

Mega Projects and Deterritorialization of Public Spaces: Case of Musi Riverfront Development, Hyderabad, India

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Recent scholarships highlight the growing trends of investment friendliness in cities of global south. According to these literatures, the development discourse is shaped by the implementation of mega infrastructure project. This has created a spatial disjuncture of binary divisions in public spaces. The paper attempts to address this nature of disjunction in the context of public spaces taking the case study of Musi Riverfront Development project in Hyderabad, India. The paper also argues the process of disneyfication of public space and subsequent marginalization of people from it. The paper shows that the gentrification process by 'rising middle class' of India operates through the contestation of public space. Finally the paper concludes with the identification of emerging pattern of negotiated spaces for collective bargaining to resist the gentrification by marginalized groups.

Keywords: deterritorialization, right to the city, contested space, gentrification, subaltern urbanism

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Since centuries ago, trade has been present in human activities in one form or the other. Before industrialization, flow of capitals, labor, goods raw materials and tourists took place within the national boundaries. With the onset of industrialization and globalization, the economic activities, production processes and the market has gone beyond the state limits or has become supranational. These global cities are supranational in nature. The major reason for these changes or the formation of global cities is globalization, privatization, and deregulation. The national markets and activities, today, are capable of participating in the international market and contribute to the international economy. Globalization led to internationalization of cities, rather than countries, leading to the development or the creation of global cities.

Globalization has enabled the global north to shift the production and manufacturing sites to the global south or the newly developing economies due to various factors such as favorable demographics, cheaper labor, favorable government policies and increased productivity (Kearney, n.d.). These factors have led to a rise in investments and Foreign- direct investment in the global south. A major shift has been noticed in the economic trends of the world and countries such as Brazil, China and India are expected to become the next economic hubs (National Intelligence Council, 2008).

According to Sassen, "Globalization produces a world city system that transcends national institutions, politics and culture, they argue. Such a view assumes, for reasons discussed below, a convergence in 'economic base, spatial organization and social structure' among the world's major cities, especially New York, London and Tokyo" (Sassen, 1991).

Global city is a type of city with functional tradition. Global cities are cities where the knowledge, wealth influence, power and sophistication accumulate. In this age of

globalization, the production process of every product is scattered over the world. There is a need of a globalized production network to manage these production services.

The urban elite of the city aims to make the city global, and promote it on a world platform. These global middle class estimated to grow from 7.6% of the world population to 16.1% with the majority of new entrants being from China and India (National Intelligence Council, 2008). Ghertner (Ghertner, 2011) talks about how the urban elite, or the new middle class is emboldened and is reclaiming the public land in the city to make their city a bourgeois city. Ghertner also states that the urban development today is liberalized and the urban governance is being neo-liberalized to help create a global image. Thus, anti-poor policies are being formed in various cities and countries.

The neo-liberalization policies and approaches lead to a certain section of the society to being excluded. In recent times, cities are often introduced with various projects to develop the infrastructure in the city. Barbara Lynch and Paul Gellert define mega-project as projects which transform the urban landscape and the city skyline rapidly, intentionally and in very visible ways. These projects also require the combined coordination of capital and state power (Gellert & Lynch, 2003). Often, social exclusion occurs due to these projects, which can be in terms of environment exclusion, social exclusion or economic exclusion. The study looks into the marginalization created in a public urban space due to a mega project.

Mega-projects are projects with large investment, more than a certain million dollars (Merrow, 1988), which often change the urban landscape. These projects often involve complex design component, aimed to transform the city's image, which is often promoted by the urban elite aiming to globalize their city (Del Cerro Santamaria, 2013). Based on the types of mega-projects as defined by Gilbert and Lynch (Gellert & Lynch, 2003), the study focusses on consumption mega-project.

These mega-projects lead to large scale displacements and relocation of the urban poor and further marginalise a certain section of the society. With Commonwealth Games as an excuse, the Delhi government relocated and evicted large number of people for major infrastructure and real-estate projects. Forty five thousand homes were demolished prior to the games between 2004 and 2007 (Bhan, 2009).

Today, a public space can be defined in many ways and dimensions. Public sphere exists physically in the form of space which is open and accessible to all; where people interact every day. Public sphere also exists in today's digital era in the form of "virtual communities" (Harvey, *The Political Economy of Public Space*, 2005). The study focuses on the physical space of urban public space.

The private sector often introduces projects with a drive to 'cleanse' the public space and remove and evict squatters, homeless people and hawkers from the public space on a very large scale (Shaktin & Vidyarthi, 2014).

Often, in markets, the exclusive commercial space, accessed only by the rich, and the public space form a symbiotic relationship (Harvey, *The Political Economy of Public Space*, 2006). This symbiotic relationship often excludes the poor from the 'public space'. The exclusive space is not private; it is a public space open for selective people. But, neither the rich in the exclusive commercial space nor the poor in the public space can ignore each other and always have to acknowledge the other. This is where contestation occurs.

David Harvey talks about the contested character of the public space and the porous boundary between the public and private space (Harvey, *The Political Economy of Public Space*, 2006). In his article, he elucidates, through Baudelaire's "The Eyes of the poor", how the disneyfication of space can help create an invisible porous boundary and exclude certain section of the society from the public space. This disneyfication of the space is done with the aim of homogenizing the space in terms of social class.

Contestation often leads to marginalization. Marginalization further calls for just social planning. Architects, urban designers and urban planners should try to plan

and design for all sections of the society. The extent to which socio-spatial justice is achieved on factors such as minimizing social and economic gaps, fair distribution of opportunities and sensitivity to cultural differences and special needs (Alfasi & Fenster, 2014).

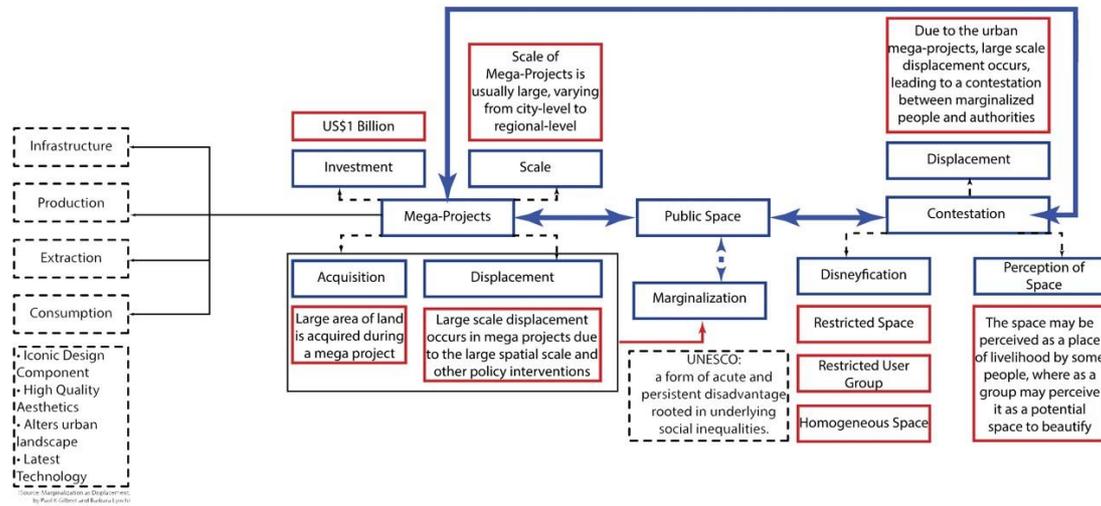


Figure 1 RELATIONSHIP BETWEEN MEGA-PROJECTS, PUBLIC SPACE AND CONTESTATION

Figure 1 explains the relationship between mega-projects, contestation publication and the subsequent marginalization occurring. The paper looks into the linkages between the four parameters and the interrelationship between each parameter.

Hyderabad City and the Musi River

Hyderabad is the capital city of Telangana state, the de-jure capital of Andhra Pradesh, and the 4th largest metropolis in India. 6.8 million People reside in Hyderabad, and a total of 7.5 million in the metropolitan area. Spread along the banks of Musi River, Hyderabad occupies 625 sq. km of area.

The city was established by Muhammad Quli Qutb Shah, a ruler of Qutb Shah Dynasty, in the year of 1591. Later, in 1724, the city was captured by Asif Jah I, who created his own dynasty, known as the Nizams of the Hyderabad. The Nizam's territories became a princely state during the British rule and the city served as their capital for 150 years. The city continued to serve as the capital to the state when it

was brought into the Indian Union in 1948. Since 1956, the Rashtrapati Nilayam in the city has served as the winter office to the president of India.

Hyderabad was established along the southern banks of the Musi River and the city grew along the banks over time. The river originates in Anantagiri hills, 70 km west of Hyderabad. The river travels through valleys and plateaus to Hyderabad city, where it acts as a natural drain for the intricate network of natural and man-made lakes and tanks. The Musi has two tributaries, namely Isa and Musa. The river travels another 130 km from the city to join Krishna River. The Musi and the bridges along the river, an important link in the city fabric, had been compared to Pont Neuf in Paris by Jean-Baptiste Tavernier, a visitor to the city (Cohen, 2011). The river has served as a recreational entity to the Nizams, British and French forces and the people.

The river, in the city, mostly runs dry and is a shallow slow trickle, unfit for transportation purposes. Though the river appears to be a small and gentle stream, it has a dark history imprinted in the collective memory of the city. Over the history, several flash floods claimed many lives, and caused a lot of damage to property and livestock. The most tragic one was the Great Musi Flood on Tuesday, 28 September, 1908.

To control similar situations in the future, the colonial government made use of new concepts and ‘modern concepts’. Various technicians and experts were invited to analyze the situation and suggest strategies to prevent the flooding of river in the future. It was during the year 1920 that Osman Sagar and Himayat Sagar were built to prevent the river from flooding in the future and contain the water for the city.

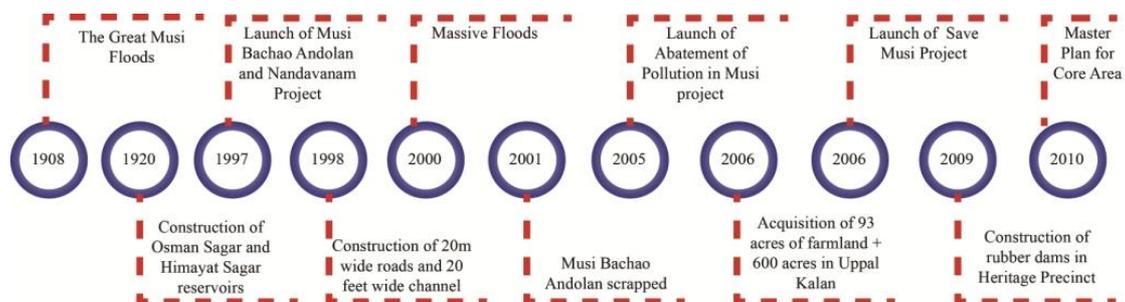


Figure 2 TIMELINE OF MUSI RIVERFRONT REVITALIZATION PROJECT

The Musi River revitalization project has been launched twice over the years, under different nomenclatures, and has been either unsuccessful or scrapped. The history of Musi River dates back to centuries when the city was established on the southern bank of the river. In the year 1908, the city experienced the worst floods, known as The Great Musi Floods. About a fourth of the city's population was left homeless, and the city suffered through huge loss to property and life.

To prevent the occurrence of such floods and subsequent damage, two reservoirs were built in the year 1920, on the tributaries Isa and Musa. The reservoirs: Osman Sagar and Himayat Sagar, act as a dam to prevent the occurrence of flood, and as a reservoir of drinking water for the city.

The government of Andhra Pradesh launched the Nandavanam Project, where the government aimed to beautify the Musi River and relocate the people living along it to a housing complex built in a nearby area. The people were forced to rehabilitate and about 97 households were forcefully evicted at 3 AM in the night.

The people living along the river and some downstream villages launched the Musi Bachao Andolan after the occurrence of the 1999 floods. Various civil societies, environmentalist and CHATRI participated in the campaign, giving the people a voice. The project aimed at resisting the environmental impact of the commercial and industrial activities around the river and to resist the implementation of Nandavanam project. The Nandavanam housing project led to the rehabilitation and relocation of various settlements along the river, leading to high quotients of stress being incurred by the people.

Under the Nandavanam Project, the government agencies built a 20 wide channel into the river basin, to control the flood waters. In the year 1999, the river faced another flash flood, and the water channel has not been used since. Also, two 20 m wide roads were built along the river on the North and South Banks.

In the year 2000, the then Chief Minister declared, in the Legislative Assembly, the Nandavanam Project to be invalid. In the year 2005, under the National River Conservation Plan, by the National River Conservation Directorate (NRCD), the Hyderabad Metropolitan Water Supply and Sewerage Board (HMWS&SB) and the Greater Hyderabad Municipal Corporation (GHMC) launched the Abatement of Pollution of Musi River project. The project aimed to beautify the river and construct sewage treatment plants to treat the sewage before the water entered the river. The project missed the 30-month deadline and the construction of Attapur village has been delayed.

The Save Musi Project was launched in the year 2006, to restore the heavily polluted river to its former glory. One of the major aims of the project was to regularize traffic flows to improve the east-west corridor through the city, an objective integrated into the master plan. The entire stretch is to be transformed with gardens, rock formations, new bridges and pedestrian zones. New sewers and new sewer treatment plants were to intercept the sewage flow into the river.

The Greater Hyderabad Municipal Corporation (GHMC) constructed rubber dams in the year 2009, to create a stretch for boating and water entertainment, which was not a plan of the initial plan of Musi River Revitalization Project. The dams could not be used since the brief trial run in 2010, owing to the non-functioning of Attapur STP.

In the year 2010, the Hyderabad Metropolitan Development Authority (HMDA) published a new Master Plan for the Hyderabad's Core Area. The plan designated the land use and infrastructure requirements covering an area of 172 sq. km. The master plan recognizes the potential of the riverbanks to create a new major east-to-west connection through the city. The master plan proposes two 80' wide roads to be constructed parallel to the river.

The above map shows the developments and important milestones of the Musi River Revitalization Project. The Puranaul is being restored under the Inclusive Heritage City Development Plan (IHCDP). Also, various promenades, boulevards and parks are

being developed along the Musi River under the Inclusive Heritage City Development Plan.

Mapping the marginalization

During the field visit, 10 settlements were surveyed to understand the impact of Musi Riverfront Revitalization Project on the people. A total of 176 samples were collected throughout the stretch. A 10% of the total households in the settlement area were collected.

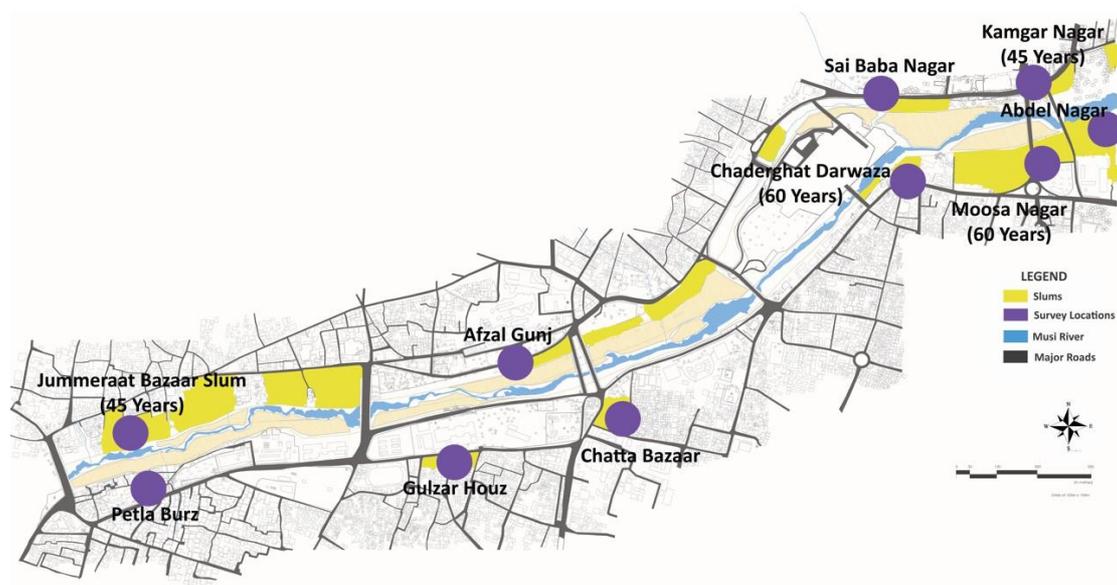


Figure 3 SURVEY LOCATIONS ALONG THE MUSI RIVER IN THE HERITAGE PRECINCT

The primary survey, takes into account the scenario before and after the implementation of the Musi River Revitalization Project. This is done to so as to understand the condition of the people along the Musi stretch and to understand how the project has affected and impacted the lives of the people, their livelihood, education etc.

After primary analysis, it is noticed that there has been a shift in the occupation of people along the river. A 7% and 10% decrease has occurred in business and services from 2000 to 2015, and a 10%, 2%, 3% and 4% increase in informal activities such as rag pickers, dhobis, maids and hawkers has occurred over the past 15 years. Thus, there has been a prominent shift from formal occupations to informal occupations.

Due to the shift in occupation, there has been a 9% decrease in the income of people. The decline in the income of the people, displacement and eviction due to the mega-project has resulted in the decline in the condition of housing structures.

In the particular case of Chaderghat Darwaza settlement, people were shifted to a resettlement site 8 kms away, who moved back to Chaderghat Darwaza due to loss in livelihood. These people have started living under the Chaderghat Darwaza bridge in kutcha houses made of plastic and tin sheets. Similarly, in Moosa Nagar and Abdel Nagar, the houses are made of leaves; plastic and tin sheets etc. and are living on encroached waste land.

The number of students in the area along the Musi River has also decreased. There has been a significant decline of about 25% in the students aged between 10 years to 18 years. People to have dropped out of schools to engage in informal activities such as rag picking, hawking etc. to cope up with the decrease in income.

Figure 4 shows the average distance travelled for medical and education in the year 2015 and 2000. The distance travelled has increased in settlements such as Abdel Nagar, Kamgar Nagar, and Chaderghat Darwaza etc. as people are now only able to afford government hospitals and schools due to the decline in income.

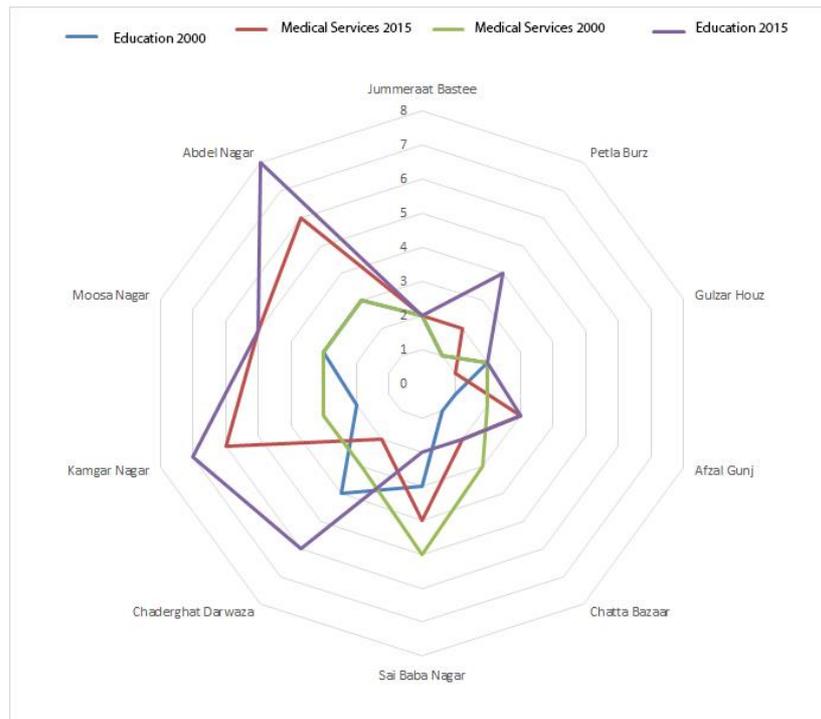


Figure 4 AVERAGE DISTANCE TRAVELLED FOR MEDICAL AND EDUCATION SERVICES

When the work force is analyzed against age, as seen in **Error! Reference source not found.**, it is observed that there has been about 5% increase in the workers of age category 10 to 18 years.

The enrolment rate for the year 2015 is only 7%. From **Error! Reference source not found.**, it is observed that about 45% of the people have no education and are working in the informal sector.

To quantify the marginalization occurring along the Musi River, a weighted marginalization index was derived. The parameters and sub-parameters of marginalization taken into consideration are mentioned in Table 1.

Table 1 PARAMETERS AND SUB-PARAMETERS OF MARGINALIZATION

Economic Parameters			Social Parameters		
Change in Livelihood	Yes	3	Social Cohesion	Existence of social structure	3
	No	1		Non-existence of social structure	1
Change in Income	Decrease in Income	3	Communal Tension	Existence of Stress due to religion	3
	Increase in Income	1		Non-Existence of Stress due to religion	1
Displacement	Yes	3	Environmental Parameters		

	No	1	Exposure to hazardous material	Exposed	3
Change in Assets	Assets have decreased	3		Not Exposed	1
	Assets have increased	1	Health issues due to pollution in river	Yes	3
Change in Saving Pattern	Decrease in Savings	3		No	1
	Increase in Savings	1	Exposure to disasters	Exposed	3
				Not Exposed	1

As seen in Figure 5, settlements east of the heritage precinct are observed to be highly marginalized, due to eviction and displacements.



Figure 5 MARGINALIZATION ALONG MUSI RIVER

Mapping the Contestation

According to Oxford Dictionary, contestation means dispute. This paper analyses the spatial contestation and the institutional contestations occurring along the Musi River.

To understand the contestation occurring in the case study area, the activities taking place along the river, the public and private land in the case study area, and land use were overlapped. Figure 6 shows the layer analysis of the different parameters. From overlaying these different layers, the hotspots of contestation were derived.

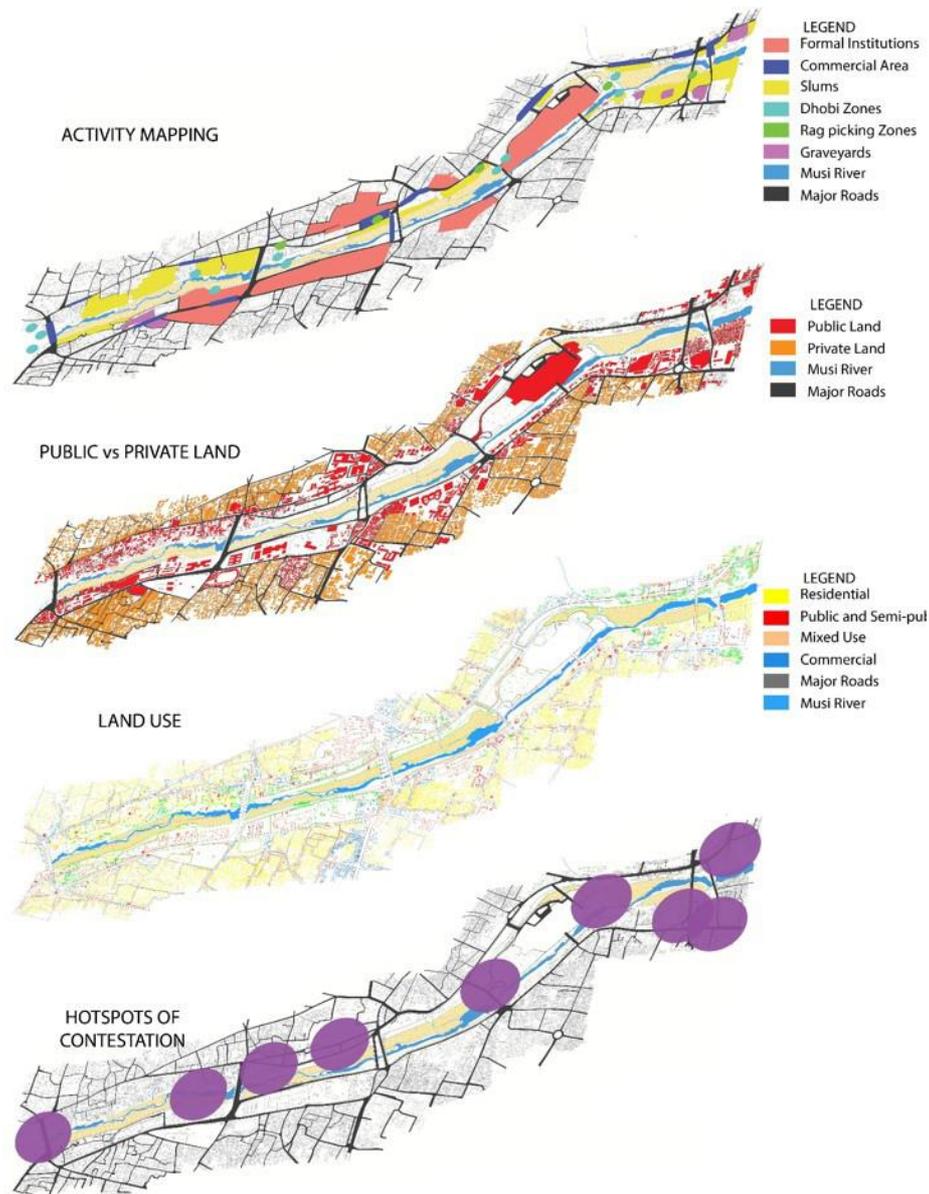


Figure 6 OVERLAP OF ACTIVITY MAPPING, PUBLIC vs PRIVATE LAND, LAND USE

It is observed that most of the informal activities such as rag-picking, dhobi, and hawking are occurring on public land. The overlay analysis helps us in deriving the reasons of the contestation.

From the land use and land ownership analysis, it has been noticed that about 59% of the land in the case study area is public land, of which only 24% of the land is used for public and semi-public use. The remaining public land is encroached upon by squatter settlements and for informal activities such as rag-picking, dhobi etc.

Also, a contestation between the intended use of space and the actual use the land put to use is noticed. The reasons and implication of contestation are listed below.

The reasons of contestation in the area are:

- **Formal vs Informal:** The public land is being used for informal activities or informal settlement.
- **Public vs Private:** Contestation between public authorities and private shopkeepers is noticed.
- **Neo-liberalism:** The neo-liberal approach of the City Development plan and Core Area Master Plan does not address the informal activities and the marginalized section of the society.
- **Disneyfication:** The beautification of the spaces along the riverfront is leading to disneyfication and is creating a restriction on usage and the user groups.

The implications of the contestation in the area are:

- **Encroachment:** Due to the contestation between formal and informal, and public and private, encroachment on vacant and public land occurs. Using the promenades, boulevards and the parks built are being used for illegal activities such as gambling, and alcohol consumption.



Figure 7 Encroachment

- **Marginalization:** The contestation occurring pushes a certain section or a group of the society to the periphery and eventually leads to social exclusion.
- **Restriction:** Disneyfication leads to the space becoming restricted which can be used only by a restricted user group.



Figure 8 Restriction of public space

- **Homogenization:** Disneyfication and neo-liberalism have led to the homogenization of space and the rich culture and heritage is lost.

In the Musi River Revitalization Project, contestation occurs at various levels. To understand the institutional level of contestation, the influence area of each institution was mapped. The various institutions involved in the beautification of the Musi River have overlapping aims and approaches.

The National River Development Directorate is involved in the cleaning up of the entire stretch Musi River and has invested in the construction of sewage treatment plants. The National River Conservation Directorate has invested Rs. 335 crores under the Abatement of Pollution of Musi River. The Hyderabad Metropolitan Water Supply and Sewerage Board is responsible for the construction of STPs along the river.

The Greater Hyderabad Municipal Corporation is responsible for the prevention of encroachments into the river bed, construction of retention walls, construction of

rubber dams in the heritage precinct and construction of STP at Attapur to prevent the flow of sewage into the river. The GHMC is also responsible for the development of a recreation zone along the stretch between Bapughat and Nagole. The project cost Rs. 752 crores.

The Hyderabad Metropolitan Water Supply and Sewerage Board is responsible for the construction of four sewage treatment plants, 16 interception and diversion units along the 34 km sewage lines that would divert the water from the nallahs emptying water into the river.

The Hyderabad Metropolitan Development Authority is responsible for the construction of roads parallel to the river, to enhance the traffic flow, as mentioned in the Master Plan for Core Area. Also, the HMDA is to develop the river banks as a prestigious recreational property.

The World Bank, Cities Alliance, INTACH Hyderabad are involved in planning and conservation of the heritage precinct of the Musi River. The plan aims to renovate, remodel, and demolish encroachments in the premises of the heritage structures.

Various contestations took place during the implementation of the project. The people of Patencheru Village filed a court case in the Supreme Court which claimed adverse effects on the health of the residents of the village. The residents of the village suffered from physical deformities, mental disorders and genetic diseases. The Supreme Court ordered the State Pollution Control Board and the Central Pollution Control Board to measure the pollution levels in the river and to implement certain measures. The Court also ordered the treatment of water at the site of the factories and industries to prevent the flow of toxic substances into the river, which was never implemented.

Similarly, a Public Interest Litigation was filed by Forum for Good Governance, a Hyderabad based NGO, to contest the claim that the government had not paid its Rs. 8.87 crores dues to the Hyderabad Metropolitan Water Supply and Sewerage Board, which in turn lead to insufficient funds for the implementation of the Abatement of Pollution of Musi River by the institution.

The contestation has given rise to a space of negotiation being created which allows people to contest the negative implications of the projects on their lifestyle. This enables a step towards collaborative governance and allows people to participate in the decision making process, making it more inclusive in nature.

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