

**Impact of Infrastructure and Governance Transformations on  
Small, Medium and Big Cities in India**

**JNNURM and Water**

**A Case study of Public Private Partnership in Aurangabad City  
of Maharashtra**

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## 1. Introduction

Jawaharlal Nehru National Urban Renewal Mission (JNNURM) launched in 2005, marked an important shift in role of the state in infrastructural development of cities in India, including basic services . Based on neoliberal ideals, JNNURM intended fundamental changes in the nature and process of urban governance through transformation of the institutions that govern cities at local as well as state level. This process of transformation has two important dimensions. First, it has attempted to change the nature of relationship among the three levels of governments, i.e. local, state and union by introducing a new process of engagement among them through performance-based funding<sup>1</sup> for improving infrastructure. This funding pattern was linked with the performance of local governments in implementing reforms introduced under the JNNURM. Second, it has changed the relationship between public and private institutions by changing the role of private sector in development and management of urban infrastructure through reforms. Thus, a set of 23 reforms under JNNURM formed the mainstay of intended governance transformations in urban services sector (See table 1).

The present study was aimed at understanding the process of institutional transformations through a case study of Aurangabad Municipal Corporation (AMC) located in the state of Maharashtra. It focuses on capturing the politics of implementation of reforms through tracing the process of design and implementation of a Public-Private Partnership (PPP) undertaken by AMC to improve the water infrastructure in the city.

The case study is divided into five sections. First section gives a basic overview of JNNURM reforms linking the central and state institutions including the nature and meaning of reforms. It also briefly outlines the purpose of the study as well as methodology. Second section describes historical, demographic and socio-economic profile of the city of Aurangabad in terms of urbanization, population growth and social structure and political scenario. Third section provides a brief history of the water supply developments in Aurangabad and throws light on the current issues and problems in water supply infrastructure as well as service. Fourth section traces the progress of the PPP project and provides a detailed account of journey of the PPP in water supply including a timeline and explains the role of local and regional politics in stagnation in the PPP initiative. Fifth section is the major analytical section of this case study which talks about the changes in the state and local level institutional structure through status and obstacles in implementing JNNURM reforms and politics behind the same. It also outlines the politics on the background of availability of water in the dam that supplies water to the city on the background of upstream-downstream conflict over water allocations. The last section of the report briefly comments on the story and concludes emphasising the major obstacles in the PPP project in Aurangabad.

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<sup>1</sup> Revised guidelines for projects of Jawaharlal Nehru National Urban Renewable Mission, on urban infrastructure and governance, Government of India, New Delhi, accessed at <http://jnnurm.nic.in/wp-content/uploads/2012/10/Guideline-2011.pdf>

### 1.1. JNNURM reforms and urban water management

In order to achieve the objective of the building “economically productive, equitable and responsive cities” JNNURM chose the route of wide-ranging systemic reforms with financial aid for infrastructure improvement. As mentioned in the preface of the JNNURM toolkit, the primary aim of the reforms was to “*eliminate legal, institutional and financial constraints that have impeded investment in urban infrastructure and services*”. Clearly, greater engagement of private sector in delivery and management of basic services became central aspect of reforms to attract the investment and so featured in the list of 23 reforms. Thus, Reforms focused on revamping institutional structure and functioning in order to facilitate PSP in the building and managing infrastructure for delivery of basic services.

**Table 1: Reforms under JNNURM**

	<b>State Level</b>	<b>ULB Level</b>
<b>Mandatory</b>	1. Implementing the 74 <sup>th</sup> CAA 2. Integration of city planning and delivery functions 3. Enactment of Public Disclosure Law 4. Enactment of Community Participation Law 5. Reform in rent control 6. Stamp Duty rationalization to 5% 7. Repeal of ULCRA	8. Adoption of modern accrual-based double entry system of accounting in ULB 9. Levy of reasonable user charges by ULBs and Parastatals with the objective that the full cost of O&M or recurring cost 10. Reform of property tax with GIS 11. Introduction of e-governance using IT applications such as GIS/ MIS for services provided by ULB and parastatals 12. Internal Earmarking of funds for BSUP 13. Provision of Basic Services to Urban Poor
<b>Optional Reforms at ULB level</b>		
14. Simplification of legal and procedural frameworks for conversion of land from agricultural to non-agricultural purposes 15. Introduction of Property title certification system in ULBs 16. Revision of building by-laws –streaming the approval process 17. Introduction of computerized process of registration of land and property 18. Earmarking 20-25% developed land in housing projects for EWS/LIG 19. Revision of byelaws to make rainwater harvesting in all buildings mandatory and adoption of water conservation measures 20. Byelaws for reuse of recycled water 21. Administrative Reforms (i.e. reduction in establishment costs, not filling posts falling vacant due to retirement), and achieving specified milestones 22. Structural Reforms 23. Encouraging Public Private Partnership (PPP)		

A closer look at the reforms, based on the explanations provided in the toolkit JNNURM reforms can be regrouped into four categories, (a) Reforms aimed at augmenting revenues of state governments and ULBs, (b) Reforms aimed at augmenting and managing land and

water, (c) reforming urban governance through structural and administrative changes with an emphasis on PSP, and (d) pro-poor reforms for targeting benefits to disadvantaged sections. First category of reforms targeting an increase in revenues primarily focused on property tax reforms including the changes in the rent-control act, and cost recovery through introduction of user-charges at the ULB level. In order to align accounting practices with industry practices, JNNURM also introduced double entry accounting system in ULBs as part of the reforms.

Another category of reforms mentioned above focused on legal and institutional changes to bring more land in the market, and encouraging formal and planned housing. Two reforms form the list, (i) repealing of ULCRA and (ii) simplification of conversion of land from agricultural use status to non-agricultural use status were specifically meant for planned and formal housing. Reforms around land also brought for systematizing the land and property databases using e-governance techniques such as property titling systems including tenural security. In water sector, recycling and reuse of wastewater and rainwater-harvesting are two direct reforms included the reforms list. However, land reforms intended to control informal housing and provide tenural security are closely linked access to formal water supply systems.

The third category of reforms, the governance reforms primarily focus on structural and administrative changes. Implementing 74<sup>th</sup> constitutional amendment is the central reform in the bunch, apart from e-governance, structural reforms, and administrative reforms. Encouraging Public-Private Partnership (PPPs) was also included in the reforms. Structural reforms, although very loosely defined, prescribe implementation of 74<sup>th</sup> amendment and create ward level structures for decentralized municipal governance. It also importantly advocates efficient staff sizes and synchronized jurisdictions of various municipal departments<sup>2</sup>. From water point of view reforms such as Public Disclosure Law, mandating voluntary disclosure of information in public domain about municipal governance, as well as community participation law which was aimed at seeking people's participation in ward level decision making were two important reforms along with the PPP.

Fourthly, the bunch of pro-poor reforms include two important changes: (a) providing basic services to urban poor and earmarking funds for same and (b) Earmarking 20-25% developed land in housing projects for economically weaker sections and/or low income groups. These pro-poor reforms are aimed at providing services to poor in a targeted manner.

Implications of reforms on the municipal governance at the state and central level show that the private sector participation (PSP) in basic services is one of the core initiatives in reforms. Interestingly, if not all, most other reforms contribute for building an enabled situation at municipal level for PSP. The rationale appeared to be simple and straightforward, which is based on the larger diagnosis that the state has failed to bring efficiency and market

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<sup>2</sup> Primer on Structural Reforms, e-published by National Institute of Urban Affairs, New Delhi accessed at [http://jnnurm.nic.in/wp-content/uploads/2011/01/Optional\\_Primer\\_primer.structural.pdf](http://jnnurm.nic.in/wp-content/uploads/2011/01/Optional_Primer_primer.structural.pdf)

institutions would be better alternatives in delivery of basic services<sup>3</sup>. First, bring the financial reforms in place to increase the revenue strength of the municipal corporations through tax reforms and introduction of user charges based on the principle of cost recovery. Second, prescribe efficient staffing patterns (mostly through laying-off or recruiting staff) and streamline structure of the water supply departments. State promoted this through reduction of ULB-size through voluntary retirement schemes and reorganizing staff configurations through cancelling few posts and introducing professional cadre in ULBs. Attempt of introducing professional cadre was also aimed at building capacities of the ULB, especially in order to enable ULBs to engage with private sector. Third, adapt accounting and financing practices that are widely practiced in industry through financial ring-fencing (separation of budgets and accounts) in order to track the cost-recovery at the level of each service, separately. Fourth, facilitate and encourage formal housing through land reforms and bring unconnected houses in the realm of formal connections and piped-network. Lastly, through 74<sup>th</sup> CAA and other decentralization-oriented reforms empower ULBs to engage with private players<sup>4</sup>. Thus, by and large the structure of reforms is designed to promote PPPs, apart from the reforms such as CPL, PDL and earmarking of 25% of municipal budgets for services to poor sections.

However JNNURM-reforms brought a special mechanism to implement and monitor reforms, which needs to be considered to develop an understanding the actual impacts of reforms on institutional transformation at the state and ULB level. The mission had two components or sub-missions: Urban Infrastructure and Governance (UIG) and Basic Services for Urban Poor (BSUP). The UIG component was geared towards developing sustainable infrastructure through granting financial aid for infrastructure projects to be undertaken in cities as well as small and medium towns. Another component, the BSUP aimed at integrated development of the slums focusing on providing basic services such as shelter, water supply as well as other civic amenities. Both these components, UIG and BSUP had independent channels for designing, funding, and monitoring the projects, under the Ministry of Urban Development (MoUD) and the Ministry of Housing and and Poverty Alleviation (MoHUPA) respectively. However, JNNURM also led to design and establishment of independent institutional arrangements at central and state level for the above mentioned functions. In addition to these two sub-missions, JNNURM had two components: (a) Urban Infrastructure Development Schemes for Small and Medium Towns (UIDSSMT);<sup>5</sup> and (b) Integrated Housing and Slum Development Program (IHSDP). These two components, UIDSSMT and IHSDP replaced the infrastructure projects under the UIG and BSUP in small and medium

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<sup>3</sup> 'Making Services Work for the Poor' – World Development Report 2004, World Bank, accessed at <https://openknowledge.worldbank.org/bitstream/handle/10986/5986/WDR%202004%20-%20English.pdf?sequence=1>

<sup>4</sup> India: Urban Water and Sanitation Services-Guidelines for Sector Reforms and Public-Private Partnerships, Ministry of Urban Development and Poverty Alleviation, Department of Urban Development, Government of India 2004, accessed at <http://www.indiawaterportal.org/sites/indiawaterportal.org/files/guide.pdf>

<sup>5</sup> UIDSSMT component was specifically brought for cities and towns having population above 1,00,000 (One Lakh) as per the 2001 census.

towns (SMTs) in place, respectively. The responsibility of administering these two components was with the Ministry of Housing and Urban Poverty Alleviation (MoHUPA).

In order to implement these sub-missions, two sub-mission directorates were established at the level of two ministries at the central (national) level. In addition to these directorates, JNNURM also roped in many academic institutions for 'hand-holding' state governments for training and knowledge dissemination purposes, such as CETP University and Administrative Staff College of India (ASCI). At the level of each state government, Ministries of Urban Development were given the tasks of appraising and monitoring the progress of the reforms as well as projects approved under JNNURM. An elaborate mechanism also was created at the level of state governments such in the form of nodal-agencies, technical appraisal agencies, and private consultants to aid the process of implementation.

With respect to the infrastructure projects, preparation of a new instrument called Detailed Project Reports (DPRs) were made mandatory for every ULB. DPRs were to be prepared with the help of consultants empanelled by GoM at the state level. DPRs were the proposals of infrastructure projects, such as roads, water supply etc. to be undertaken in beneficiary cities. However, a new instrument named as City Development Plans (CDPs) were brought for prioritizing the long list of infrastructure projects ULB could have come up with through the study of gaps in available infrastructure in the city. CDPs were expected to present a diagnostic assessment of the prevailing state of infrastructure for delivering basic services in the beneficiary city, made through a participatory and informed manner. On the basis of CDPs, projects were to be finalized.

In addition to the organizational structure established within urban ministry, simultaneous organizations and/or schemes were also floated independently at central and state level by other ministries. For example, the Department of Economic Affairs (DEA), under the Finance Ministry in India, initiated efforts to promote PPPs independently through international partnerships, twinning arrangements,<sup>6</sup> and declared important schemes such as the Viability Gap Funding (VGF).<sup>7</sup> VGF is particularly important to fill the financial or capital gap so as to bring a loss-making project into the realm of financial viability by improving the weaker components of the projects. VGF was introduced specifically to bring more infrastructure projects in the realm of PSP. To aid this process, the International Financial Institutions<sup>8</sup> also

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6 Twinning arrangements are made when two independent entities come together to share the expertise, experience and skills to improve the performance of their activities. In case of Maharashtra, Ranhills Utilities, Malaysia and Maharashtra Water Supply and Sewerage Board (commonly known as Maharashtra Jeevan Pradhikaran – MJP, which also served as the institutions appraising all the DPRs of water supply under JNNURM in Maharashtra) had entered into twinning arrangement for network modelling and increasing efficiency of water supply systems in Maharashtra. Ref: <http://www.rws.com.my/index.php/projects/twinning>

7 Viability Gap Funding (VGF) is a special scheme launched by GOI to support PPP projects where economic viability of the investment cannot be worked out, especially due to risks in recovering costs such as affordability issues, political issues or other constraints. This funding is utilised mostly to fund the infrastructure building or asset building part of the PPPs.

offered special aid, loan packages, and sponsored studies to facilitate and handhold the process of developing PPP projects. Nevertheless, government of Maharashtra (GoM) also established a special PPP-cell to facilitate PSP in municipal services.

This also paved the way for international and domestic consultancy firms to join the bandwagon.

### *1.2. UIDSSMT and urban reforms in Aurangabad*

Among many projects sanctioned under UIDSSMT (the special component for SMT under JNNURM), one such project was approved for the city of Aurangabad, in Maharashtra in 2009. This project, popularly known as the ‘parallel pipeline project’ was initially conceived only to lay a pipeline parallel to the original pipeline that brings water to the city from Jayakwadi dam in bulk quantities. In order to supply water to the growing needs of the city, laying the parallel pipeline was proposed and undertaken by the Aurangabad Municipal Corporation (AMC). Gradually, it was transformed into a Public-Private partnership project by adding a few more components to the project and attracted 50% private investment.

In addition to the reforms brought under JNNURM, in Aurangabad it is also important to state that GoM had started its own reforms in water sector since 2001. Most of these reforms resemble the financial reforms introduced under JNNURM, wherein the urban water reforms aimed at water sector financing through the private sector, building databases through water and energy audits of the water supply schemes, and reducing the role of para-statal agencies (such as Maharashtra Water Supply and Sewerage Board) to support the ULBs in running the schemes. These reforms were conceptualized and initiated much before the central government embarked upon the sector reforms. The only addition in Maharashtra, seen after commencement of JNNURM, was to introduce ‘*Sujal Nirmal Abhiyan*’ (clean water and sanitation campaign) to cover the cities not included under JNNURM for improving water supply and sanitation services.

### *1.3. Purpose of the study and Methodology*

In the background of the advent of JNNURM and induced institutional and governance transformation, the present research attempts to study whether and how reforms are changing the institutions in the urban water sector in general as well as in particular to the case of Aurangabad? It also focuses on the understanding how urban governance is changing and how sector specific factors and overarching structural changes are influencing the governance via institutional change and actual practice of reforms on the ground? And finally attempts to investigate how political economy factors are influencing these transformations and whether and what impacts these processes are creating the ground?

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<sup>8</sup> Toolkit for Public-Private Partnerships in Urban Water Supply for the state of Maharashtra, India, the ADB-GOI PPP Initiative, Asian Development Bank, 2011, accessed at <http://www.adb.org/sites/default/files/publication/28892/tool-kit-ppp-water-india.pdf>



The study employed a broadly qualitative approach while has used secondary data also of quantitative nature wherever the objectives and focus of the study demanded so. The study is based on in-depth semi-structured interviews, purposefully sampled on the basis of their direct and indirect involvement or association in the PPP project.

## 2. Historical, socio-demographic and economic profile of Aurangabad

Aurangabad is a city with rich medieval history. It is located in the central Maharashtra region, and is a capital of Marathwada region. It was founded in 1610 by Malik Ambar, the prime minister of Murtaza Nizam Shah of Ahmednagar, in a village called Kharki. Malik Ambar is known as a visionary planner of 17<sup>th</sup> century, who designed the first development plan of the town. Malik Ambar also designed the famous underground water harvesting and transportation system based on the siphon principle, which is still functional. Fatehkhani, the son of Malik Ambar, named kharki as Fatehnagar after the demise of Malik Ambar. In 1653, Aurangzeb was appointed the viceroy of *Deccan sultanate*, made Fatehnagar his capital, and renamed it as Aurangabad. In 1724 Aurangabad was ruled by Nizam-Ul-Mulk and later the capital of the Nizam was shifted to Hyderabad. During the British period, Aurangabad remained under the princely state of Hyderabad under Nizam Shah. After independence of India, it was part of Bombay state and later in the year of 1960 it was included in the newly formed Maharashtra State.

Aurangabad features a semi-arid climate having average 72 centimetres of rainfall. The surrounding region has been known for frequent droughts and water shortages. However, due to construction Jayakwadi dam near Paithan taluka of Aurangabad district, which is one of the largest dams in Maharashtra, Aurangabad developed as a major industrial town. The Jayakwadi dam (1972) gave assurance of water for city and industrial needs and by tapping it, Maharashtra Industrial Development Corporation (MIDC, established in Aurangabad in 1965) and City and Industrial Development Corporation (CIDCO in Aurangabad in 1972) facilitated locating and establishing industries and housing colonies in Aurangabad. Initially, eastern parts of Aurangabad developed rapidly due to industries in Chikalhana.

Subsequently, other parts of the city such as Delhi Gate, Himayat Baug, Jalna road and Shahaganj developed on the eastern side.

Broadly the city can be divided in to three parts: (a) parts developed to the southern side of Aurangabad Railway Station; (b) eastern parts in the Jalna Road; and (c) northern part towards the

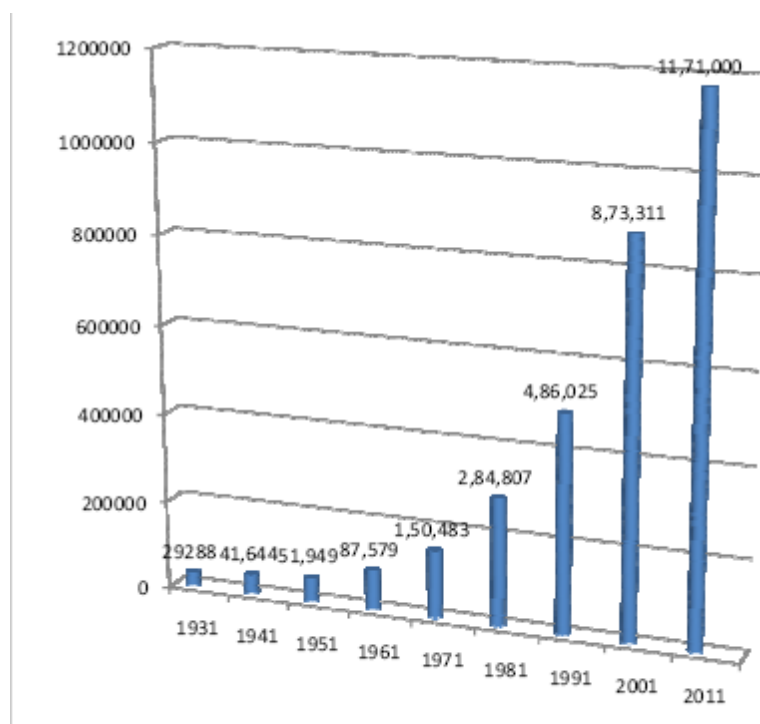


Figure 1: Graph showing population increase in Aurangabad

Jalgaon Road. The areas where *Nizams* army had its residence have been transformed into army cantonment area after independence.

Urbanization process in Aurangabad has tremendously increased due to large scale migration caused by severe drought in the year of 1972, in addition to the Industrial development. Large population migrated to Aurangabad in search of work, especially from the Marathwada region and gradually settled down. In 1982, Maharashtra Housing Development Corporation (MHADA), another para-statal organization, was established in Aurangabad for provisioning of housing of lower and medium income groups. In the decade of 1980, Aurangabad recorded most rapid urbanization in Asia. Today, Aurangabad stands as a major industrial city in a drought-prone region of Marathwada with a population of 1,171,330 as per the 2011 census.

Industrial development continued in Aurangabad after MIDC and CIDCO started their work. After Chikalthana industrial estate, Aurangabad was awarded with another industrial area on the Aurnagabad-Pune road near Walunj village. Walunj has a concentration of industries involved in the manufacture of automobiles, consumer products, power and telecom products and medicines. In addition to this, near the railway station (paper products, kitchenware, and floor-tiles and construction materials), Shendra village (automobile and tools, distilleries), and Chitegaon (household appliances and agro-processing industry) are some of the developed industrial estates surrounding Aurangabad city. Aurangabad, after automobiles and households appliances, is now called as *beer-capital* of Maharashtra, due to assured water allocations from the dam matching the required quality for beer manufacturing, and breweries have been rapidly increasing in Aurangabad in the last two decades. Recently under the central government's massive project of industrial estate, the flagship *Delhi-Mumbai Industrial Corridor*, has also reached Aurangabad; and near Shendra and Bidkin villages new special economic zone is under development.

Tourism is another important economic activity in Aurangabad, as it receives approximately 5 lakh tourists per year mainly for religious and pilgrimage tourism. The Buddhist caves of Ajanta and Elora, Shiva temple of Ghrushneshwara (one of the 12 *dyotirlingas*), famous pilgrim center of Paithan, and world famous mini-Taj Mahal, the Bibi-ka-Makbara, located in the city are some of the key tourist attractions. Caves of Ajanta and Elora are world heritage sites declared by UNESCO. Aurangabad is also a major destination on the great tourist luxury train of India – *The deccan odyssey* – and receives a large number of foreign tourists. Tourist operators, transport business and hospitality industry have boomed over the years in Aurangabad.

In addition to industries and tourism, Aurangabad is also a trading town. Industrial development, tourism, historical development as well as geographical location gave Aurangabad a strategic location as an entry point to drought prone districts of Marathwada. This facilitated trade development in Aurangabad over the last few centuries. Shahaganj, Aurangpura, Usmanpura, Gulmandi and areas surrounding railway station are major trading centers in Aurangabad. Aurangabad still maintains the tradition of weekly markets, and *peer-bazaar*, cantonment, Jafar-gate, Mukundwadi and Chikalthana are some of the places of

weekly markets. Diverse social base has been an important driver of trade in a variety of consumables in Aurangabad.

Due to continued demand of the people of Marathwada region for the establishment of a permanent Bench of the High Court at Aurangabad and subsequent support from Legislative Assembly and Bar Council, in the year of 1982, a permanent bench was set up in Aurangabad. Aurangabad High Court has a total of 9 districts from central and northern Maharashtra under its jurisdiction. Aurangabad is also the headquarters of Regional Commissioner of Revenue Department with a jurisdiction over eight districts of Marathwada region. In addition to CIDCO and MIDC, the Aurangabad council (established in 1936) was upgraded to the 'B' class Municipal Corporation in 1982. In addition to this, being a district and *tahsil* place Aurangabad also hosts an entire range of line departments and makes it a major administrative centre in the region. With the presence of a range of administrative, developmental and juridical institutions, along with industries, middle-class has rapidly emerged in Aurangabad.

In 1958, Marathwada University was established in Aurangabad, which was later re-named as Dr. Babasaheb Ambedkar Marathwada University in 1992, after a long-drawn struggle and anti-Dalit violence in the region and the state. Over the years public as well as private educational institutions have grown rapidly in Aurangabad, including vocational educational services. At present, the statistics show that 14 engineering, 15 management and 8 medical educational institutes and colleges are functional in Aurangabad. In addition to educational facilities, Aurangabad also hosts a few public and many private hospitals. These facilities increased the importance of the city as a central place in Marathwada region and also facilitated the increased flow of permanent as well as floating population.

Being a historically planned and established city, that too by rulers such Ahemadshah Nizam and Aurangzeb, Aurangabad had its identity as the 'Gateway of Deccan'. Due to the experiments of Mohammad Tughlak to make Deogiri fort (near Aurangabad) as well as Aurangzeb's residence, Aurangabad gained tremendous political and cultural importance. However, the city got its true identity due to the efforts of Malik Ambar and later by his son as well as Aurangzeb. Aurangabad became a planned city with 52 gates and an army base. During the Nizam's rule, it was used as a major strategic place. Due to Mughal and Nizam history, Aurangabad has substantial Muslim population. Today's estimate shows that nearly 40 per cent of the Aurangabad's population is Muslim, and within Hindu communities, 20 to 25 per cent population represents *Dalit* (the so called lower caste) communities.

Up to 1970, Muslim and Hindu people lived in harmony<sup>9</sup>, Majority of the political leadership was concentrated in the hands of Muslim communities, such as Members of Parliament, Legislature as well as city mayor-ship. However, due to the dominance of Muslim leadership in politics, Hindu leaders within Congress started prioritizing Hindu leadership in the city as well as state politics. This gave rise to divisive politics in Aurangabad. Riots played an

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<sup>9</sup> Interview with Mr. Nishikant Bhalerao, senior journalist and ex. Corporator and current editor of a fortnightly called "*Kisan*".

important role in polarising the communities, especially voters and set the trend for municipal politics in the later years. First, a small incident happened in Aurangabad on 20<sup>th</sup> March 1982<sup>10</sup>, and then major riots occurred in 1988 during the civic poll elections. Mr. Rafiq Zakeria, who nurtured the development of the city by bringing CIDCO, especially when he was the Minister for Urban Development in Maharashtra, cautioned the Congress-I for the emergence of divisive politics. However, its intensity and spread increased with the emergence of Shiv-Sena and Babri Masjid issue. Although Shiv Sena entered just three years before the civic polls of 1988, it earned major success in Aurangabad and obtained the opposition leader in the general body of Aurangabad Municipal Corporation (AMC). Subsequently, Shiv Sena gained complete control over the city politics, and from the next election onwards started ruling the AMC together in alliance with Bhartiya Janata Party (BJP).

The Hindutva agenda, divisive politics and polarization of the voters not just disturbed social relations between Hindus and Muslims, but also produced a process of spatial segregation in the city. Gradually, both Muslims living in Hindu concentrated areas and Hindus living in Muslim concentrations sold-off their houses and preferred physical separation. Their colonies grew differently and Muslims remained concentrated in older parts of the city, especially around the underground water supply system built by Malik Ambar. Aurangabad emerged in three distinct areas: areas with concentrated Muslim population, areas with concentrated Hindu-upper cast population and areas with concentrated Dalit (lower casts) population. Although the social rift increased, economic relations among the Muslims and Hindus continued and grew with changing times and economy of the city. However, this had a decisive impact on the political identities and the nature of the politics in Aurangabad completely changed.

The political history of Aurangabad is not directly related to water supply, however is important from the point of view of political dynamics around the municipal council. Due to the divisive politics, Muslim population have a constant perception that it does not get enough representation in the municipal council as well as regional and state politics. This situation results in poorer response and engagement from Muslim populations to the municipal affairs and issues handled by Muslim leadership revolve around protecting the interests of Muslim communities at the cost of municipal revenues<sup>11</sup>.

### **3. Supplying Water to Aurangabad City – Brief History and current issues**

Aurangabad city is famous for its water supply schemes of historical importance. Initially the town received its water supply from springs or wells, connected with small underground masonry pipes. These systems were designed to supply sufficient water throughout the year. The city still depends upon some of these sources and of these four are still in a working condition. This system is called as *Nahar-E-Ambari*, named after Malik Ambar.

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<sup>10</sup> Interview with Mr. Nishikant Bhalerao

<sup>11</sup> Interview with Mahesh Kulkarni, sub-editor, daily Saamna, Aurangabad, and Suhas Deshmukh, news-correspondent, Marathwada region, daily Loksaatta

### 3.1. Phases of water supply

The *Nahar-E-Ambari* continued to supply water to the city till 1954 in adequate quantities, along with small dug wells and tanks in the peripheral parts of the Aurangabad town. This scheme was also a matter of pride for the people of Aurangabad. In 1954, the first public water supply scheme was initiated by state government for Aurangabad sourcing water from the Harsul tank, and subsequently two more schemes based on Jaikwadi were built. The existing sources of water supply to Aurangabad are as the following:

- 1620: *Nahar-E-Ambari* Khan Dam 2 MLD
- 1954: Harsul Water Supply Scheme 10 MLD
- 1976-76: Old jaikwadi Water Supply Scheme 56 MLD
- 1992: New Jaikwadi Water Supply Scheme 100 MLD
- Ground water<sup>12</sup> 1.5 MLD

Presently water supply of Aurangabad is managed by AMC. Although, it has a capacity of drawing 170 MLD of water exact figures of withdrawal are not available. The data provided by AMC to DRA consultants for preparing the DPR claims that it draws about 150 to 156 MLD water and provides for about 100,000 connections. It charges annual water flat tax to the citizens / connection holders of different user groups, viz., domestic, commercial, institutional and industrial users.

### 3.2. Current issues

Obviously the above mentioned quantity of 156 MLD is in fact sufficient to Aurangabad's present population of 1.171 million since in terms of LPCD it comes to about 133 LPCD (against the new benchmark of 135 LPCD set under JNNURM for Indian cities having underground drainage system). However, in practice, Aurangabad receives water on alternate days and in summer the frequency of water supply drops further. Major reasons for the insufficient supply include: physical losses of water through bulk and retail distribution network, supply to en-route users,<sup>13</sup> and limited treatment as well as distribution capacity<sup>14</sup>. Key issues listed in the DPR are as follows<sup>15</sup>:

- Design capacity of existing head works is 200 MLD. Frequent silting in approach reduces intake capacity, leading to emergency operations frequently to operate the

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<sup>12</sup> This quantity does not reflect the self-provisioning, i.e. groundwater extracted by individual households or housing cooperative societies or apartments or by real estate operators construction purposes

<sup>13</sup> Jaikwadi dam is located 60 kilometers away towards southwest from Aurangabad in the downstream. The existing pipeline that carries water in bulk to the city passes through habitations, villages and industrial areas, which also take water from it, through legal connections as well as illegally.

<sup>14</sup> Source: Interview with Mr. K. M. Falak, Assistant Engineer, Aurangabad Municipal Corporation.

<sup>15</sup> Source: Detailed Project Report (DPR) for parallel pipeline project, prepared by Dinesh Rathi and Sons, Nagpur for Aurangabad Municipal Corporation under the UIDSSMT scheme.

pumping stations near the jaikwadi dam. Another issue also created Seven head works of various water supply and lift irrigation scheme are in the upstream of AMC existing head work.

- Both raw water and pure water transmission lines have completed their useful life and are suffering from frequent leakages, breakdown leading to more operation and maintenance costs that expected.
- Water treatment capacity also need to be enhanced however as it does not match with the lifting capacity.
- In the distribution network spread across the city, no uniform quality of pipes is used. About 60 per cent of pipe length is AC, RCC and GI, and PVC material; and hence physical losses are much more than acceptable limit. A number of parallel lines have been laid over the period of time to reduce the number of issues. Rusting and erosion of pipelines leading to failure in meeting the required pressure and discharge standards. This is leading to unequal distribution of water across the city further leading to application of booster pumps and direct tapping from main supply lines and creating further distortions. The water audit report in 2007 states that against the capacity, actually the water distribution is amounting to 80 LPCD.

Owing to these issues, tanker supply increased in Aurangabad rapidly, and both public and privately owned tankers are operating and in scarcity situation this leads to higher tanker prices.

Largely, experts blame the improper planning and piecemeal approaches to augment water supply scheme for this situation<sup>16</sup>. Water supply system augmentation has not kept pace with the physical expansion of the city and especially commensurate to the developmental planning and practice. Since independence, Aurangabad Municipal Council (in 1969) and Aurangabad Municipal Corporation (once in 1982 and later in 2006) has increased its physical limit (boundary) thrice. These inclusions have brought large tracts of the land within the municipal jurisdiction of Aurangabad and gradually led to increase in the demand for water. The details of the municipal limit extensions are given below:

- (a) 1969: 54.39 sq. kilometres
- (b) 1982: 138.5 sq. kilometres [18 villages, leading to change in class of AMC]
- (c) 2006: 142 sq. kilometres

In 1982 and 2006, large areas developed by CIDCO and MIDC were included in the municipal limit; however, until the year of 2000, the AMC was not able to collect house tax and water tax. While, developing these areas as residential colonies, CIDCO did not plan for water supply scheme and the state-government decided to transfer this responsibility to

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<sup>16</sup> Source: Interview with H. K. Tholia, retired municipal engineer from AMC and Mr. Purandare, retd engineer, Water and Land Management Institute (WALMI), Government of Maharashtra

AMC. This decision put additional load on AMC, which was already suffering from inadequate water supply and inadequate revenues.

Thus, the augmentation of water supply scheme in the form of parallel pipeline to increase the bulk water supply was rationalized, using the issues and problems in current water supply, initially by conducting the water audit and independent financial assessment by the external consultant appointed by the state-government<sup>17</sup>.

#### **4. Journey of the parallel pipeline project**

The project of laying parallel bulk water pipeline has had a long journey of more than a decade now. The muddled process of decision-making of the project shows a lot of ups and downs, twists and turns and deep political-economy relations rooted in the political history of Aurangabad city and Marathwada region at the local, regional and state level. This section makes an attempt to map this journey with key milestones, which shaped the policy making and progress of the piped water supply scheme.

##### *4.1. Earlier efforts*

For the first time, the proposal of parallel pipeline was explored in 2003-04. The Detailed Project Report (DPR) was prepared and a tendering process was initiated, initially for defining the technical specifications. While this formal process of tendering was undergoing, off-line negotiations with one of the technical bidders was also being explored<sup>18</sup>. It was reported that the contract was under negotiation with Kirloskar Engineering Services but it failed over off-line financial negotiations. Thus, due to unsuccessful negotiations financial bid was not called and the process was abandoned. Interestingly, official explanations for abandoning this bid were never provided to the corporators (members of general body of AMC). However, most of the respondents reported that the difference, which led to unsuccessful negotiation, was about the disagreement over the scale of illicit monetary benefits to be obtained between the contractor and local politicians. This includes politicians involved in all major steps in decision making representing the ULB, state government, and representatives from central governments, such as Member of Legislature (MLA) and Member of Parliament (MP)<sup>19</sup>.

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<sup>17</sup> Note: Maharashtra state (GoM) is considered as one of pioneering state for bringing in reforms in the water sector, because of the steps it has taken such as allowing ULBs to engage with private sector well before the reforms were launched in 2000. GoM is also a pioneer in establishing first independent regulatory authority for water sector which is known as Maharashtra Water Resources Regulatory Authority. GoM began reforms in Maharashtra through first issuing a government order) GO for PSP in water supply at municipal level. Further to the GO, GoM selected a few consultants through a process of Expression of Interests to help ULBs in order to conduct performance assessment of existing water supply schemes through water audits and energy audits.

<sup>18</sup> Source: Interview with Mr. Sarang Takalkar, political activist and co-director, Abhishree travels and media agency, Aurangabad.

<sup>19</sup> Source: Interviews with Mr. Sarang Takalkar, Mr. Nishikant Bhalerao, and Ex. Deputy Mayor Mr. Sanjay Joshi and ex. corporator Mr. Sameer Rajurkar

#### 4.2. UIDSSMT<sup>20</sup>

A few respondents, especially corporators and journalists believe that while the negotiations among the prospective private contractors, municipal officials and politicians were going on, the UIDSSMT scheme was declared; and the reforms brought altogether fundamentally different opportunity to pursue this project through Public-Private partnership. The idea of the Parallel pipe scheme was floated in 2005-2006, when the UIDSSMT scheme was sanctioned. According to the JNNURM guidelines the proposal was prepared based on the water demand considering population projections up to 2041. A brief time-line of the project is as follows:

##### **2005-2006**

In 2006, this proposal was submitted for approval to JNNURM authorities by the then Municipal Commissioner Mr. Dilip Bund. Initial proposal was created. While the scrutiny was going on at state government as well as central government level, the AMC was intensely discussing on the modalities and possibilities to raise the Rs. 35 crores as local contribution towards the capital costs. This was mandatory as per the JNNURM guidelines as well as water sector reforms initiated by GoM. According to the pattern of financing for SMTs, 80 per cent of the capital cost was to be granted by the national government and the state government and ULBs were to contribute 10 per cent each amounting to Rs. 350 million according to the total project cost of Rs. 3590 million. In addition, discussions also revolved around the selection of contractor and possibilities of internal financing (investment possibilities for politicians themselves in the scheme)

##### **2008**

Government of Maharashtra initiated a new scheme at the state level in order to provide grants to the SMTs excluded from the UIDSSMT. The scheme was named as *Sujal-Nirmal Abhiyan* and had a strong component of reforms and conditional funding on the lines of JNNURM in order to further the urban water sector reforms in the state by wooing other municipal councils and corporations by providing infrastructure development grant with reform conditionalities. AMC also sought some grant under this scheme (Rs. 40 crores) to meet the emergencies and managed to connect the unconnected housing colonies with the existing water supply network. Initially, the State Government responded with reluctance as the concern was to reach out to more number of small and medium towns; and nearly more than 10 small towns' financial requirement could have been met with Rs. 3590 million for new drinking water supply schemes.

##### **2009**

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<sup>20</sup> Source: Based on interviews of Municipal Engineers, Mr. Falak, Mr. Joshi, Mr. Kulkarni and Mr. Sakharam Panzade, AMC.



However, relentless persuasion continued by the AMC to JNNURM authorities in order to obtain the approval for the scheme. This led to a discussion about further improvements needed in the scheme, especially in the distribution network, including laying of new distribution lines in the city with additional number of overhead tanks. The emphasis of the reforms under JNNURM on PSP gave a boost to the idea of a Public-Private Partnership (PPP) project with substantial amount of investment in the private sector. Maharashtra PPP cell approached Department of Economic Affairs (DEA) for support. DEA had initiated a process at the central level under the India Infrastructure Project Development Fund (IIPDF), which was with partial support from the ADBs support program for developing PPPs.

The idea was borne. It was decided to add all 'necessary' components to transform the existing intermittent water supply system into a continuous water supply system on 24x7 basis. Credit Rating and Infrastructure Services India Limited (CRISIL) was appointed as a transaction advisor for developing the PPP agreement and carrying out the bidding process under the IIPDF support.

## **2011**

CRISIL aided AMC to carry out a global bid, with detailed and complicated documentation, deciding on the qualifying criteria for bidders, selecting the lowest bid and entering in agreement with the selected company/consortium for carrying out the enhanced project. Bidding process for the same was initiated on August 20, 2009 by publishing a tender notice for Request for Proposal (RFQ)<sup>21</sup> in national level news papers. CRISIL drafted the Draft Term Sheet for Concession Agreement and RFQ document. Out of 9 bidders who were qualified for the final bid only two bid documents were received. Both bidders asked for Annual Operational Support Grant (AOSG). AOSG amount quoted by Infrastructure Leasing and Financial Services (ILFS) was more than Subhash Projects and Marketing Limited (SPML). The difference between the two quotes was Rs. 49.90 Cr. Following this, on April 08, 2011, a consortium of three companies: (a) Subhash Project and Marketing Limited (SPML Infra Ltd), (b) National Water and Sewerage Corporation, and (c) VA-TEC WaBag (a Dutch firm) were selected as preferred bidder<sup>22</sup>.

CRISIL further facilitated the formation of a special purpose vehicle (SPV), which is named as Aurangabad City Water Utility Company Limited (ACWUCL) to carry out the project.

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<sup>21</sup> Request for Qualification (RFQ) is the document which outlines basic qualification and eligibility conditions and used for short-listing of companies or contractors based on pre-decided criteria. This process is then followed by issuing another document called Request for Proposal (RFP) is the document that outlines the details of the project along with terms and conditions and includes base budget with which bids are opened. Both documents are critical in any kind of bidding process.

<sup>22</sup> Source: Resolution by 'Standing Committee' of AMC, dated: 22<sup>nd</sup> March 2011

The concession<sup>23</sup> agreement between the ACWUCL and AMC was entered on September 22, 2011.

#### 4.3. The scope of the agreement

The PPP contract was based on the two considerations: (a) need to improve the scope of the works in order to supply water to the projected population of the city up to 2041; and (b) to match the burgeoning costs of the earlier project due to inflation. This together led to

**Table 2: Financial contributions of private entity and AMC in the PPP project**

Particulars	Transmission System	Distribution System	Transmission trunk, feeder mains	Metering	Total Cost
<b>Total Estimate Cost</b>	<b>346.22</b>	<b>320.18</b>	<b>69.17</b>	<b>56.63</b>	<b>792.20</b>
<b>Total Grant</b>	<b>265.82</b>	<b>133.69</b>	<b>NA</b>	<b>NA</b>	<b>399.51</b>
UIDSSMT	202.59	85.14	-	-	287.74
GoM – Original	25.32	10.64	-	-	35.97
GoM – Additional	37.91	37.91	-	-	75.82
<b>Concessionaire’s contribution</b>	<b>80.39</b>	<b>186.49</b>	<b>69.17</b>	<b>56.63</b>	<b>392.68</b>

doubling of the cost of the project. Brief details of the same are as follows:

[Source: Reproduced from Draft DPR of the PPP project 2012]

The agreement had stipulated a preparatory period of maximum 6 months to both the parties for fulfilling their *Conditions Precedent*<sup>24</sup>. Condition precedent had certain conditions stipulated in the agreement to be fulfilled by both the parties, pertaining to techno-financial preparedness. Preparatory period is a period between the date of signing the agreement and the Appointed Date i.e. the date on which both parties have confirmed the fulfilling of their condition precedent. The agreement further mentioned that the concession period will commence from the Appointed Date and continue for the next 20 years. It will comprise of 2 phases:

(a) Construction and Rehabilitation period of 3 years from Appointed Date

<sup>23</sup> A type of PPP in which substantial amount of stake is transferred to private party as it invests capital in developing the infrastructure.

<sup>24</sup> Conditions precedent are articulated in the PPP-agreement between AMC and the consortium led by SPML, and refer to the certain level of preparedness at the level of both parties before handing over the operations of the existing water supply system to the concessionaire.

(b) Operation and Maintenance Period of 17 years from Commercial Operations date to the last day of Concession Period

However, the takeover (or handover) of the project, which includes operation and maintenance of existing water supply system and undertaking refurbishment works committed in the PPP-agreement delayed inordinately. This happened due to the non-compliance of the conditions to be fulfilled by both the parties before the take-over process. From the AMC side, the reforms were to be implemented and a sum of Rs. 92 crores was to be deposited in the escrow account as caution money, which did not happen. With respect to implementation of reforms, AMC officials could not implement them due to on one hand lack of clarity and on the other lack of capability to understand and design implementation strategies<sup>25</sup>. Finally, state government sought CRISIL's advisory services to complete the reforms at AMC level; and the AMC did it with the help of two CRISIL officers stationed in their office for almost two years. With respect to deposit Rs. 92 crores also AMC faced difficulties. AMC, already burdened with earlier loans which it could not pay back due to poor recovery of water tax and other revenues pressed to negotiate a fresh loan of Rs. 100 crores with IDBI to deposit the caution money in escrow account. This took quite long. Third important reason was AMC's delay in designing "New Water Supply Rules" with a policy of 24x7-supply, metering and volumetric billing which formed the basis for various distributional norms, supply criteria, and tariff related issues. Further the delays worsened due to the time consumed by the Chief Minister's office in approving the New Water Supply Rules.

Concessionaire, like AMC also suffered a lot to fulfil the *Conditions Precedent*. On the concessionaire's side, the conditions were: (a) to achieve financial preparedness (raise loan or equity) in order to put concessionaire's share in upgrading infrastructure, (b) obtain all permission and no-objection certificates, i.e. legal preparedness, (c) conducting a detailed environmental assessment report and, (d) conducting social impact assessment reports, and (e) prepare hydraulic design for refurbishment of the existing supply network. However, concessionaire failed to fulfil these conditions, and among all conditions, struggled most to raise finance for investing in the proposed water supply works. The concessionaire faced major difficulties in establishing creditworthiness in the market to raise the loan of Rs. 3.92 billion to put its own share.

### **December 2013**

The government approval was sought and the final handover of the existing water supply network took place. During this entire period the concessionaire suffered from major financial stress and at the beginning of 2014 decided to sell-off shares to Essel Utilities [Essel Utilities is a subsidiary of Zee-Group of Companies in the basic services sector; and is operating the water supply service from last 4 months in Aurangabad.]

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<sup>25</sup> Refer section 5.1 for more detailed discussion

Thus, due to the oppositional party politics, procedural non-compliance and deliberate strategy of AMC not to monitor the concessionaire's capacities and progress before handing over are among the key reasons for the delays. However these delays made a significant impact on the urgency of the improving water supply services in Aurangabad. First, delays caused major price escalations

## **5. Institutional transformations, PPP and politics of water**

UIDSSMT scheme demanded a fundamental change in the relationship between the state government, ULB and local citizens; and this process centered on the theme of decentralized decision-making. However, informal responses to the policy instruments that were forcing the adoption of reforms at local level altered the process of implementing reforms, subverted its spirit and realigned them in order to maintain the prevailing power equations or strengthen them. This process created a new politics of public services at the local as well as state level through informal coalitions on the political front. This section describes the on-ground status of implementation of JNNURM reforms in Aurangabad in general as well as specific institutional changes that are brought with respect to water supply. This section also demonstrates how local political equations influence and direct the decisions pertaining to institutional changes in order to accommodate interests of the powerful sections in the society.

### *5.1. Status of JNNURM Reforms in Aurangabad*

As mentioned in the background section of this case-study, JNNURM expected fundamental overhauling of state structure with an orientation towards PSP. Simultaneously, it expected structural reforms for increasing community participation, streamlining and standardizing staffing patterns and . While the set of administrative and financial reforms, aiming at commoditization of services and increasing revenues, created the much required space for PSP; reforms such as community participation law and public disclosure of information, aiming at creating spaces for informed decision making and increasing citizens' control over urban governance, remained unimplemented. In terms of procedural clarity and indicators for successful implementation, the reforms prescribed under JNNURM remained vague and obscure<sup>26</sup>. This vagueness created enough space to reinterpret them based on the capabilities and interests of local bureaucracy and political leaders, thereby leading to selective prioritization of reforms at the state as well as local level.

Broadly, the emergent scene at the state level shows prioritization of PSP-oriented reforms while at the local level actual implementation of reforms appeared to be floundered. Even at the state level, review of status of (mandatory) reforms in Maharashtra shows that the legal

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<sup>26</sup> The vagueness in implementation of reforms refers to inadequate operational guidelines for implementing the reforms at the ULB level, for all the list of ULB level reforms. Of course there are a few exceptions such as the reforms of adopting Double Entry Accrual Basis accounting system, which was an easy task as software developed by Kalyan-Dombivali Municipal Corporation was made mandatory for all ULBs to adapt. However, such concrete guidelines weren't provided for all other reforms, especially reforms like, Public Disclosure Law, property tax reforms, or earmarking 20-25% developed land in housing projects for EWS/LIG, or even introducing laws for rainwater harvesting.

formalities for state-level reforms have been complied by making necessary amendments in concerned laws or issuing orders,<sup>27</sup> except the enactment of Community Participation Law (CPL). CPL was floundered due to large-scale opposition across political party lines; especially from the corporators as it was aimed at decentralizing the ward level (linked with electoral constituencies) development decisions by seeking the participation of voters in an institutionalized manner<sup>28</sup>. Enactment of CPL was initially suspended in Maharashtra by constituting a single-member study-committee, which provided a favorable conclusion to not enact and implement it. Implementing the provisions of 74<sup>th</sup> CAA has always been sidelined, apart from the devolution of functions to ULB pertaining to basic services as the Municipal Acts in Maharashtra have already stipulated them.

In terms of ULB level reforms, Aurangabad seems to have adopted a selective approach. This selectivity is seen through prioritization of certain reforms under influence of state-government as well as local preferences at the ULB level. Broadly the priority and emphasis at the state level in choosing between PSP oriented reforms and pro-poor and participation oriented reforms shows that the tilt is towards PSP. This can be substantiated from the fact that GoM has come out with specially established institutions such as PPP cell, and Maharashtra Urban Infrastructure Development Company. Thus promoting PPP clearly came-out as a priority from state level which reflected in AMC's decision in entering into PPP mode for improving the water supply.

In addition to this, AMC took a few initiatives for improving the collection of house tax through the self-assessment scheme. However self-assessment scheme received a poor response and AMC continued with its old records as well as system of surveying houses for tax-assessment purpose. AMC also made special efforts to improve the collection efficiency for house tax which resulted in increase in revenues marginally. AMC, in order to bring accuracy in tax-assessments also attempted GIS based surveying and listing of properties but could not be successfully complete it. The reasons behind this unsuccessful attempt were multifold. First, the agency which was to be awarded to the contract to complete the task of doing a GIS mapping exercise of all properties attracted a lot of debate within the municipal council between bureaucrats and corporators. Another issue was the sensitivity of the data collected through GIS, especially from the point of view of land-developers' interests. The

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<sup>27</sup> (a) GoM repealed Urban Land Ceiling Act on 30th November 2007 in winter session of state assembly in Nagpur, (Ref:[http://www.business-standard.com/article/economy-policy/maharashtra-repeals-land-ceiling-act-finally-107113001114\\_1.html](http://www.business-standard.com/article/economy-policy/maharashtra-repeals-land-ceiling-act-finally-107113001114_1.html))

(b) Rationalization of Stamp Duty was done through through 2012-13 budget as the following: stamp Duty structure: A simpler rate of 3% for areas falling under Grampanchayats, 4% for areas under Municipal Councils and Influential Areas and 5% for other urban areas including Municipal Corporations. (Ref: <http://www.capitalmarket.com/CMEdit/story49-0.asp?SNo=544531&sid=49&ssid=139&rbyear=2012>)

(c) Government of Maharashtra, amended the provisions in all the four municipal acts in Maharashtra with respect to Public Disclosure Law on 26th November 2007

(d) GoM has not been able to amend the Maharashtra Rent Control Act 1999, which has frozen the house rents at pre-1965 levels as well as in some cases pre-1940 levels depending on the year of construction of the building.

<sup>28</sup> For more details, refer draft Community Participation Law, Government of Maharashtra

data about the state, size of properties, empty land and ownership of lands was considered as a sensitive data which could make huge impact of the land and real-estate market in the city. Due to both these reasons the issue of GIS survey got politicized and the task was not undertaken by the AMC<sup>29</sup>. Thus, corporators preferred manual property assessments, and the city level leadership could not generate political rationale and consensus for digitization of property listings. Interviews with officials in the property tax department also suggested the reluctance of people in paying tax, the prevailing political culture of safeguarding the defaulters, and the differential treatment towards various social groups were major hurdles in achieving the objective of 90% collection of house tax. Another important reason dawdling of GIS survey was the complexity in tracing ownership records and conflicts over many land parcels and properties in old city areas as these lands were earlier owned and controlled by the Nizam of Hyderabad. Records have been maintained irregularly and, even after the inception of Municipal Council and subsequent upgrading as Corporation, AMC has not been able to correct the land titles<sup>30</sup> from the Nizam's era. The corporators, especially engaged with real estate business, were also disinclined towards computerized records scaring the centralized availability of data on land parcels and its possible impacts on the role played by the Municipal Corporation in the real estate development in Aurangabad. Since the AMC failed at initiating a GIS based survey, which is a precursor to the computerization of land and property and its titling system, both these reforms could not go ahead at the ULB level. In terms of improving the property tax assessment methods not much progress is made by Aurangabad as the AMC has been practicing the old system based on rent control laws. Linking tax calculation to the prevailing market rates of the properties has not been integrated. Instead, AMC increased the rate per square-feet, which has led to increase in the overall revenue from property tax in the city.

Administrative reforms broadly include regulating the staff size, creation of new cadres, regulation of administrative expenditure as well as streamlining of administrative procedures. In terms of rationalization of staff size, Directorate of Municipal Administration (DMA) has started a practice of regulating the size of ULBs from 2006, by issuing *Akrutibandh* (Organization-Structure specifying number of staff for each department of ULB, including posts and eligibility of the posts), based on the revised staffing guidelines<sup>31</sup>. Obviously, on the rationality of efficiency, the prescribed staff-size for ULBs in Maharashtra never matched

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<sup>29</sup> Source: Interview with Mr. Kiran Shirodkar, senior clerk, department of tax assessment and collection, AMC

<sup>30</sup> Note: The history of land records of Aurangabad is most confusing, mainly because Aurangabad was part of a princely state of Hyderabad in the pre-independence period and land records were maintained very loosely and in Urdu language during Nizam's period. Translating and transferring them into Marathi language after 1960s was a tedious task involving a lot of conflictual claims over land-parcels and this process of updating and correcting land records has not been completed at the fullest level. Ref: Case study of Aurangabad's IHSDP scheme by Centre for Urban Policy and Governance, Tata Institute of Social Sciences.

<sup>31</sup> Source: State Level Background Paper (SLBP) published online by Urban India Research Facility, School of Habitat Studies, Tata Institute of Social Sciences, and Government Order dated 4th May 2006, GR No.1005/classification/C.R.No. 379/05/UD-24, Mantralay, Mumbai-32. Department of Urban Development, the Government of Maharashtra

with the actual size; and the ULBs lobbied for other instruments permitting retaining of staff until their retirement. This led to not only retaining of permanent and temporary staff but also halted new recruitment and introduced voluntary retirement scheme (VRS). However, in Aurangabad the issues of temporary workers took a serious turn and entered into a judicial process as workers union resorted to a writ-petition. Local respondents<sup>32</sup> say that the union workers gained a high level of political support from ruling political leadership to deter the negative impacts of staffing regulations on their current jobs as well as post-retirement benefits. The Aurangabad High Court passed a ruling accepting the claims of temporary workers union and ordered the AMC to include the temporary workers in municipal staff register (further elaboration can be provided if this appears cryptic).

E-governance, apart from the GIS surveys and computerization of land and property has elements of digitization of accounts and other records (for example, birth and death records). AMC is also faltering in this area. The model software built by Kalyan-Dombivali Municipal Corporation (KDMC) has been adapted by AMC as per GoM orders. However, digitization of past records have not been completed and shift to double entry accounting system is not made as of now. It has its own website—one of the compulsory measures under E-governance reform. Other procedures such as rendering building permissions, as well as issuing property tax bills are neither digitized nor has the AMC taken any step towards it.

The reforms in urban planning under JNNURM, especially ‘associating/transferring city planning function to ULBs’, seems to be the victim of the ambiguity deliberately maintained in explaining the reform itself. In Maharashtra too (like in most states) this particular reform has been equated with the process of writing City Development Plans (CDPs) and using them for ranking and prioritizing the selection of urban services to be improved. Thus, CDP was supposed to be instrumental in not just assessing the scales of investment needed to improve the infrastructure but also build rationales for prioritizing the ‘investments’ through a ‘needs assessment’ study. Further, availability of funds under JNNURM and effective allocation of funds to increase the reach within state, i.e., covering more number of cities, were other considerations in the allocation of funds or approving the DPRs submitted by various ULBs under JNNURM. Like DPRs, consultant driven process was practiced to build the CDPs and to calculate the scale of investment needed to refurbish infrastructure for improving the urban services such as water, sanitation, solid-waste and public transport including roads and flyovers. AMC conveniently selected a consultant empanelled at the state level to write a CDP and complied with this reform, under the hand-holding support of state-governments, mainly with an aim to procure funds for water supply and underground drainage network schemes, which are currently approved under the JNNURM. It is further important to note that, under the directions and actual spadework by MRTPB and CIDCO, a process of extending the municipal limit is underway for the third time in Aurangabad’s history, which remains disconnected from other regulations and infrastructure planning. In this way the micro-level design and shaping of reforms has been influenced by interest-politics in a substantial way.

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<sup>32</sup> Source: Interviews with workers union and journalists of local newspapers.

## 5.2. Nature and structure of institutional transformations in water sector

Due to PPP in the parallel pipeline project under JNNURM, water supply sector is experiencing most of the reforms argued to improve efficiency and effectiveness in Aurangabad. PPP has led towards not only financial and organizational ring-fencing but also substantial private investment towards refurbishing water supply infrastructure. As it has been discussed in the background of reforms, AMC has ‘liberalized’ itself by changing its role from a service provider to a facilitator and regulator as far as water supply in Aurangabad is concerned.

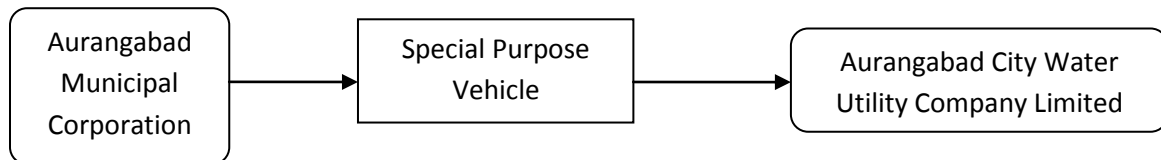


Figure 2: Basic Institutional relationship in PPP

Through the PPP contract functional unbundling of services has been envisaged.<sup>33</sup> AMC has transferred all important functions hitherto handled by the Maharashtra Water Supply and Sewerage Board (renamed as *Maharashtra Jeevan Pradhikaran – MJP*) as well as the ULB—such as financing infrastructure, engineering works (building infrastructure), operating the schemes and its maintenance—to the concessionaire (PPP). The mechanisms and modalities adopted by the ACWUCL for actualising institutional transformations in the water sector is discussed in this section.

ACWUCL has gradually started bringing the corporate culture in the operations of water supply system. The first step was to start “consumer service centers” (CSCs) for collecting the taxes as well as resolving the consumer complaints in the existing distribution system. Oracle Corporation, a leading software agency providing IT solutions, is contracted to set-up the CSCs emulating the model of call-centers. At present, six such CSCs covering the six water distribution zones are made operational in Aurangabad.

ACWUCL has appointed a specialized public-relations agency to create ‘favorable impression’ among the customers of water supply, which is a kind of damage control measure to improve the image of PPP and gain acceptance. The interview with PRO of the agency reveals that it performs two tasks: (a) PRO tracks all the news in print and electronic media that is directly and indirectly related to the PPP project, and (b) organizes press conferences, designs and conducts campaigns to create a favorable opinion among the general public about PPPs. Public relations also undoubtedly include maintaining close relations with politicians and other key stakeholders such as bulk-consumers and civil society members.

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<sup>33</sup> Functional unbundling refers to the separation of various functions and handing over management of these separated functions to the independent agencies with freedom for managerial and administrative decisions.



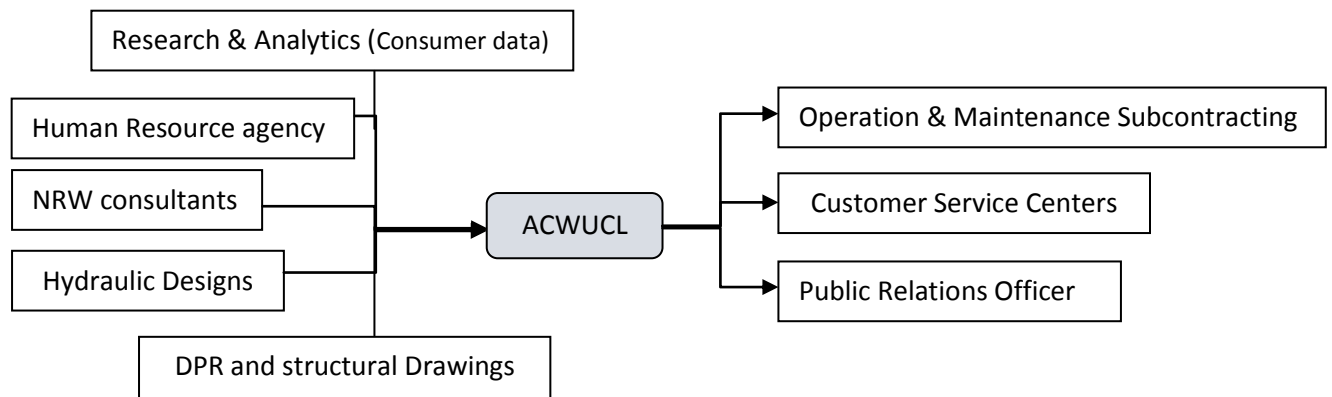


Figure 3: Changed Organizational Structure after PPP

Source: Author's work [based on the inputs during interviews and documents shared by ACWUCL]

The job of preparing the hydraulic design was subcontracted to the Dahasahasra Waternet Solutions (DWS), a consulting firm set up and run by former Member-Secretary of MJP, based in Thane. DWS was unable to submit the hydraulic design of the scheme till December 2014 to SPML and Essel Utilities. Similarly, Dinesh Rathi and Associates-Consultants (DRA), the consulting firm which prepared the DPR for the revisions in the project in PPP mode, was supposed to prepare the structural drawings, an important component of engineering designs of the water supply scheme. However, DRA has not submitted the same till January 2015 to the Essel Utilities; and as one of the Essel Utilities employee reports, the DRA is trying to settle scores due to earlier differences between them in some other project over the payments issue. This is causing serious implications on the progress of the Aurangabad PPP project<sup>34</sup>.

AMC was restless and overstressed to operate the scheme and decided to handover the operations of water supply system to the SPV by including provisions of handing-over of the scheme in the PPP agreement. with its precarious status. While negotiating the contract AMC also de-linked the task of laying the pipeline and refurbishment of the scheme with O&M of the existing system. Thus, O&M as well as refurbishment became the part and parcel of the PPP agreement. After handing over the system in 2013, ACWUCL appointed three sub-contractors to operate the scheme, of which two were local and one was from Delhi. Importantly, one of the local contractors sub-contracted by ACWUCL was already involved in doing small repairs and maintenance works of the water distribution system of Aurangabad for the AMC. Each of the sub-contractors is now managing the operations of two zones out of the total six zones of the system. Further, all the three sub-contractors have employed six retired municipal engineers to manage the zone-level operations in all the six zones. In addition, the SPV has taken over all the 256 employees of the AMC's water supply

<sup>34</sup> Interviews with employees of Essel Utilities / ACWUCL

department for its operations; and maintains the same contractual conditions of employment with the SPV.

ACWUCL is also negotiating a contract with a corporate giant in the water sector named Mia-Water for management of non-revenue water.<sup>35</sup> Mia-water is supposed to provide technical and strategic consultancy for the management of physical losses (primarily water which gets wasted through leakages) as well as apparent losses (water which is siphoned off by theft as well as availed through free taps). ACWUCL has also contracted a human resource agency for various levels of requirements. For instance, while the labour contractor for manual work of laying pipes is different, IKYA agency has been given the task of providing the skilled labour for middle order as well as frontline workers. In addition, the SPV has also hired an additional consultant for project management functions through an agreement with Royal Huskoning-DHV, which is another giant providing engineering and management consultancy services. However, talks failed over financial terms and having wasted some money on it, this agreement is on the verge of closing down<sup>36</sup>.

Interestingly, the above discussion not only shows unbundling of existing functions but also re-shaping of them with a corporate touch. Everything needs to be professionalized, specialized and customer oriented. The service provider here (ACWUCL) becomes a customer of several other services providers unlike the earlier public agency responsible for carrying out each function. Despite these efforts, even today (in the begging of the year 2015) nothing has moved on this project. Although, the ACWUCL has been taken over by Essel Utilities, with a new management team and added monetary strength and diversified strategy of entering into electricity and gas markets, it has not been able to commence the project work and is struggling to operate the existing water supply scheme. This raises several questions which remain unanswered, like why is this blocked? Is there any resistance to the idea of metered water on a 24x7 basis and what is the nature of resistance? Or is it an issue of organizational capacity? What is the role of politics in this process at various levels?

### *5.3. Situating Parallel Water Supply project in local politics*

As described in the second section of this case study, Shiv Sena holds control over the AMC since last 20 years. While the BJP is in alliance with Shiv Sena and jointly rules the AMC, it is not as strong as the Shiv Sena in terms of popular support as well as strength of elected representatives. A current Member of Parliament (MP) from Aurangabad, Mr. Chandrakant Khaire is from Shiv Sena and holds decisive control over decision-making in the AMC and politics around it. Mr. Khare and the Shiv Sena have emerged together after 1998 in Aurangabad (the context is discussed in detail in the second section). First as a Corporator in 1998 and later as a Member of Legislative Assembly (MLA) of Maharashtra, Mr. Khaire coordinated Shiv Sena's growth in Marathwada region by ensuring a stronghold over the

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<sup>35</sup> Non Revenue Water (NRW) is term used to denote water losses indicating the revenues lost as either water is distributed free (through free taps) or leaked through the system due to degenerated system or accessed illegally.

<sup>36</sup> Source: Interviews with employees of concessionaire (Aurangabad City Water Utility Company Limited)

economy and politics of Aurangabad through municipal level decision making. He has been elected twice as MLA and four times as Member of Parliament (MP), along with holding membership on numerous positions such as cabinet ministries, Waqf Board,<sup>37</sup> committee for Nomadic Tribes in Maharashtra. Mr. Khaire, thus, is an important figure in the local politics as well as politics around the local body.

As opposed to this, Congress-I deteriorated its base in Aurangabad after the rise of Shiv Sena and was reduced to a limited strength of only one MLA among the three MLA constituencies from Aurangabad city. The sole MLA of Congress-I, Mr. Rajendra Darda, is nonetheless a powerful media giant and owns the most widely circulated Marathi daily called *Lokmat*. Having limited interest in local and municipal politics, Mr. Darda devotes most of his time to business, apart from protecting the support from his electoral constituency and suppressing an emergence of alternative political leadership within Congress-I. Unlike the two others, Nationalist Congress Party (NCP) has no elected representative in the Legislative Assembly but has a representative in the upper house (Legislative Council) indirectly elected through an electoral college. Mr. Satish Chavan is the current Member of Legislative Council (MLC) from Aurangabad—Marathwada graduate's constituency—and represents the education sector. Patrons of NCP top leadership in Aurangabad are involved in establishing and running colleges and institutes of *Marathwada Shishkhan Prasarak Mandal* (Marathwada Education Society), which is led by such patrons, earlier by Madhukarrao Mule and now by his disciple, Mr. Satish Chavan.

Mr. Khaire is a staunch believer in ‘conciliation politics’ and known to have the political skills so as to establish and maintain good relations with political giants across party lines.<sup>38</sup> In order to suppress the competition within Shiv Sena, as well as to reap the benefits from local politics, Mr. Khaire maintains implicit relations with all the three major state level parties, Nationalist Congress Party (NCP), Bhartiya Janata Party (BJP), and Congress-I. To achieve this, the three key strategies being used are: (a) to leverage ULB to support the real estate related matters; (b) to support leaders across the parties in different constituencies; and (c) to not involve in the influence zone of other political leaders, as long as their activities do not threaten his own existence, and ensuring favorable exchanges. Each of these strategies has been explained further in the following paragraphs and its relation to the water supply project under UIDSSMT in Aurangabad.

Generally, each party's base in any area is developed through two important factors, (a) strong involvement of its workers in the local political economy and (b) populist strategies to

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<sup>37</sup> Waqf board is a formal agency that looks at the religious, educational and developmental support for Muslim populations. Member ship to Waqf board is critically important in the context of Aurangabad where substantial number of Muslim population is residing and thus becomes a power-position.

<sup>38</sup> I am using this term “Conciliation politics” to explain the nature of a politician to maintain good relations with political elites across political parties, sometimes at the costs of few losses to the own party or adjustments in shorter terms but by creating spaces for long term political benefits.

gain greater public support<sup>39</sup>. Like Shiv Sena enjoys strong support from the lower caste-Hindus due to a cleverly employed mix of strategies of cultivating Hindu-Muslim rift, offering monetary exchanges through municipal schemes, and decision-making, NCP's presence in Aurangabad district has been mainly through real estate development and keeping a stronghold over the education sector. While the real estate development is a major source of money for most parties, NCP leadership and their patrons are particularly known for the same in Aurangabad. Real estate development proves to be particularly beneficial through land-dealing in peri-urban areas where the city is likely to grow in the near future. In Aurangabad, this can be characteristically seen in the case of Shendra-Bidkin industrial estate project. Aurangabad has received a major project of developing an industrial estate under the Delhi-Mumbai Industrial Corridor (DMIC) near the peripheral villages—covering the huge tract of land between Shendra village on the east and Bidkin village on south—which is now called as Shendra-Bidkin DMIC project. Through his implicit relations, Mr. Khaire paid a special attention to land acquisition for DMIC in order to protect the investments made in this belt by politicians of all parties and further ensured that only farmer's lands were acquired. Advertisements and whisper-campaigns were also circulated in such a way that prices of surrounding lands would increase leading to increased benefits through sale and re-sale of the land surrounding DMIC. Although, this was largely done using the political influence of Shiv Sena in the Shendra-Bidkin areas, this could also be seen as a coordinated action among workers across the political parties in Aurangabad. Since these transactions were beyond the realm of AMC's jurisdiction, AMC was directly least instrumental. However, the Municipal Corporation is implicated in these processes as the department of planning, department of building permissions as well as roads and street lights were major instruments used to prioritize real estate development in various parts of the city. For instance, roads and water supply increase the land prices; and AMC has been prompt enough to channelize roads and other infrastructure projects under the current Development Plan (DP) for certain areas.

The second strategy of supporting political leaders across party lines is the key to political existence and progress of Mr. Khaire. This is done in various ways. First is by supporting each other secretly, i.e., without revealing such support to their own constituencies as well as public at large. Second way is not to oppose actively or to abstain from criticizing each other in public. Third important tactic is not to contest stronger candidate against each other despite being in oppositional strands and paving a smoother way for each other. This third way is popularly called as “friendly electoral fights” in Maharashtra: a strategy adopted by top political leadership not only on constituencies that do not reach agreement on sharing when elections are fought jointly through a declared coalition before the election but also that could be used to maintain clandestine relationship at the local level even in the absence of a coalition. All of these tactics, under the second strategy, can be seen quite actively used in Aurangabad. For instance, Mr. Khaire and Mr. Darda are schoolmates; and interviews with journalists as well as party workers reveal that both have helped each other in earlier elections using all of the abovementioned tactics. An example of the tactics could be the fact

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<sup>39</sup> Interviews with senior journalists, such as Mr. Nishikant Bhalerao, and Mr. Suhas Dehsmukh

the irregularities of the PPP project were handled rather softly by the daily Lokmat group of newspapers owned by Mr. Darda. Rather, silently Congress-I supported the project on the name of Aurangabad's developmental needs. Respondents, especially journalists and workers of political parties across and the ruling and oppositional parties criticize that in exchange of this, *Lokmat* has secured an important plot (land-parcel) in the upcoming Shendra-Bidkin industrial estate.

The third strategy of not intruding into the political power-centers of other leaders also applies in Aurangabad's case. Shiv Sena leadership has never attempted to create its base in the education sector. It has also refrained from entering into the sugar cooperatives or in the Aurangabad District Central Cooperative Bank (ADCCB), one of the major source of power for gaining control over the rural agricultural economy, as this has been led by Congress-I leadership. Due to Hindutva agenda, Shiv Sena enjoys larger popular support and firmer footing in Aurangabad city without involving itself in other sectors.

How is all this related to water supply? This question is directly related with another question: what does Mr. Khaire achieve through conciliation politics? This strategy has proved immensely helpful to get through the tedious and highly politicized process of seeking approval for various projects/schemes at the level of state government and central government. Getting approval for one's own city with any kind of infrastructure project is a highly competitive process as explained by Aurangabad journalists during interviews. While the Congress-I and NCP were ruling at both state and central level, and busy catering to a number of demands by MLAs and MPs within their parties, Shiv Sena leadership was able to seek approval for the parallel pipeline scheme from the state and central governments under the UPA government's flagship program. This was a 'reward' Shiv Sena leadership sought for other many exchanges. The modalities that were initiated to implement this UIDSSMT project and its linkages with electoral politics, along with the institutional changes that produced in the water supply sector of Aurangabad, are elaborated further in the next subsection.

#### *5.4. Conciliation Politics and PPP—where politics meets institutional changes*

Top NCP leadership has been instrumental in seeking approval for the Detailed Project Report (DPR, the proposal) from the central government, although UPA- led by Congress-I which is in opposition with Shivsena-BJP alliance which rules AMC, was ruling at the Center. NCP was an important member of the UPA-coalition. Senior NCP leadership helped in significant manner to obtain approval for this scheme under the JNNURM-UIDSSMT at the Central level. Mr. Khaire also used his presence in Delhi as MP for the last three-four terms, to increase his proximity with top NCP leaders. In return, Mr. Khaire has been supportive in most business activities of local NCP leadership as shared by party workers across political parties during interviews. At the state level too, Congress-NCP coalition government was in power, and Mr. Vilasrao Deshmukh and other leaders in Congress-I aided the administrative processes at the state level. However, this was not an easy task. It took several months to pursue the project, which also got rejected twice at the state level.

The rationale for canceling earlier proposal with Kirloskar Engineering was never revealed. Official explanations for abandoning the same are such that the earlier proposal did not integrate the forecasts of city growth and was more of a sort of stop-gap arrangement to address the acute shortages in water supply. However, the new proposal, submitted and approved under the UIDSSMT, was in fact a copy of the old proposal itself. It neither had a substantial component on the expansion of water supply network to the growing peri-urban areas nor a component on the refurbishment of existing network at the city level. This is very much in consonance with the vision to bring in the PPP as UIDSSMT was giving more opportunity to seek central and state level support and technical hand-holding in facilitating the PPP project. The issue is how this was envisioned at the local level, especially when the sole source of money for Shiv Sena has been the AMC? Was an 'enabling environment' created and the support provided by central policies and organizations alone enough to boost the confidence of AMC and local leadership to carry this forward? What other factors facilitated this effort of transforming a simple project of laying parallel pipe-line for bulk supply into a PPP project leading to substantial changes in the nature and scope of urban water services?

The answer lies in the power shifts caused by the big-budget scheme of JNNURM at various levels. Even a cursory look at the history of infrastructure development in the cities of India suggests that infrastructures in Indian cities have been a victim of piece-meal approaches of the government. The state has approved infrastructure development projects to Indian cities after an interval of average 10 to 15 years and in most cases when service delivery became almost impossible due to decaying of infrastructure [need reference]. Aurangabad is not an exception to this. Consequently, approval of any new infrastructure project to AMC stirs the power-dynamics at local as well as state and national levels as it becomes an important opportunity for many to earn legal as well as illicit income or use it as a medium of exchange for other political or monetary benefits. Given this background, flagship programs like JNNURM, which use project-finance as a medium for reforming the policies and institutions of urban governance in a fundamental way, entails substantial redistribution of power. Of course, this process depends on the size of institutional overhauling aimed at; and since the parallel pipe-line project was not approved under any other mundane scheme of government but the JNNURM, it caused two important shifts. First, it rendered increased power to the bureaucrats, including administrative and engineering services. For instance, designing infrastructure by training as well as profession is an engineering job; and within the government bureaucracy it has been monopolized by engineers over a period of time. The new projects under JNNURM changed the terminology used in bidding and contracting process as well as amended a few processes for awarding contracts. The terminology introduced by the reforms was new and hard to learn for the engineers, but the bureaucrats could have learnt with some efforts. Also, the AMC engineers' had neither the capacities to carry out bidding with the changes introduced in the process and tendering with e-tendering and/or global tendering processes nor enough experience and capacities to manage business with consultants like CRISIL. These capacities were only with the IAS officers. Second, it created space for skillful and farsighted bureaucrats, for upward mobility, who could demonstrate their skills in crafting the PSP with 'win-win' exchanges for politicians and

corporate agencies. Interview with former standing committee members of the AMC uncovers this process, wherein engineers and bureaucrats tapped the opportunities of upward mobility brought by JNNURM through the PPP.

Both these factors, widened powers and space for upward mobility of bureaucrats, have shaped the process of crafting and steering of Aurangabad's parallel pipeline in a particular direction that the politicians wanted. Considering these needs of the PPP project, twice as capable IAS officers from the Union Public Service Commission (UPSC) were deployed in Aurangabad in its early phases. This is despite the history of AMC, which shows that the ULB generally receives promote officers from the State Public Service Commissions. These IAS officers, who led the AMC as Commissioners for short periods, facilitated the idea of PPP and quickly moved up the ladder in state administration services by securing posts of bigger cities where more money and power flows than Aurangabad. Similarly, the engineer who showed the fortune to local political leadership was pushed up on important position for steering the PPP by transferring the chief engineers of water supply department twice within couple of years by the AMC.

These developments led to a great suspicion about the clandestine cooperation between the 'visionary engineers' of AMC, top Shiv Sena leadership and importantly the top Congress-I leadership. It spurred a controversy at the local level that relatives of Shiv Sena and Congress leaders were sleeping partners in the project. Of course, it was difficult to prove and even today no strong evidence is available to substantiate this, but the controversy had an impact. Much of these discussions spread initially through whisper campaigns by political opponents and later through the media, which led to serious allegations against Mr. Khaire and Mr. Darda about misusing positions of power for personal gains. Allegations also included that giving-up the earlier proposal was a necessity for bigger plot of PPP, which was a deliberate step by indirectly forcing Kirloskar Engineers to withdraw. In doing so, the opportunity of PPP emerged on the horizon for municipal bureaucracy and political leadership to make investment in PPPs indirectly.

However, serious confusions prevail across the political workers, media as well as civil society members in Aurangabad on the veracity of the story. While none of the respondents denied the clandestine relationship, some of them believe that the controversy has been constructed to defame the ruling party. They argue that the Shiv Sena leadership does not have the required vision to strategize this 'Politician-Bureaucrat-Private Partnership', which came from the bureaucracy. Political leadership remained concentrated around the spot gains, primarily monetary in nature and at important junctures such as: designing the qualification criteria favorable to the informally pre-selected private firm which is ready to accept investments from the ruling party, carrying out the bidding process, selecting favorable agency, and diluting the TOR for the contract-agreement. This led to the selection of a consortium formed together by three companies of which one member, SPML infra services (earlier known as Subhash Projects and Marketing Limited, SPML) is an allegedly blacklisted agency in other states. The authenticity of this controversy also could be questioned because the allegations have not been proved with any kind of documentary evidence for direct investments in the PPP.

In contrast, the group which believes in the controversy argues that apart from the spot gains, meant to satisfy the municipal functionaries at every step in the formal paperwork, there was a clear political investment in this initiative. They also maintain that such investments were always made through the clients or trustworthy people, generally from the inner circles of the leadership, and the same was the plan. However, due to the controversy it spurred, the plan to continue with the investments in the PPP had to be abandoned at least for some years. If and when the situation becomes ‘conducive’, the plan can always be executed given that projects of supplying water require huge investments and such projects have enormous space for politicians involvement in executing them.

While this was the informal version of the story, the formal rationale for bringing PPP seems to be equally important. Largely, following the logic of the reforms, the need of the PPP has been argued in Aurangabad for three core reasons: (a) the precarious financial situation of AMC, (b) changes in the policies at the state level leading to reforms in para-statal bodies, (c) other broader structural changes in the institutional structure at the ULB level. First, the precarious financial situation is an important driver of the reforms itself, again perfectly matching with the Aurangabad case. AMC has not been able to repay the debt raised to finance the earlier expansions of distribution system for a long time now. Even as per the earlier institutional arrangements by GoM, the debt was to be paid from the recovery of O&M costs, especially from the water taxes, but neither the tax calculation reflected the full costs nor the collection efficiency was adequate for debt servicing. Another indicator of its poor financial situation can be traced from the fact that AMC had to mortgage some of its assets to raise a small amount of Rs. 350 million towards the 10 per cent contribution the ULB for the capital costs of parallel pipeline project as per the UIDSSMT rules. These

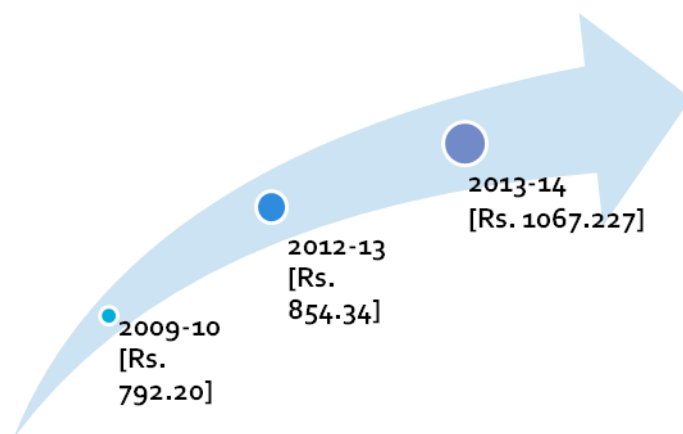


Figure 4: Increasing cost of the Aurangabad Water Supply Project  
[Source: Author’s analysis]

inefficiencies of the ‘public system’ were used to rationalize the PPP. Second important justification emerged from the local level, which was related to the shrinking size of MJP itself. MJP has not been able to operate schemes unlike earlier and its mandate and power has been reduced consistently due to decentralization policies undertaken through 74<sup>th</sup> CAA

Due to large-scale reforms at the state level, MJP also stopped recruiting new engineers and their strength

reduced over a period of time. Owing to these changes, the role of MJP has also changed from engineering works to technical appraisal of proposals as far as urban water supply schemes are concerned. The third reason in fact comes from the larger structural changes, one of which directly effects the staffing of Aurangabad’s water supply department in the form of restrictions on recruitment. This issue has been discussed in detailed in section 5.2 of this case study.



### 5.5. Political solutions to financial challenges

The biggest challenge before the ACWUCL is to implement as well as run the project. Like AMC, ACWUCL had to raise a loan of Rs. 575 crore from IDBI. The burden to repay this loan is one big challenge. This loan was primarily raised in order to fill the gap in required capital, over and above the approved funds by the government, due to inflation. Estimates suggest that cost of the project has risen substantially from 2009-10 to 2013-14 by Rs. 275 crore (See figure....40). Interestingly, the loan of Rs. 575 raised from IDBI must have been estimated considering the inflation due to the delays in project approval and other political obstacles in carrying out the project. The issue now is, because UIDSSMT guidelines do not approve any top-ups in the capital grants due to delay in completing the projects and subsequent inflation, how to recover this cost of Rs. 575 crores? The only way to recover the money is the water tariff. SPML Infra Services Pvt. Ltd., the company having most shares in ACWUCL had to quit the project under this pressure and other political challenges in implementing the project. SPML could not sustain its staff without earning a single rupee from 2009 to 2014 and was on the verge of declaring bankruptcy. To salvage this situation, the political leadership of Aurangabad brought Essel Utilities and settled the deal of purchasing SPML's stake in ACWUCL. Essel Utilities, as mentioned earlier is part of the Essel group of companies popularly known for its entertainment subsidiary – the Zee Television. Essel had many advantages and disadvantages over SPML. In terms of equity strength, SPML was weaker than Essel; and the latter with its strong base in other sectors was willing to expand in utility services and came with large capital strength. It had enough financial cushions to sustain in the project given its long gestation period. However, despite a powerful company like Essel Utility entering into Aurangabad's parallel pipeline project, the issues of recovering costs and legalizing the politically protected illegal connections remain.

ACWUCL is expected to have the skills to operate and maintain the system since it has been selected through a rigorous process based on certain eligibility criteria. However, the knowledge and expertise of local staff of the ULB remains crucial for the agency to undertake its responsibility mainly due to two reasons: (i) the distribution system of the existing scheme has undergone huge changes in last 20-25 years due to increased connections with the increase in density of population in supply zones, constant repairs and replacement of pipes, illegal connections and usage of booster pumps to extract water from taps in the case of low pressured supply; and (ii) the entire water supply network is underground with the locations of joints, illegal connections, inter-zone crisscross connections and unscientific expansion of zones<sup>41</sup> becoming invisible for external engineers.

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<sup>40</sup> The costs shown in the figure are calculated by applying the District Scheduled Rates (DSR) issued by MJP to the detailed costing of the projects. DSRs are every year issued by MJP (Water Supply and Sewerage Board of GoM) as standard guidelines and are compulsorily used for costing of government funded drinking water supply projects.

<sup>41</sup> Water supply zone within a city or industrial water distribution network are independent units of pipe-network linked with one or more overhead storage tanks with fixed capacity (called as Elevated Storage Reservoirs-ESRs in technical language). Zones generally have a limited range of capacity to supply water in terms of number of

Generally, this knowledge is possessed by local licensed plumbers,<sup>42</sup> linemen,<sup>43</sup> zonal engineers who witness the legal and illegal changes in the network over the years. This remains a very specialized and highly valued experiential knowledge available among the local staff and their ‘cooperation’ becomes highly critical for external agency to undertake the refurbishment work. These knowledge monopolies create unique dynamics, and thereby, increasing the dependence of external agency over the experienced human resources. Obviously, this involves exchanges of different kinds among frontline linemen, zonal engineers, licensed plumbers on the one hand and corporators as well as their party-workers on the other hand. This feature does not appear in case of PPPs that target a complete replacement of existing distribution network; nonetheless remains an important characteristic of PPPs aiming at partial replacement of networks and small expansions. This has become a challenge for Essel Utilities because the experienced SPML has withdrawn its stake. Despite the fact that most of the staff recruited by SPML has been retained by Essel in the ACWUCL, the chief negotiators of SPML are not in the picture. Essel is planning to fill this gap by outsourcing functions as well as keeping ‘good relations’ with the ruling party. Interviews with local political workers reveal that Essel group is one of the strong supporters of Shiv Sena and BJP at the state and central levels, actively donates to both the parties, and supports their political agenda through its media channel.

Another important challenge for ACWUCL is to handle the continuous pressure now coming from the political front. In 2015, AMC elections were conducted and, despite the same coalition of Shiv Sena and BJP coming to power, the political dynamics has changed in the city. The rise of Muslim fundamentalism in Aurangabad has resulted in a huge popular support for *All India Majlis e Ittehadul Musalmeen* (AIMIM) party. AIMIM has emerged as a strong opposition in the AMC with their number of corporators being slightly less than one-third of total strength of the AMC. The AIMIM is vigorously opposing the ruling coalition, and the PPP project for laying parallel pipeline is one of their main targets of criticism. The retaliation of the ruling coalition to this challenge could be a drive to remove

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connection that could be given on the linked distribution network which further depends on (a) density of population, and (b) the pressure it could maintain at different elevations. Density is also inversely related with expandability of the network- the area that could be covered (sq. kms) by the pipelines. Usually, in newly constructed systems capacity cannot be fully utilized as those are planned with capacity to accommodate increased population with some assumptions about density and geographical spread. When the water supply zone reaches its maximum capacity, ideally allotting connections is expected to be stopped which does not happen due to political reasons. Water, being a necessity cannot be denied to residents of a city and connections are given exceeding the capacity of zones. This further leads to problems of inadequate pressure, reduced duration of water supply and further illegal connections. Illegal connections can be taken in various ways, secretly by tapping the main distribution line underground or by linking two zones with each other leading to crisscross connections. Illegal connections also use motorized booster pumps to pull water from the pipes towards the tap.

<sup>42</sup> Licensed plumbers are formally authorized by the ULBs to render the service of water-connections to the households able and willing to connect themselves to the public water supply system.

<sup>43</sup> Linemen are important functionaries working at the frontline of the water supply system, who manages zones in an intermittent system — water supply system with fixed timings, generally supplied twice a day in mornings and evenings.

illegal connections and fix meters in Muslim concentrated areas. AIMIM could also launch a campaign against this, which will directly impact the recovery of money through taxes as well as tariff meant to be collected as per the tariff plan agreed upon in the contract between the AMC and consortium of companies.

The current thinking in the AMC as well as ACWUCL is to outsource the function of recovery of tax immediately to the local agencies and this function can remain outsourced even after completion of the project. This model of institutional transformation is most interesting where local politics in Aurangabad comes into the picture. Shiv Sena leadership has its strong roots in managing riots since the very beginning of its political rise in Aurangabad from 1980s, where the local *mafia* played a major role. Even today, the influence of Shiv Sena leadership on certain sensitive pockets has been maintained through their party-workers and organizational power mobilized through a specific structure of *shakha-pramukhs* (branch head) and workers. Apart from identity politics, a major strategy of Shiv Sena in Aurangabad has been to maintain a reserved force of workers with the capacity of encourages riots by supporting, ignoring or protecting their informal occupations and livelihood earning activities. Such forces serve multiple purposes but the party cannot keep them engaged continuously. Many a times, unemployed youth engage in such forces expecting employment support from the party with the prevalence of established practices of providing employment for party workers and supporting them financially through small self-employment activities such as auto-rickshaw, snacks-corners, tailoring shops or other activities on demand of the party-workers. A few who are already in illicit activities are also protected by the leadership for long term support in their own illicit activities with the aim of gradually legalizing them partly or wholly.

The aforementioned point is illustrated with respect to urban services in Aurangabad city, which not only presents one such model of formalizing the activities of informal nature and but also shows, more importantly, that such a model is based on the opportunities created by reforms. For instance, one of the emerging leaders and recently elected corporator of AMC climbed up his 'career' path through a contractor-ship of recovering loans for co-operative banks. Initially, this 'recovery business' was semi-formal where use of physical threats was an important feature of the work. However, later this loan-recovery business got formalized when the nationalized banks also started outsourcing loan-recovery tasks. Gradually, he registered himself as firm, and started taking formal contracts from nationalized banks<sup>44</sup>. It became an easy model for banks for managing their NPAs. This person eventually emerged as most effective 'recovery-person' in Aurangabad using muscle power and other pressure tactics. In this model most of his colleagues, involved in recovering loans by coercion and sometimes extortion, are now 'formal' employees of his firm; and his supporters have become party-workers of Shiv Sena since he has joined the party. He also obtained the biggest contract of his life from GTL Infrastructures Limited to recover pending electricity

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<sup>44</sup> Source: Interview with Mr. Ranjendra Janjale, Corporator of AMC and head of city-cable network in Aurangabad

bills from domestic as well as commercial and industrial customers in Aurangabad<sup>45</sup>. Thus, franchisee model is one of the key aspects of unbundling functions, which has unfolded as per the electricity sector reforms in India, and especially in Maharashtra. . This is ‘the model’ ACWUCL is trying to evolve or adapt for legalizing illegal connections as well as recovering the water tariff. Noting the criticality of recovery of tariff for financial efficiency (which is the sole objective of reforms in urban water sector and also existence of ACWUCL) it has now become every politicians’ concern and getting political support for copying this model in urban water supply seems to be an emergent idea in Aurangabad and has potential to become an important characteristics of institutional transformation in urban water. However, considering the human dimensions of water as a resource essential for living, this model can prove more oppressive and raises important moral and ethical questions.

### 5.6. Upstream-Downstream Conflict and Political Economy of Urbanization

The Aurangabad PPP has one more critical dimension. Aurangabad is sourcing water from Jaikwadi dam, which has been the sole source of water supply for many other uses including: (a) irrigation in the command area of the dam; (b) industrial estates surrounding Aurangabad city; (c) drinking water source for cities of Jalna (a district headquarter located towards the east of Aurangabad), Ambad and Gevrai (taluks in Jalna and Beed districts); and (d) thermal power plant in Parali in Parbhani district (see table 4).

**Table 3: Allocation of water from the Jayakwadi dam**

	Availability of water in the Jayakwadi Dam	2171 MCum (Live storage capacity)	
		Allocations <sup>46</sup>	Actual use <sup>47</sup>
1	Reservation for Aurangabad	147.96 MCM	105 MCM
2	Reservation for Jalna, Ambad and Gevrai	26.68 MCM	
3	Walunj, Paithan and other industries	58.482 MCM	34 MCM
4	Parali thermal power plant	29.5 MCM	188 MCM
	Total	262.62 MCM	327 MCM
	Available for irrigation = 2171 – 327 = 1844 MCM		

Source: Resources and Livelihoods Group, Prayas [Internal notes]

<sup>45</sup> GTL Infra, functions as a franchisee of Maharashtra State Electricity Distribution Company Limited [MSEDCL] —the public utility which functions under the Ministry of Energy of Maharashtra Government—for providing electricity services to Aurangabad

<sup>46</sup> Source: Note prepared by Prayas on the basis of information received through Right to Information applications made to several departments. Note is unpublished.

<sup>47</sup> Source: Information provided by Mr. Pradeep Purandare, retired professor, Water and Land Management Institute, Aurangabad

Thus, the availability of water is always subject to the difference between the allocated quantity and the quantity of water actually used. However, in this case the issue is not only limited to the actual allocations and use, or the difference between the two, but also to the availability of water itself. In fact, the Jayakwadi dam was built, like the 98 per cent of dams in Maharashtra, for irrigating the farms in the command area in 1976. However, in order to respond to the growing needs of the city and industries water was gradually increasingly allotted for non-irrigation uses. This led to the kind of allocations listed in table no 2.

Later, in the upstream of Jayakwadi on the river Godavari and its two major tributaries, Pravara and Mula, 17 dams were built with greater capacities. Despite the claims by the Department of Water Resources of the GoM about accuracy of assessment of total water availability in the catchment, and further that upstream dams are not disturbing the availability of water in Jayakwadi, continuously from last decade onwards Jayakwadi dam has not been reaching its full reservoir level. This situation gets more precarious when the monsoon fails and the AMC compels to supply water to Aurangabad city twice in a week. While most often the culpability for non-availability of water in the dam goes to insufficient rains, the blame-game shapes up among politicians between upstream and downstream of the river, mainly with accusations on upstream abstractions above the permitted limits for sugarcane farming in Ahmednagar and Nasik districts. To critically analyze these contentions, unfortunately, no reliable figures are available on: (a) evaporation of water from upstream dams as well as from Jayakwadi, (b) extra releases in the upstream, and (c) lift of water directly from various reservoirs as well as river-bed for irrigation (riparian lifts). In addition, the figures for dead-storage of the Jayakwadi dam and actual drawing of water from dead-storage for drinking purposes show a huge difference.<sup>48</sup>

Table 4: Jayakwadi waters: planned vs. actual use<sup>49</sup>

	Jayakwadi Reservoir	As per the Planning	Actual Use
1	Gross Storage	2909(103)	2511(89)
2	<i>Encroachment due to silt</i>		
	<i>Dead</i>	738(26)	170(6)*
	<i>Live</i>	Nil	228(8)**
3	<i>Dead Storage</i>	738(26)	567(20)*
4	<i>Live Storage</i>	2171(77)	1943(69)**
5	Carry over	382(13)	Nil
6	Annual Evaporation	665(23)	?
7	Non Irrigation		
	Domestic	Nil	105(3.7)
	Industry	Nil	34(1.2)

<sup>48</sup> Every dam is designed with a *dead-storage* level and *live-storage* capacity. Dead storage is the level in the dam where sediments settle down allowing purer water to accumulate on the surface.

<sup>49</sup> Source: Collected this data from Mr. Purandare from his own compilation from pieces of data gathered from various government departments, especially WALMI, Command Area Development Authority (CADA) and Godavari Marathwada Irrigation Development Corporation (GMIDC), GoM.

	Parali Power plant	Nil	188(6.6)
	Total [1]	Nil	327(11.55)
	DMIC	Nil	50(1.77)?
	Parallel pipeline project	Nil	127(4.5)?
	Total [2]	Nil	504(17.80)?
8	Lift Irrigation from reservoir	Nil	233 (8.23)
9	Releases for Majalgaon Project	350(12.4)	Nil
10	Water remained un-utilized in 50% years	NA	13 to 830 (o.46 to 29)
11	Utilization for irrigation at canal head	1394(49)	No data available

The planned dead-storage level is at 738 MCM while the dead-storage has actually come down to 567 MCM, and the planned live-storage level was at 2511 MCM which has come down to 1943 MCM due to encroachment of silt in the submerged area. The silt has the occupied space of 398 MCM water in the dam.

Now, from this actual live storage, the currently used water is given in the table 2 for non-irrigation purposes has to be discounted to arrive at actual availability of water in the dam. In addition, the planned figures of annual evaporation losses from the dam are huge accounting up to 665 MCM and a carryover<sup>50</sup> water of 382 MCM also to be subtracted. This calculation amounts to only 896 MCM water in the live storage.

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<sup>50</sup> The concept of carry-over water is used in hydrology to maintain certain amount of water in the reservoir to be carried over for the minimum required use in the next year, anticipating the risk of drought.

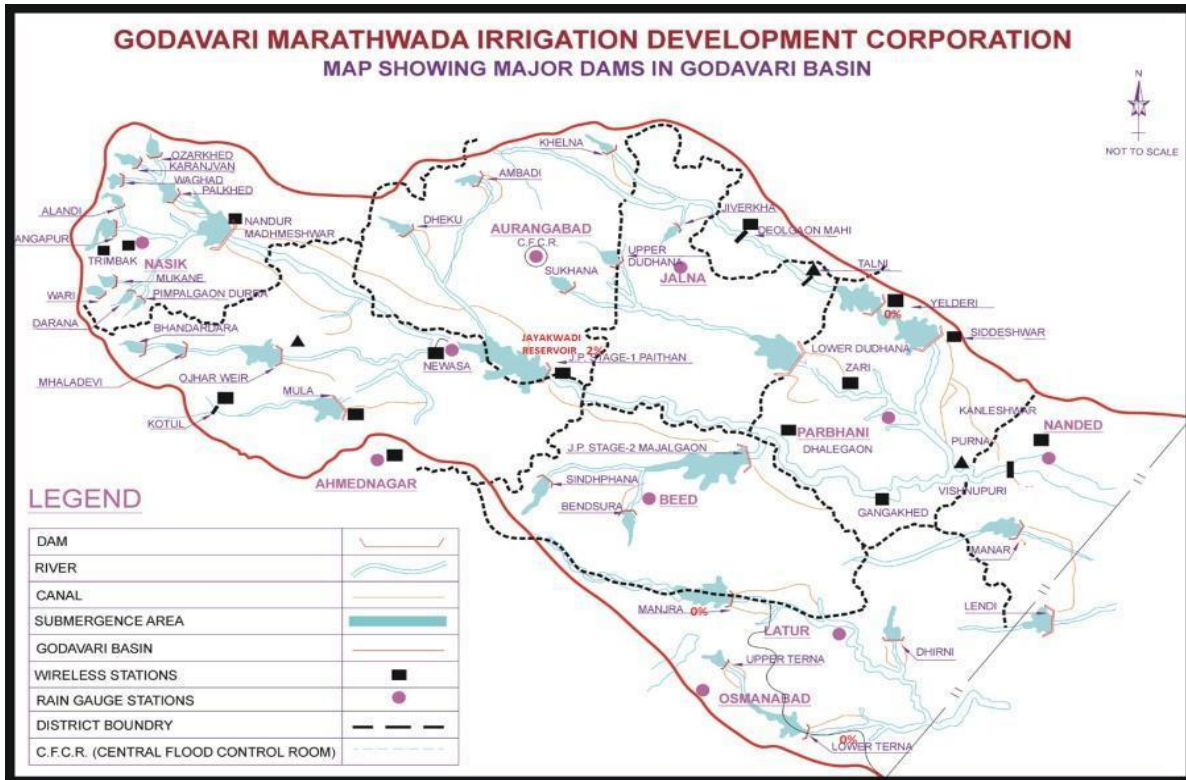


Figure 5: Map showing the number of dams in the catchment of Jayakwadi dam

As per the existing plan, Jayakwadi dam has to release water to the Majalgaon dam (located downstream in Beed district), which rarely happens. Similarly, 1389 MCM water has to be released or reserved for irrigation purpose, which is not possible with the available 896 MCM. Further, the non-irrigation use (not the allocations but figures of actual use, refer table 4) of approximately 327 MCM if reduced from 896 MCM, actual availability of water in Jaikwadi comes down to 569 MCM. Various estimates by the department of irrigation also suggest that the legal and illegal lift of water directly from the dams for irrigation and other purposes is roughly around 233 MCM, bringing further down the usable water up to 336 MCM.

Unavailability of enough water in Jayakwadi dam has led to serious conflict with respect to sharing of water in the upper Godavari basin; and these contentions cannot be verified since the irrigation department refuses to share records about how much water is being released through the partial canal network for farmers in the command area for irrigation purpose. Considering that Jayawadi dam was primarily built for irrigation purpose, increasing allocations for non-irrigation purposes (including urban and industrial use) are increasingly being questioned and leading to the emergence of rural-urban water transfers as a big policy issue.

On this background, the aspirations of real estate business and industrial development are complicating the water allocations from Jayakwadi dam. The third big municipal limit-extension of Aurangabad city is planned as well as works have already been started to develop the industrial estate under Delhi-Mumbai Industrial Corridor project in Aurangabad.

Having 50 per cent of corporators in AMC and 3 MLAs from Aurangabad engaged in real estate business, urbanization becomes the sole path to climb the ladder of economic prosperity for local politicians in which availability of water plays a major role and thus sourcing water of growing population becomes everybody's interest. Industrialization is critical for urbanization and DMIC came with another 'win-win' opportunity for local political leadership and industries. Despite the fact that industries demand lesser quantities of water, than domestic and irrigation sectors, industries drive urbanization that results in a huge demand for water. Accordingly, DMIC industrial estate has led to a reservation of additional 50 MCM of water in Jayekwadi; and in addition to the earlier use of 105 MCM, 127 MCM is freshly reserved for the parallel pipeline project.

This clearly shows that the regional politics, despite increasingly scarce availability of water is Jaikwadi dam facilitates projects such as 24x7-water supply through PPP arrangements in Aurangabad. While making decisions for increasing allocations of water for Aurangabad,

### **Conclusion**

The story of urban water PPP in Aurangabad shows a state of stagnation however contains enough dynamism in it. This story is characterized by high levels of politicization, weak civic engagement high involvement of local and regional politics in pushing as well as stagnating progress of the PPP. Despite efforts from the central, state and local level bureaucracy and politicians, two factors: (a) the politicization of the PPP project, and (b) risk averting behavior of private sector has heavily influenced the process. It also raises important question about capabilities of Aurangabad Municipal Corporation understanding and implementing reforms and creating solid platforms for PSP. The mergers and acquisitions of the SPV through trading of shares does strongly show the interests of local politicians in the PPP business indicating their preference less towards the completion of the project and more in facilitating the trades. Overall, the Aurangabad case shows a difficult terrain ahead for PPP project.



## **Annexure – I: List of Interviews**

1. Mr. Phalak, Sub-Engineer, Aurangabad Municipal Corporation (AMC)
2. Mr. Neeraj Chinchkhede, Reporter, Times of India
3. Mr. Unmesh Deshpande, Reporter, Times of India
4. Mr. Sarang Takalkar, Co-director, Abhishree Travels and Media company
5. Mr. Sameer Rajurkar, Ex. Corporator and member, Standing committee, AMC
6. Mr. Sanjay Joshi, Ex. Dy. Major, AMC
7. Mr. Rajendra Janjale, City Cable Network and current Corporator, AMC
8. Mr. Shantilal Gayekwad, Sub-editor, Lokmat Marathi daily, Aurangabad
9. Mr. Bhushan Raut, Engineer, Aurangabad City Water Utility Company Limited
10. Mr. Rahul Sardar, citizen, Aurangabad
11. Mr. Vijay Diwan, Activist, Aurangabad
12. Mr. Sachin Barange, Public Relations Officer, Aurangabad City Water Utility Company Limited
13. Mr. Vijay Shirsat, Activist and Coordinatory, Shrunkhala Navnirman (NGO)
14. Rajendra Datye Patil, activist and member – Congress (I)
15. Mr. Kiran Shirodkar, Sr. Clerk, property-tax department, AMC
16. Dr. Shaikh Ramzan, Professor and Ex corporator, AMC
17. Mr. Mahesh Kulkarni, sub-editor, Samna – Marathi daily, Aurangabad
18. Mr. Nishikant Bhalerao, Sr. journalist
19. Mr. Jehangeer Khan, opposition leader, AMC
20. Mr. Naseer Siddhiqui, member, All India Majlist-E-Ittehadul Musalmeen (AIMIM)
21. Mr. Ayub Jahgirdar, member, All India Majlist-E-Ittehadul Musalmeen (AIMIM)
22. Mr. Arnab Ghosh, Vice-President (EPC), Aurangabad City Water Utility Company Limited (ACWUCL)
23. Mr. Jameek Shaikh, partner, Omi-Cronance [Water Contractors]
24. Mr. Shrirang Deshpande, Ex. Incharge – Aurangabad PPP project
25. Mr. Pawar, Accounts Officer, AMC
26. Mr. Prashant Desarda, Ex. Dy. Major, AMC
27. Mr. Sanjay Kenekar, Ex. Corporator AMC and partner, Omi-Cronance
28. Mr. Raju Vaidya, Chairperson, Standing Committee, AMC
29. Mr. Hemant Kolhe, Executive Engineer, AMC
30. Mr. Prasad Narhire, Executive Engineer (Distribution), ACWUCL
31. Mr. Akash Rathod, Executive Engineer (EPC), ACWUCL
32. Mr. Ashish Porwal, Engineer (Plannign and EPC), ACWUCL
33. Mr. Sonkamble, Enginner (Head-Operation and Maintenance), ACWUCL
34. Mr. Sharad Adwant, Director, Sir Ramanand Tirth Research Center, Aurangabad
35. Adv. Pradeep Deshmukh, lawyer, high-court Aurangabad and fighting the PIL against the PPP and Chairperson – Marathwada Janta Vikas Parishad (NGO)
36. Mr. Mujeeb Deoneekar, journalist, Lokmat daily, Aurangabad
37. Jayant Deshpande, consultant on water and sanitation issues
38. Mr. Sanjay Mistri, journalist, Samna Marathi daily, Aurangabad

- 39.Mr. Pramod Rathod, Dy. Mayor, current, AMC
- 40.Mr. H. K.Tholia, retd Engineer, AMC
- 41.Mr. Ajju Pahalwan, Leader, AIMIM
- 42.Mr. Dhande, Water Supply Engineer, AMC
- 43.Mr. Sakharam Panzade, Ex. Executive Enginner and current City Engineer, AMC
- 44.Mr. Sachin Bhojne, Shrunkhala Navnirman (NGO)
- 45.Mr. M. R. Thatte, Financial Auditor, AMC
- 46.Mr. Mr. Suhas Sardeshmukh, journalist, Loksatta-Marathi daily, Maharashtra  
(incharge-Marathwada Region)
- 47.Mr. Farooqui, Enginneer, water supply, AMC
- 48.Mr. Yusuf Mukati, citizen, Aurangabad
- 49.Mr. Pradeep Purandare, retd Engineer, Water and Land Management Institute,  
Aurangabad, and water-activist
- 50.Mr. Mokashi, Accountant, AMC
- 51.Mr. Bhau Shinde, Activist, Aurangabad
- 52.Mr. Subhash Bobde, PRO, ACWUCL

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