax base and better enforcement measures. State Finance Commission Report to synchronise with the Central Finance Commission, so that the needs and requirements of ULBs can be adequately addressed. Streamlining devolution of funds to ULBs by linking it to performance and efficiencies.	Proper assessment, valuation, enforcements, and communicating with public with regard to urban development, property and other taxes. Ensure cost recovery through user charge and tariff rationalisation.

13 | Urban Planning

Policy objectives
- To enable integrated planning of urban areas taking into consideration expected population growth, infrastructure requirements, and land use.
- To strengthen and improve technical capability in the use of technology such as ærial photography, satellite imagery and Geographical Information Systems in planning, management, and development.
- To encourage participation of all stakeholders in the planning process and strengthen enforcement mechanism to curtail unauthorised development.
- To ensure uniform growth of urban regions by including peri-urban areas in planning and directing investments and development towards them.
- To promote "City Branding" as a tool to enhance city image and ownership, promote tourism and attract investments

13.1 Overview

Urban planning is a technical and political process concerned with the use of land, protection and use of the environment, public welfare, and the design of the urban environment. It draws upon engineering, architectural, social, and political concerns. It is an endeavour involving political will and public participation.

Urban planning revolves around the idea of making a thriving city with a standard living condition. It takes into concern the basic character of the city that comes from its people, commerce and finance, culture, and heritage. It is a process of integrating land use planning, economic planning, inclusive planning, planning for infrastructure including transport and water supply at all level.

Urban planning as a framework to promote and streamline urban development[26]**:** Urban planning entails the drawing up of a methodological and legal spatial framework to assess infrastructure needs of particular states, towns, and cities therein and earmarking resources under different sectors. Urban Planning tools may be leveraged to encourage private sector participation in land and urban infrastructure development. Urban planning can thus provide a perspective for participation and coordination between the different partners (private and public) and decision makers.

Urban planning as a tool for programme implementation and infrastructure development: Urban planning acts as tool for city infrastructure development through programme implementation of government schemes. Urban planning offers the opportunity to tie different initiatives together and focus on realising them within a given period.

Urban planning enables people participation: Urban planning is a process that represents the aspiration of the end users and entails participation at community level, with elected representatives, and decision makers.

Urban planning in Rajasthan is performed by the Town Planning Department and it is part of the Ministry of Urban Development and Housing, Government of Rajasthan. The main function of the department was to prepare physical development plans, such as schemes, master plans of towns, regional plans and village plans.

13.2 Emerging challenges

Multiple agencies in planning: Planning is a comprehensive exercise done at various levels from national, state, regional, urban, and zonal areas. Often the plans are not in consonance with each other and results in overlaps and conflicts. This problem arises because of lack of mechanisms for coordination between different agencies involved in the planning process. The agencies involved in planning are different from those involved in enforcement.

Inclusive planning: The planning process excludes the involvement and participation of people. Due to this, plans are not comprehensive and neglect the concerns of various sections of people. The present practice of developing a land dœs not require the developer to link its site to the trunk/main infrastructure system of the city, due to which colonies are developed in silos without integration with the surrounding areas.

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[26]http://www.iitk.ac.in/3inetwork/html/reports/IIR2006/Planning_for_Urban.pdf

Economic aspects: Lack of focus on economic aspects of plan implementation/budgeting while preparing land use development plans. Master plans need to look in to the dynamic nature of human settlements over a period of 20 to 25 years rather than focusing on the results or end state. The projecting population should be based on economic projections, social changes, and basic infrastructure requirements.

13.3 Implementation strategy

Implementing agencies: Town and Country Planning and ULBs
Supporting agencies: Urban Development and Housing Department.

Implementation roadmap:

Short term (0-5 years): Integrated planning of urban areas and transit oriented development principles to be adopted by the planning agencies. Municipalities with population greater than one lakh to play an active role in the planning process and in its implementation. Regulation of horizontal urban sprawl in the cities.

Long term (5-20 years): All urban areas to implement the plans through strict enforcement measures. Establishment of institutional mechanisms to increase participation of people, civil society, and citizen forums in the planning process.

13.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To enable integrated planning of urban areas taking into consideration expected population growth, infrastructure requirements, and land use.	Legislating provisions of planning for implementation and enforcements. Provision of land for urban utilities Mandatory assurance from the developer to the local body for connecting the proposed site with the city's main trunk network. Allocation of housing and urban services for urban poor and slum dwellers based on demand assessment.	Integrate urban planning with the socio-economic, demographic, and spatial scenario in urban areas. Lands to be reserved for future requirements of urban utilities through town planning schemes, land pooling schemes and other such mechanism . Ensuring appropriate need assessment for urban poor in planning of new areas such as housing, transport and other services. Tourism and heritage planning to be a part of the master plan.
To strengthen and improve technical capability in the use of technology such as aerial photography, satellite imagery and Geographical Information Systems in planning, management, and development.	Establish urban planning cell in all municipalities to coordinate with different state agencies for issues related to urban planning.	Invest more funds in the use of GIS based mapping and uploading all maps and master plans online. Capacity building of ULBs, this will include building organisational as well as financial capabilities of ULBs to meet the challenges of urban planning.
To encourage participation of all stakeholders in the planning process and strengthen enforcement mechanism to curtail unauthorised development.	Involvement of NGOs, civil society organisations, academicians, urban experts, and business community in the planning process.	
To ensure uniform growth of urban regions by including peri-urban areas in planning and directing investments and development towards them.	Designate and define greater metropolitan areas for regional planning exercise involving surrounding villages as well.	Identify potential growth areas and direct public investments in infrastructure and services in these areas. Plan to guide prospective investors and developers in the target peri-urban areas by incentivisation.
To promote city branding in all the towns and cities of the state	Establishment of "City Branding and Marketing" cell in the state and preparation of model city branding guidelines at the state level.	All the ULBs in the state to prepare a strategy to promote city branding or the process of branding. The cities should seek to put in place basic ground elements for this, i.e. if a city is seeking to brand it as cultural destination, it should have to invest in an attractive cultural infrastructure, like new museums, theatres, etc. ULBs may build this infrastructure by converging the funds from the central / state govt. missions or using their own funds.

14 | Inclusive Development and Urban Poverty

Policy objectives
- To create inclusive infrastructure to provide basic services to poor related to housing, water, sanitation, and transport.
- To improve delivery and management of social services for health and education to all.
- To provide necessary skills, training, credit and other resources to urban poor for creating and finding gainful livelihood opportunities.
- To create inclusive urban environment focusing on women, children, senior citizens, and differently abled citizens.

14.1 Overview

Deprivation of basic needs of humans amounts to poverty. In the last two decades, the developing world has seen tremendous progress in reducing poverty. Although the share of poor living in rural areas is higher, the share of urban poor is rising at a faster rate than the population as a whole. As with other developing countries, India is also witnessing the triple dynamics of growth, rapid urbanisation, and poverty. Urban poverty is more complex and multi-dimensional – extending beyond the deficiency of income or consumption, where its many dimensions relate to the vulnerability of the poor on account of their inadequate access to land and housing, physical infrastructure and services, economic and livelihood sources, health and education facilities, social security networks, and voice and empowerment.[27]

As countries are more urbanised, the level of urban poverty also increases. Some scholars label it as "Urbanisation of Poverty". In India, poverty levels are estimated by the Planning Commission. However, these estimations have limitations to take into account the factors of changing consumer behaviours, lifestyle changes, expensive and low quality housing, affordability to schools, hospitals, and transport systems. For example, in rural areas, work place and residence are nearby; hence, cost of travel is almost negligible.

The latest poverty estimates are done based on the methodology suggested by C. Rangarajan. The method considers food and non-food items such as education, healthcare, clothing, transport, rent, etc. In the food category, the estimation takes into account not only calorie intake but also nutritional requirements of protein and fats. Due to these changes, urban poverty has increased by 40% as compared to rural poverty that has increased by just 19% compared to previous estimates. Based on these considerations, the poverty line is 7,035 INR per month for a family of five, which translates to 1,407 INR per month per capita. The Expert Group (Rangarajan) estimates that the 26.4% of the urban population was below the poverty line in 2011-12 in urban India. Approximately, 1,025 lakhs and 39.5 lakhs people were below poverty line at all Indian and Rajasthan State level respectively in the year 2011-12. Development can be inclusive only if all groups of people contribute to creating opportunities, share the benefits of development, and participate in decision-making.

14.2 Emerging challenges

Shelter and slums: The distress of urban life is most evident in the slums of the cities. Due to high cost of land in urban areas, people are forced to live in informal settlements in unhygienic conditions. Many, who are not able to find a place in slums, also live on the streets, pathways, etc. Due to uncertainty over land titles and tenures, basic services are not available in these areas. Efforts to improve the situation have not borne any fruits until now and this is one of the most pressing problems.

Urban services water, sanitation, and transport: Poor households are unconnected to water and sewage networks of the city. Due to this, they rely on private contractors and distributors and end up paying higher price than high-income households pay. The slum areas also lack access to individual or community toilets, due to which most of the slum dwellers practice open defecation. Open defecation is not only a social issue but also a public health issue as it leads spread of diseases like cholera and diarrhœa, which hamper growth and productivity. The main transport corridors of the city are also not accessible from slums due to which transportation costs increases manifold for the urban poor.

[27]Urban Poverty in Asia, Asian Development Bank(ADB)

Informal employment and livelihood: Due to rural stress, many people migrate to urban areas. Due to lack of training facilities and education in hinterland, the migrated poor lack the skills required in urban economy. Hence, the poor are exploited in the cities with low wages. Opportunities are limited and number of people seeking employment is large. Self-employment requires cheap credit. Due to migrant status and lack of collateral for credit from organised banking institutions is difficult. The urban poor fall prey to local moneylenders charging exorbitant interest rates.

Education, health, and social security: The informal sector is the primary job creator in urban areas. These include street vendors, rag pickers, and construction workers. They lack social security protection, insurance covers, unremunerated work, and absence of rights at work, inadequate social protection, and lack of representation. Due to the high cost of living in urban areas and high pressure on government institutions, the poor are often deprived of the basic services like education and health, which hampers productivity.

This section only deals with livelihood and social infrastructure issues. Slum rehabilitation is taken up separately.

14.3 Implementation strategy

Implementing agencies: Urban Development and Housing Department, ULBs
Supporting agencies: Department of primary and secondary education, Department of Health, and Department of social justice.

Implementation roadmap:
Short term (0-5 years): Emphasis on public health issues and livelihood as means of alleviation of urban poverty. Setting up skill training centres and connection with industries for employment opportunities.

14.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To create inclusive infrastructure to provide basic services to poor related to housing, water, sanitation, and transport.	Subsidies to the poor through direct benefit transfers and smart cards linked to Aadhar.	Develop community toilets and public toilets especially near informal settlements and slum areas. Install public stand posts and water ATMs in poor localities for accessing clean drinking water. Develop night-shelters for homeless and migrant population in the city.
To improve delivery and management of social services for health and education to all.	Education Increase investments in technical and vocational institutions and link them to the school education system. Establish uniform curriculum for ease of transfer of children from migrant families. Collaborate with NGOs, civil society, and private sector to improve the quality of education. Health Engage community participation through involvement of ANMs, and ASHA workers and Rogi Kalyan Samitis. Develop hospital management systems, telemedicine and other technological interventions to better manage and reach all the sections of the society. Collaborate with NGOs to increase awareness about health and hygiene and prevent communicable diseases.	Education Increase in the number of schools covering all the classes from primary to higher secondary in urban areas. Provide night schools to enable adult education and certification. Introduce information and technology enabled classrooms with children education tracking and monitoring systems. Make special provisions for girl students like safe transport, mandatory separate toilet facilities and gender sensitisation of teachers and fellow students. Health Increase the number of primary and community health centres to provide basic services to all. Increase the coverage of health insurance and provide smart card based cashless delivery of health services. Provide essential medicines to the poor free of cost and subsidise other non-essential medicines.

Policy objective	Institutional/Legislative	Physical
To provide necessary skills, training, credit and other resources to urban poor for creating and finding gainful livelihood opportunities with emphasis on gender	Livelihood generation Integrate the national, state, and local level policies and programmes for provision of urban livelihood and employment. Adequate resources to municipal authorities to implement the central and state legislations regarding livelihood issues. Collaborate with educational institutes and industry to impart meaningful skills and training to urban poor leading them to employment opportunities. Credit facilities Interface with banking, micro finance institutions, and other monetary organisations to the provide credit to urban poor. Street vending Recognise street vending as an important urban activity, and integrate provisions and space for it in urban planning. Clear guidelines and procedures for declaring vending zones in the city.	Livelihood generation Establish livelihood centres for one stop solution to livelihood issues. Provide affordable public transport facilities for people in peri-urban areas to travel to the city for employment and then travel back. Credit facilities Mobilise the community through formulation of self-help groups to provide collateral towards loans. Replicate successful business models such as "Alwar Vahini" which provide livelihood to poor and services to public in general. Street vending Place adequate checks to regulate vending and maintain minimum hygiene standards in food and other products.
To create inclusive urban environment focusing on women, children, senior citizens and differently abled.	To develop dedicated programmes with focus on equipping women from underprivileged community groups with requisite skills and encouraging their participation in the workforce. Plan open spaces, playgrounds, and sports infrastructure for children of all age groups in urban areas.	Establish day care centres and crèches for facilitating working women. Upgrade transport facilities taking care of special security needs for women passengers. All infrastructure including urban transport and buildings to be universally accessible to all.

15 | Gender Equalty and Inclusion

Policy objectives
- To promote sustainable and inclusive urban spaces considering the specific needs and issues of men and women

15.1 Overview

The Urban Development Policy aims to provide a direction and course of action to support development in areas such as water, sanitation, mobility, housing, heritage, employment, and smart cities. Gender is one of the several aspects that need to be taken into account in order to develop urban areas with enhanced safety, productivity, liveability, and prosperity for its citizens.

15.2 Emerging challenges

Limited gender focus: In the process of rapid urbanisation, failure to address gender concerns hinders the inclusiveness of cities. In order to improve the well-being of all the citizens, it is important that urban development promotes gender inclusion by making urban spaces inclusive and engages men, women, and girls.

Informal settlements: While the population living in irregular urban settlements is confronted with a set of inter-related problems such as no access or limited access to basic services and lack of tenure security. These conditions further aggravate gender inequalities in the issues of safety, lack of access to security of tenure, water, sanitation, transport, health, and livelihood.

Mobility: Poor urban designs that are reflected in poor street lighting, secluded underground walkways, lack of footpaths, and unsafe open spaces, can put women and girls more at risk of violence in public spaces. While making public space safer for all requires a change in social norms, it is critical that policies and planning approaches adopt a gender sensitive approach to prevent crime and violence against women and facilitate gender inclusion.

Livelihood: Opportunities for gainful employment are limited in case of women due to gender division of labour that segregates them to low paid jobs. Women living in poverty face immense challenges in accessing credit and financing. Ensuring integration of women in public life through improved livelihood opportunities has great potential in lowering poverty levels and further assists in reaching the policy goal of bringing prosperity.

Tenure security: Lack of secure tenure over housing and land affects a large section of poor but women are the ones who are greatly deprived due lack of provision of basic provisions such as water and sanitation. Formal recognition of the existing slums by way of enlisting or notifying the slums will enable provision of basic services and thereby reduce drudgery faced by women and girls.

15.3 Implementation strategy

Implementing agencies: ULBs, Urban Development and Housing department, Public Health and Engineering Department
Supporting agencies: Town and Country Planning, development authorities, Revenue Department, Housing Board, and Transport Department.

Implementation roadmap:
It is to be mentioned here that gender is not an 'add on' component but a 'cross cutting issue' in various sectors addressed in the Urban Development Policy and the roadmap will be aligned to those specific sectors.

15.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To promote sustainable and inclusive urban spaces considering the specific needs and issues of men and women	• Integrate gender perspective in design and implementation of sectors like urban transport, urban water supply, wastewater management, storm water drainage, solid waste management, affordable housing, slum redevelopment, urban governance, planning, eco-friendly cities, ICT and smart cities, disaster resilience. • Develop practical methodologies for incorporating gender perspectives in planning, implementation, and O&M.	• Gender analysis based on sex disaggregated data collection and monitoring framework. • Consultation including both women and men to ensure effective participation of users in all stages – planning, implementation, and O&M. • Capacity development of implementers on gender responsiveness • Capacity development of beneficiary groups for greater acceptance and ownership. • Gender sensitive grievance redressal mechanism. • Communication for behaviour change targeting women, men, and children at household, community, city, and institutional levels. • Convergence with other departments with special focus on women.

16 | Disaster Resilience

Policy objectives
- To have a proactive approach towards disasters by focusing on prevention, mitigation and adaptation rather than just post disaster management.
- To build institutional and human capacity and expertise in disaster management at the local levels.

16.1 Overview

A disaster refers to a catastrophe, mishap, calamity, or grave occurrence, which is beyond the coping capacity of the affected community. Disaster could be man-made or natural. Natural disasters could be due to floods/ cloudbursts, earthquakes, tsunamis, landslides, cyclones, hailstorms, droughts, epidemics, and outbreak of various viral diseases, fire, or collapse of buildings. The disasters emanating from the activities of man could be in the form of fire outbreaks, major rail, road and air accidents, industrial accidents, bomb explosions, and stampedes during festivities/fairs.

In the traditional disaster management approach during the immediate post-independence period in India, the focus was on emergency relief and immediate rehabilitation. Of late, however, there has been a perceptible shift. The governments at the central and state level have started several proactive, quick response, and other structured response mechanism. Cities and towns in urban areas are likely to face increased challenges from climate change and other natural hazards.

The **Disaster Management Act (DM Act), 2005**, lays down institutional, legal, financial and coordination mechanisms at the national, state, districts and local levels. **National Disaster Management Authority (NDMA)** setup under the act approves the national plans and the plans of the respective union ministries/departments; it will also lay down guidelines for state authorities, coordinate the enforcement and implementation of these policies and plans, and ensure timely response.

The state has also brought in to force the State Disaster Management Plan, 2014, which precisely defines the role of various agencies/departments including NGOs in the event of a disaster. The document outlines the methodology for restoration of essential services such as power supply, communication, transport, etc., as the rehabilitation works are closely linked to these principal services.

16.2 Emerging challenges

Disaster management capacity: The institutions involved in urban governance and development lack the required expertise and institutional capacity for management of disasters. Many of the investments in the urban infrastructure are long term, which may face vulnerabilities in future. Hence, resilience in the system has to build in at the planning stage itself for protection of the infrastructure and people.

Ineffective enforcements: The building bylaws, safety procedures and other regulations are regularly flouted and municipal bodies lack the requisite political and administrative will to penalise the illegal developments. Many of these regulations are prepared by agencies outside the municipal administration system, due to which enforcement responsibility is also not clearly allocated among the agencies.

Specialisation: Issues concerning special events such as fairs, religious ceremonies, etc. require certain degree of specialisation for the management and prevention of disasters. Such specialisation is missing in the present governance structure.

16.3 Implementation strategy

Implementing agencies: ULBs, State Disaster Management Authorities
Supporting agencies: Urban Development and Housing Department.

Implementation roadmap:

Short term (0-5 years): Vulnerability mapping of urban areas to identify areas prone to disasters. Establish clear guidelines on building plan approvals to mitigate disasters. Conduct training and workshops on disaster management. **Long term (5-20 years):** Implement resilience plans for the cities.

16.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To have a proactive approach towards disasters by focusing on prevention, mitigation and adaptation rather than just post disaster management.	All records pertaining to permissions/licenses to be brought in the public domain suo motu. Revisiting the municipal regulations such as development control regulations, building byelaws, and structural safety features. Periodically review all regulations to identify gaps and suitable modifications will be made to align them to the revised building codes of the Bureau of Indian Standards (BIS).	Ensure effective enforcement of laws on encroachments, public health and safety, industrial safety, fire hazards, building by-laws, and safety at public places. Third party audit of all major alleged violations in the respective regulation governing the activity. Audit of existing structures with respect to the siting of infrastructure, operational life, and design standards, with regard to matters such as heat stress, inundation, and extreme storms event.
To build institutional and human capacity and expertise in disaster management at the local levels.	Establishment of clear and precise roles and responsibilities of every institution and individual official in the event of disaster. Development of 'standard operating procedures' for each category of disaster.	Carry out vulnerability mapping of all urban areas and make mitigation plans according to vulnerability maps. All necessary equipment, staff, and experts should be available 24x7 to effectively deal with the situation arising due to sudden events such as fire and building collapse.
Gender equity and social safeguard	Women, girls, and boys are particularly vulnerable to natural hazards. Most disasters place an undue burden on women and girls who are responsible for unpaid work such as providing care, water, and food for households. Realising this factor, the policy would take measures to address gender issues.	Capacity development of disaster authorities, and gender--sensitive initiatives to be undertaken. Sensitive risk assessment in a gender-responsive manner. Strengthen the participation of women and give attention to women's concerns in the decision-making and policy processes. Ensure women and men's equal access to early warning systems for natural hazards. Establish gender specific data and statistics on the impact of disasters, carry out gender-sensitive vulnerability, risk and capacity assessments and develop gender-sensitive indicators to monitor and measure the progress. Increase awareness of the public and media on the gender sensitive vulnerabilities and capacities in disasters and gender specific needs and concerns in disaster risk reduction and management. Support gender sensitive financial risk-sharing mechanisms, including risk insurance and reinsurance. Improve disaster preparedness, response, and contingency planning from a gender perspective and make them respond to the specific needs and concerns of men and women.

17 | Eco-friendly Cities and Urban Environment Sustainability

> **Policy objectives**
> - To protect the natural environment in the urban areas by enhancing green spaces and protecting/reinvigorating the existing ones.
> - To manage resources such as water and energy efficiently, economically and sustainably.
> - To reduce emissions of pollutants and greenhouse gases.

17.1 Overview

Development is not a standalone process; it has positive and negative. Decision makers always face a dilemma of conserving and preserving the natural environment while facilitating human habitations. The process of urbanisation makes sustainable development more relevant as economic development and quality of life are closely interlinked. The quality of environment is an important aspect of urban competitiveness as it attracts talented workers and helps in optimisation of their potential.

The urban areas can be divided into natural and built environment. The natural environment needs to be protected and enhanced while built environment needs to be planned and developed in such a way that it does not impose unnecessary costs to the future generation.

The term eco-friendly city is not a defined but a perceived term. Any city or town that adopts measures in building of its infrastructure and its operations that reduces the footprint on regional natural ecosystem can be termed as an eco-friendly city. Some of the cities of the world that are termed as eco-friendly have one attributes such as bicycle-friendly infrastructure, public transport, solar energy, recycle, and waste management. The Urban Development Policy can tackle the challenge of environment sustainability through three approaches:

- Price regulation
- Technology adoption
- Behaviour influence

Through these three approaches, the state needs to make environment sustainability practices as prime focus area in the implementation of the Urban Development Policy.

17.2 Emerging challenges

Rajasthan as a state faces certain problems that have to be taken care in the Urban Development Policy –

Water shortage: Rajasthan is a water-stressed area with annual rainfall averaging 25-30 cms. The total surface water source is limited and the ground water source is depleting at an alarming rate. Demand for drinking, agriculture and industry is constantly rising. With new initiatives like DMIC to come up in the state, the new infrastructure will put more pressure on the existing resources. Due to inefficiencies in management of this scare resource, the state is facing imminent threat. The state has already utilised 72% [28] of the prevailing economically utilisable surface water resource. This challenge needs to be addressed by policy makers in a holistic manner. The state has 10% of the country's area but only 1.17% of its water resources [29].

Air pollution: The National Ambient Air Quality Monitoring Program (NAMP) data for five major towns (Alwar, Jaipur, Jodhpur, Kota, and Udaipur) shows that suspended particulate matter (SPM) concentrations remained above the annual average ambient air quality standards in all these cities during 1995-2007 [30]. However, this is bound to change due to the rise of vehicular traffic, industrial growth, coal based power generation and increasing construction activities.

Water pollution: Major reasons for polluted water resources in the state are flowage of untreated sewage, industrial effluents, and depletion of ground water. The pollution is unabated due to low priority, paucity of funds and monitoring mechanisms. Also, ground water is over exploited due to low availability of water resources and erratic rainfall.. This has increased the concentration of salts and has made water not suitable for drinking purposes.

[28]Source: State Commission on urbanisation
[29]MoEF Report, State of Environment
[30]Source: State Commission on Urbanisation

Loss of biodiversity: Rajasthan is home to two national parks and 25 Wildlife sanctuaries with a total area of 9,161.21 sq.km, i.e. 3% of the total area. The Kaladeo National park is a UNESCO World Heritage Site with a rich biodiversity of birds. The forest ecosystem is characterised by arid and scanty vegetation. Rajasthan has one of the lowest forest covers, i.e. 9% , compared to all India level.

Environment degradation: One of the major threats to environment is illegal mining. Mining carried out by small lease and quarry holders is in small areas and it is difficult for them to comply with environmental laws. Some of these are in remote areas due to which it is difficult to monitor them also. Mining is a growing and profitable sector giving an impetus to the economy of Rajasthan It has spill over effects on urban areas as well. Land degradation in and around mining areas renders it useless for any other purpose.

Migration: Urban areas are not well connected to interior hinterlands of Rajasthan. Due to this, the population that wishes to work in urban areas has to settle in cities and towns, and cannot commute on a daily basis. This increases the pressure on prevailing infrastructure in the towns and cities. The growth rate of towns with population less than 20,000 is negative because of massive migration to the cities.

17.3 Implementation strategy

Implementing agencies: ULBs, State Pollution Control Board
Supporting agencies: Urban Development and Housing Department.

Implementation roadmap:

> **Short term (0-5 years):** Adopt eco-friendly solutions for transport, power, and water management in all the ULBs. State-level policy framework and guidelines for adoption on environment-friendly practices. Pilot projects on new technologies under the ægis of the state govt., to be developed and adopted by the Urban Local Bodies.
> **Long term (5-20 years):** Enhance green spaces in urban planning and all infrastructure to be environment friendly.

17.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To protect the natural environment in the urban areas by enhancing green spaces and protecting/ reinvigorating the existing ones.	Green spaces Designation of urban forest areas within municipalities and their maintenance in collaboration with the Forest Department. Mobility Planning of the cities in order to reduce travel demand, by mixed land use and co-location of residential, commercial, and institutional complexes. Green building Legal enforcements to all commercial and institutional buildings to follow provisions for green buildings as given international and national agencies such as LEEDS and GRIHA. Encouragement to resident welfare associations for establishment of composting and biogas units for cluster of homes in the colonies.	Green spaces Mandatory provision of green areas in all the urban development plans with a minimum norm of 9 square metre per inhabitant. Identification and development of parks, recreational facilities, green corridors and open spaces in the city. Green building Mandatory wastewater treatment and recycle for non-potable uses of water such as gardening and washing within building premises. Enforcement of rainwater harvesting units in all buildings with area beyond the limits set by local bodies. Incentivisation for installation of solar water heaters and biogas units in all hotels, guesthouses and other commercial-residential buildings.
To manage resources such as water and energy efficiently, economically, and sustainably.		City infrastructure Conversion of all streetlights to low power consuming light emitting diode (LED) lights with solar panels as the primary source of power.
To reduce emissions of pollutants and greenhouse gases.	Urban mobility Promotion of electric vehicles for all public transportation modes.	Urban mobility Reservation and demarcation of space on roads for cycle lanes. Allocation of space in commercial and institutional buildings for parking of cycles on priority. Provide electric rickshaws and vehicles for last mile connectivity on designated routes. Building to have parking and charging stations for electric vehicles.

18 | Information Communication Technology and Smart Cities

Policy objectives
- To adopt ICT solutions for facilitating citizen engagement and transparency in all aspects of governance.
- To integrate ICT in the infrastructure and service delivery for increasing efficiency of the services.
- To build capacity of institutions and personnel in the use of ICT.

18.1 Overview

Information, communication, and technology (ICT) is revolutionising and transforming our lifestyle tremendously. Internet has become an integral part of our work, study, and daily life and hence its integration to urban setting is essential. Acquisition and exchange of information in real time has resulted in creation of a vast bank of data. This data needs to be analysed and utilised by agencies for improving the decision making of not only the policy makers but also citizens for optimal utilisation of the services.

Cities as centre of economic activity are under severe pressure due to limited infrastructure and increasing population pressure. Pumping money to create more infrastructures is not a viable solution. With increasing migration and rate of consumption of resources in urban areas, existing approach to urbanisation will not be sustainable over long term. Technological interventions are necessary to increase the efficiency of present infrastructure and make it more environmentally sustainable and socially inclusive.

Initiatives of SMART city and Digital India aim to bring in the ICT revolution in our cities. Smart City integrates the critical urban infrastructure with technology for delivering in a more efficient, interconnected and transparent manner. There is a realisation by businesses and government that investments in ICT can enable delivery of systems for a better quality of life for residents while being cost efficient. Successful implementation of ICT and outcomes will encourage extension of these initiatives in other areas as well.

Some of the initiative under Smart city can be –

Sector	Smart intervention
Energy	Smart grids, net metering
Water	Leak detection and pressure sensors, automation and control systems smart metering
Transport	Intelligent transport systems, traffic management control centres , dynamic demand handling, smart cards for multi-modal use, automatic decongestion systems, car pooling and aggregation service, public transport scheduling and real time information
Housing	Smart buildings, sensor lightening
Public safety	Citywide monitoring, sensor tracking, emergency response systems
Governance	M Governance, App based tracking and customer complaints
Connectivity	Expanded reach of broadband, Wifi at public places

Smart buildings: Buildings that integrate ICT for resource conservation, management, and monitoring. ICT integrates various components such as water, wastewater, heating, cooling and ventilation, waste management, cleaning and maintenance, etc. on a single platform to monitor, control, and optimise the operations.

Intelligent transport systems: An integrated transport system is only possible with the use of ICT. ICT facilitates seamless travel for passengers across the city in different modes. The ease of use not only increases passenger comfort and safety but also increases the efficiency of overall system. Components of ICT include automated and integrated fare collection using smart cards, traffic information, control centres, synchronised traffic signalling, mobile application based traffic, and parking updates.

Smart water: Installation of meters, sensors, and leak detection devices will help to reduce wastage of water. The collected data can be analysed to forecast the demand and supply, optimise utilisation capacity, reduce storage and stagnation enable conservation, and make citizens more responsible towards water usage.

Smart grids: Use of IT tools which help in prediction and adjustment of network changes automatically through feedback response system. Such grids help in reducing losses, increase reliability, helps to integrate non-renewable energy like solar, wind and biomass and enable net metering.

Smart governance: Smart governance is about using technology to facilitate and support and better planning and decision-making. It is about improving democratic processes and transforming the way public services are delivered. Smart health care: Use of ICT to communicate between medical personnel and consumers in real time for optimisation of health services. Solutions include telemedicine, electronic records management, hospital and clinic asset management, mobile health, remote patient monitoring, etc.

Smart education: When classroom teaching involves multimedia and ICT to make classrooms more interactive. It also increases learning outcomes. Components of smart education involve e-Learning, knowledge sharing, connected schools and campuses.

Smart security systems: Use of technology to undertake public safety initiatives that optimise efficiency and response time of emergency services, secure and control mass events, provide surveillance in public spaces, and secure public administration transactions.

18.2 Emerging challenges

Readiness of the basic infrastructure: To integrate ICT in infrastructure and create smart utilities the basic infrastructure such as water distribution systems, public transport systems, waste management have to be in place with minimum quality standards. It is only after the presence of these basic elements that ICT can be used to enhance the effectiveness and efficiency of the systems.

Capacity of the municipalities: The use of ICT deviates from the past and municipalities lack the requisite skills and knowledge to adopt the technology. Without adequate training and sensitisation, ICT can actually hamper service delivery.

Digital divide: A large proportion of citizens are either still not connected to the network (Lack of IT infrastructure) or there is to digital illiteracy. When services are transferred to digital mode without creation of infrastructure and filling of knowledge gap, it leads to exclusion of large section of population. This also leads to increasing presence of intermediaries and commission charges for those services that were supposed to be freely available to all citizens.

18.3 Implementation strategy

Implementing agencies: ULBs
Supporting agencies: Urban Development and Housing Department, Development Authorities, UITs.

Implementation roadmap:
  Short term (0-5 years): Procure hardware and software to implement ICT solutions in governance. Conduct training and workshops for all employees of ULBs in use of ICT. For ULBs with population greater than ten lakhs, the use of ITC, automation and technology solutions help in increasing efficiency and reduce costs. State-level policy guidelines and framework for ICT integrated infrastructure.
  Long term (5-20 years): Implement ICT solutions to create smart infrastructure in all the ULBs.

18.4 Key interventions and action points

Policy objective	Institutional/Legislative	Physical
To adopt ICT solutions for facilitating citizen engagement and transparency in all aspects of the governance.	Increase the presence of government institution on social media platforms for more engagement with the citizens and capture their feedback.	Revamp the websites of all the departments with open data policy to furnish all the necessary details to the public. Create centralised database and use data analytics for better decision making and predicting potential areas of problems beforehand. Mobile, SMS and online-based customer complaint lodging and tracking.

Policy objective	Institutional/Legislative	Physical
To integrate ICT in the infrastructure and service delivery for increasing efficiency of the services.	Integrate information from all the services and utilities on a single map based GIS platform for optimising the efficiency of the existing infrastructure and better plan for future creation. Implement E-municipality in all the ULBs to issue or reissue all the documents electronically.	Implement Intelligent Transport Systems (ITS) in all public transportation systems. Introduce smart cards and promote fare integration between various modes of transport in the cities. Develop traffic information command, control centres for real time monitoring of traffic situation, and increase the efficiency of the road network system to reduce travel time and congestions. Implement SCADA based automation and control systems for management of water and wastewater transmission. Development of an online system for automatic building permission and approvals based on engineering designs and digital signatures.
To build capacity of institutions and personnel in the use of ICT.	Provide skills and knowledge through trainings and workshops to all the staff of the municipalities regarding the use of ICT.	Provide essential hardware and software to all the municipalities. Hire experts to facilitate the integration of ICT in municipal infrastructure and service delivery.

19 | Financing Urban Infrastructure

19.1 Overview

Rapid urbanisation in India has led to increased demand for providing infrastructure in the ULBs and the ULBs are continuously looking for new sources of funds to meet the requirements of creating and upgrading infrastructure. Similarly, central and state government ministries and departments have to make lumpy investments for the urban infrastructure development at the state level.

Based on High Powered Expert Committee (HPEC) Report, 2011 of the Ministry of Urban Development, Government of India, it is understood that an annual investment of 3,698 crores INR is required for the development of urban infrastructure in cities / towns of Rajasthan and 3,078 crores INR is required for their operation and maintenance.

Infrastructure development in the ULBs is catered through various central and state government programmes focused on urban infrastructure, agencies and through interventions supported by donor agencies. Further, it is observed that the total amount of devolution to ULBs recommended as a part of the interim report of the 5th State Finance Commission (SFC) and 14th Central Finance Commission amounts to a total of only 1,695.46 crores INR (FY 2016-17) that is primarily utilised for core functions of the ULBs. While the allocations have been increasing over the past 5 years, the numbers are indicative of the gap in investments and the need for strengthening the existing revenue sources and exploring innovative sources.

19.2 Priority Focus Areas

To improve the financial situation of the ULBs / agencies involved in urban development in the state and to unlock financing for urban development, focus shall be on following priority areas:

Strategy	Key action points
Strengthening the usage of various funding sources to raise finances (through loans, grants, bonds, etc.)	• Strengthen the resources of ULBs through rationalisation of urban development taxes / property taxes and effective coverage of these taxes in ULBs. • Levy of user charges, fees, and fines for provision of regulatory and other statutory functions related to civic services, like sewer charges, solid waste management charges, etc. • Support for leveraging / ensuring convergence with various state government and central government schemes such as Swachh Bharat Mission (Urban), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Mission, National Heritage City Development and Augmentation Yojana (HRIDAY), Pradhan Mantri Awas Yojana (Housing for All – Urban), National Urban Livelihood Mission (NULM), National Urban Health Mission (NUHM), Shyama Prasad Mukherji Rurban Mission (National Rurban Mission), Pilgrimage Rejuvenation and Spirituality Augmentation Drive (PRASAD), Mukhyamantri Jal Swavlambham Abhiyan, Janta Jal Yojana, and Rajasthan Urban Infastructure Development Project (RUIDP). • Support for improving the creditworthiness of ULBs to enable access to debt financing and raising tax-free municipal bonds. • ULBs may also raise finance through government owned banks, financial institutions and commercial banks, private equity funds, and infrastructure debt funds.

Strategy	Key action points

Ensuring efficient and effective financing through various instruments	• Implementation of recommendations of the State Finance Commission and the Central Finance Commission to ensure effective allocation of funds for core municipal functions.
	
	• Support and advice for exploring innovative finance mechanisms such as:
	    o tax increment financing (TIF)
	    o land value tax
	    o betterment levy
	    o development charges (impact fees)
	    o transfer of development rights
	    o premium on relaxation of rules of additional FSI
	    o advertisement tax
	    o vacant land tax
	    o land pooling system.
	
	• Leverage borrowings from financial institutions, including bilateral and multilateral institutions, both domestic and external sources.
	
	• State may also access the National Investment and Infrastructure Fund (NIIF).

Blending different source of financing for effectiveness	• Private sector participation through Public Private Partnerships (PPPs) • Pooled financing