



WINTER INSTITUTE

January 11th to 22nd 2015

LAKE BEAUTIFICATION
IN VASAI-VIRAR

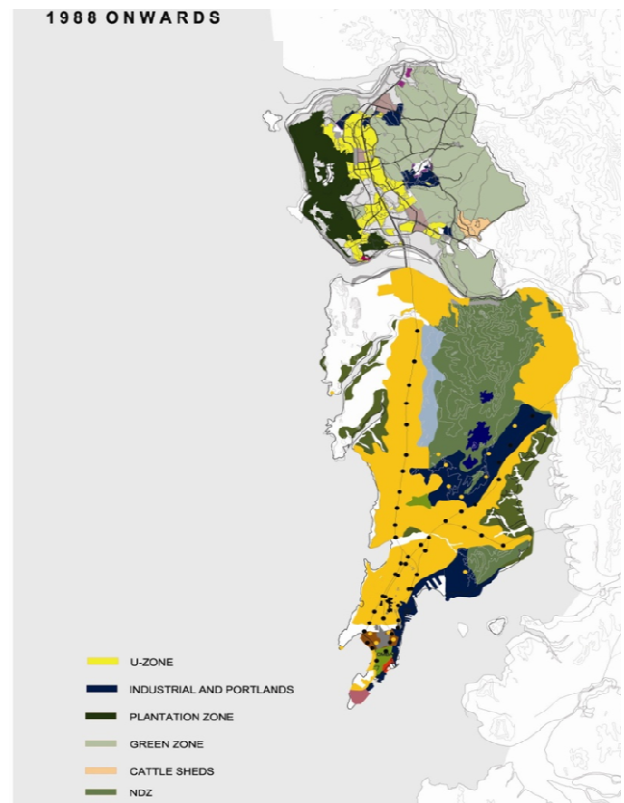
By students of MA/MS
in Urban Policy and
Governance 2014-16

Introduction

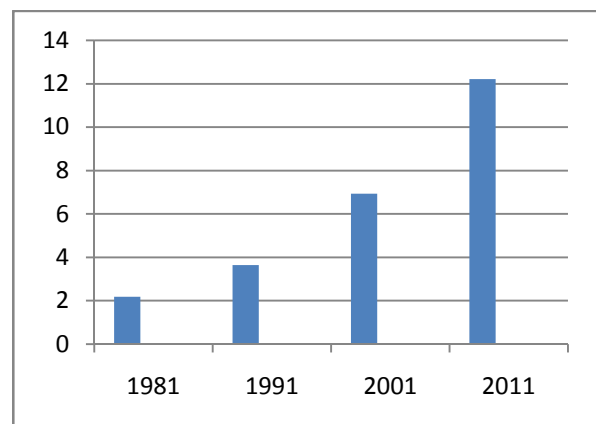
The theme for the Winter Institute 2014-15 was the Lake Beautification project in the Vasai Virar Municipal Corporation region. The Vasai Virar region is a sub region of the greater Mumbai Metropolitan region. It has an area of about 380sqkms and is the northern most part of the Mumbai Metropolitan Region. Its a coastal area geographically bound by the Vasai Creek to the south, the Vaitarna Creek to the north, the Western Ghats to the east and the Arabian Sea to the west.

This area has seen rapid urbanisation with a continuously increasing population growth rate since in late 70s. This occurred due to many factors like the continous push effect of an ever growing Mumbai city, the application of land ceiling acts in Mumbai and also the good connectivity provided by the Western Railway line to the region.

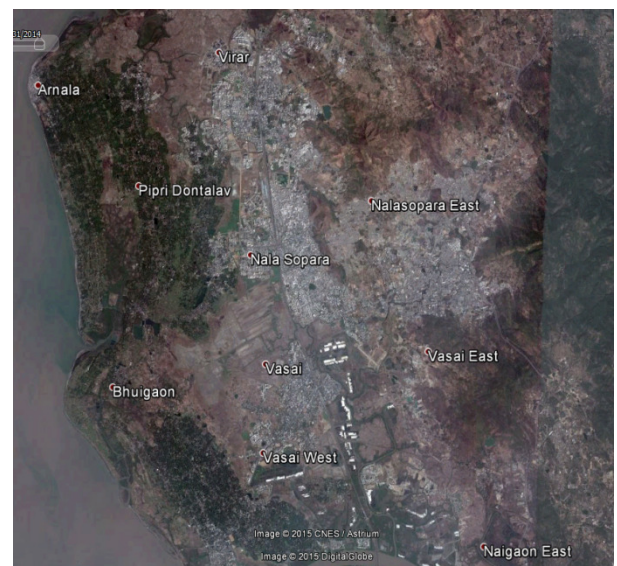
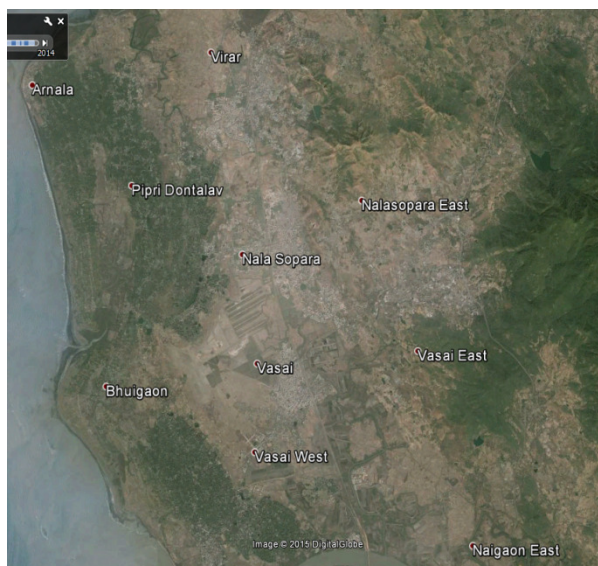
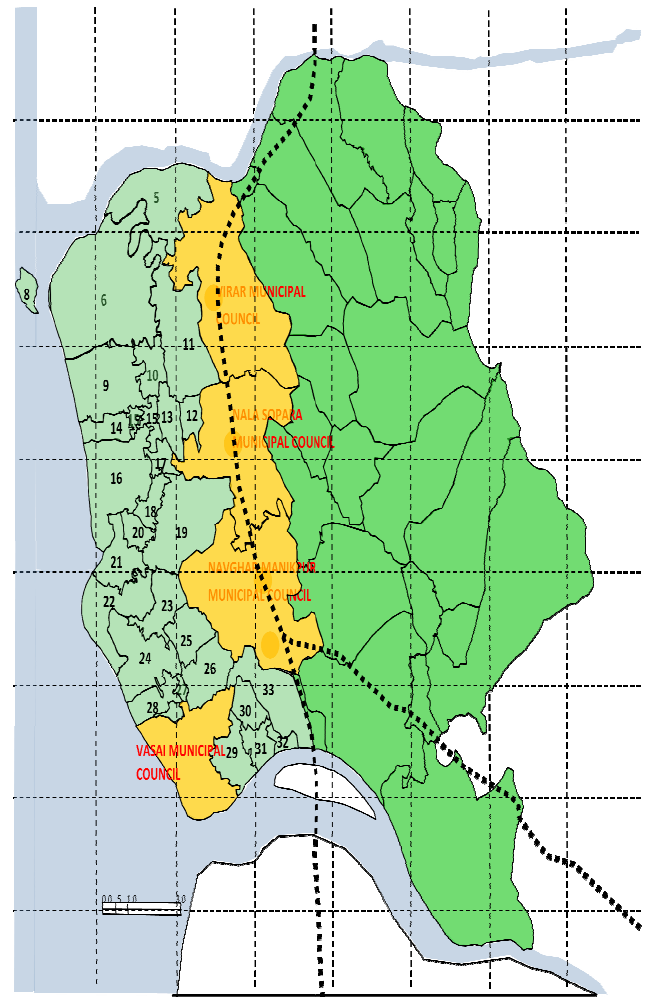
While today it is termed as the dormitory town of the Mumbai region, the area is also home to some industrial parks, cattle zones, agricultural areas, large fishing villages etc. Geographically the region can be seen in three parts. The first is the coastal green zone, the second is the eastern hilly zone and in between these two are the central low lands where most of the urbanised part of the region lies today. Till 2009, the area had 4 separate municipal councils ie, Vasai, Navghar-Manickpur, Nallasopara and Virar. In 2009, the state govt decided to merge these 4 municipal councils along with 53 other surrounding villages into a single municipal corporation of Vasai-Virar. The city has seen very high growth rate of population since 1981.



Year	Population	Growth Rate
1981	219868	-
1991	365480	66%
2001	693350	90%
2011	1221233	76%



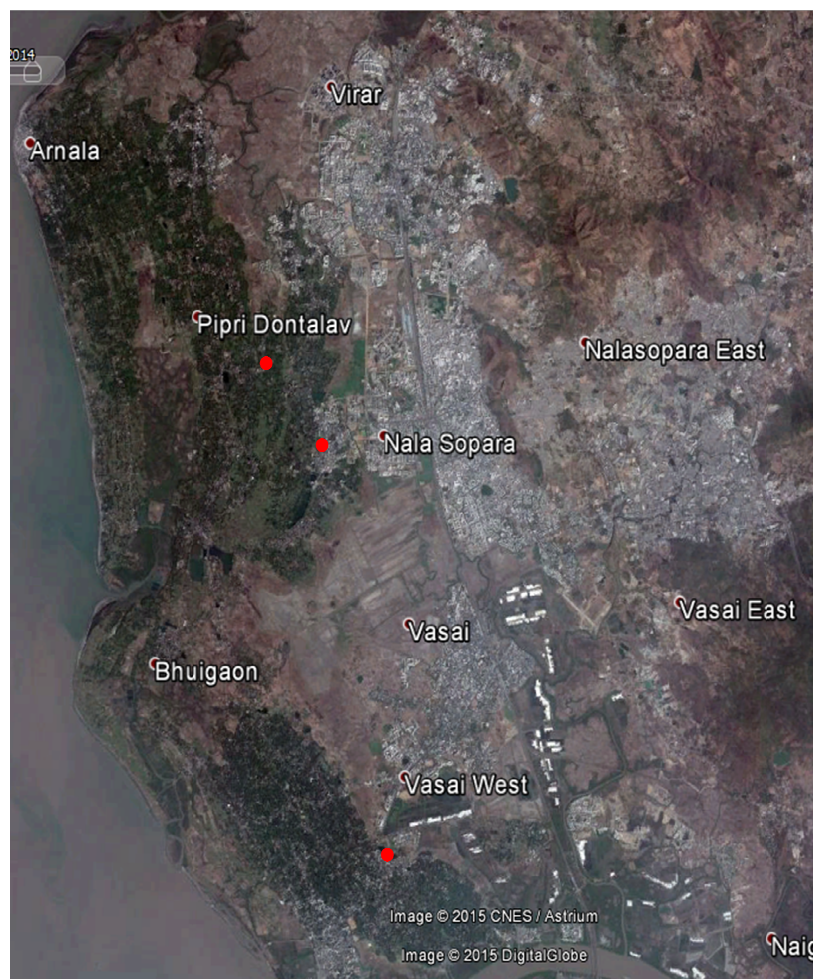
Since 1970 the planning authorities of the region have been carving out more and more land for urbanisation in the area mostly in the third zone which also happens to be around the railway line. But even today most the area of the region, about 78%, is not for development as per the development plan in place and are categorised as “Green Zone”, “Plantation Zone” and “No Development Zone”. The eastern coastal zone is mostly home to agriculture, plantation or fishing communities like the Kuparis, Saamvedis etc. But even these communities today are moving away from agriculture towards the service sector as well. The hills to the east are home to some hill tribal communities. While the central urbanised zone is mostly home to people who have migrated in the last few decades due to the low cost housing available in the region and the opportunity of employment in the Mumbai Metropolitan region. People travel to places all over the MMR like Mumbai, Thane, Panvel, Navi Mumbai etc for work while having their homes in Vasai Virar.



While the earliest urbanisable pockets were carved out in the early 70s, the Vasai Virar Sub region was created as part of the Mumbai Metropolitan region in 1988 and the authority to plan for the area was given to the erstwhile BMRDA. But just two years later in 1990, CIDCO was instead brought

in as the Special Planning Authority for the region. Between 1990 and 2004, CIDCO tried to create and get a development plan approved for the region. But the first three drafts of the plan could not be passed due to opposition from the people in the area. It was the 4th draft for the period 2001-2021 was finally passed in 2004 and is in force today. But with the creation of the VVCMC in 2009, the baton of planning has now been passed to the local government. But right through this period the growth of the region in terms of population as well as expansion of the central urbanised region has continued unabated as was seen from the population numbers as well as these two satellite pictures of the area from 2004 and 2014 shown above.

This continuous and fast growth in population with the influx of people from outside along with the steady increase in the designated urbanisable area by the planning authorities has created a strain between the various communities presently residing in the region. This rise in population has put extreme strain on the resources of the region, especially land and water. This strain also gets reflected in the political scenario prevailing in the region which is dominated by local political parties like the Bahujan Vikas Aghadi and Jan Andolan Samiti. The conflicts could also be seen in the high level of difficulty CIDCO faced in getting a development plan approved for the region. The new urbanised regions have come up in the central low lands which are extremely important for the drainage of water in the region. The pressure on water has continuously increased in the region, which is now very much dependent on water from various reservoirs around the area and still faces a shortage of about 35MLD.



It is in this sort of scenario that the newly elected Vasai Virar City Municipal Corporation started the lake beautification project for the large number of lakes in the region. Many of the lakes in the area were not in a very healthy condition with varying levels of eutrophication and having become places for dumping of garbage. These lakes formed a very important part of the hydrological system of the region. They helped keep the fresh water table high in the area and allowed for agriculture to occur in the area despite being close to the sea. The idea of the project was to spend about a 100crore to create a chain of lakes, by undertaking works like “lake conservation” and “other development works” around the lake. A few lakes, like Virar and Achole had been down the process of beautification even before this project started. The usual set of works seems to include constructing a retaining wall, fencing off the lake by erecting a outer peripheral wall and creation of gardens, children’s play areas, jogging track, exercise equipment etc. Other than these, there also seem to be some degree of cleaning of the water involved. The major argument for creation of such new beautified lakes by the VVCMC was the requirement of open spaces and places for recreation and leisure in the light of increasing population in the region. Its termed as “breathing space” for the growing city.

To study the lake beautification project a case study approach was chosen under which detailed studies would be undertaken for three lakes in the region. The three lakes chosen, as shown in the adjoining image are at different stages of implementation of the beautification project. The top most in the image is Nanbhat lake for which a plan for beautification has just been made while actual work is yet to start. The second is the Chakreshwar Talav which has already been beautified while the third is the Papdi Lake where the work under the beautification project has already started but is yet to be completed.

Nanbhat Lake

Nanbhat Lake is located in the Nanbhat village of the Nallasopara town in the Palghar district of Maharashtra. It comes under ward number 24 of the Vasai Virar City Municipal Corporation and is one of the 86 officially recognised lakes. Nanbhat Lake also referred to as the Akkarbhat Lake by the local dwellers, has been approved for beautification by VVCMC and the process will start from April. The lake has approximately 10-12 feet depth, and is surrounded by agrarian fields, residential units, a traditional water body (Bavkhal), a School, the Nanbhat Church, a branch of the Bassein Catholic Bank, few shops and roads connecting nearby villages. On one side lies a community hall of the Catholics used for village events and on the other side is a small seating area with a statue of Mother Mary at the centre, which was constructed by VVCMC and partially funded by village dwellers. The lake had its significance for the 12 villages of Nanbhat but now the lake is not in a good condition. The upper layer of lake is covered with algae. Near the community centre on the East side of the lake there is a well which belongs to a Brahmin family in Nanbhat. This well currently lies inside the boundary of lake and is proposed to be separated after the lake beautification process gets completed. A key event in the area since the last twelve years is a festival during Christmas organised by the youth of Nanbhat that attracts viewers from different corners of the city.

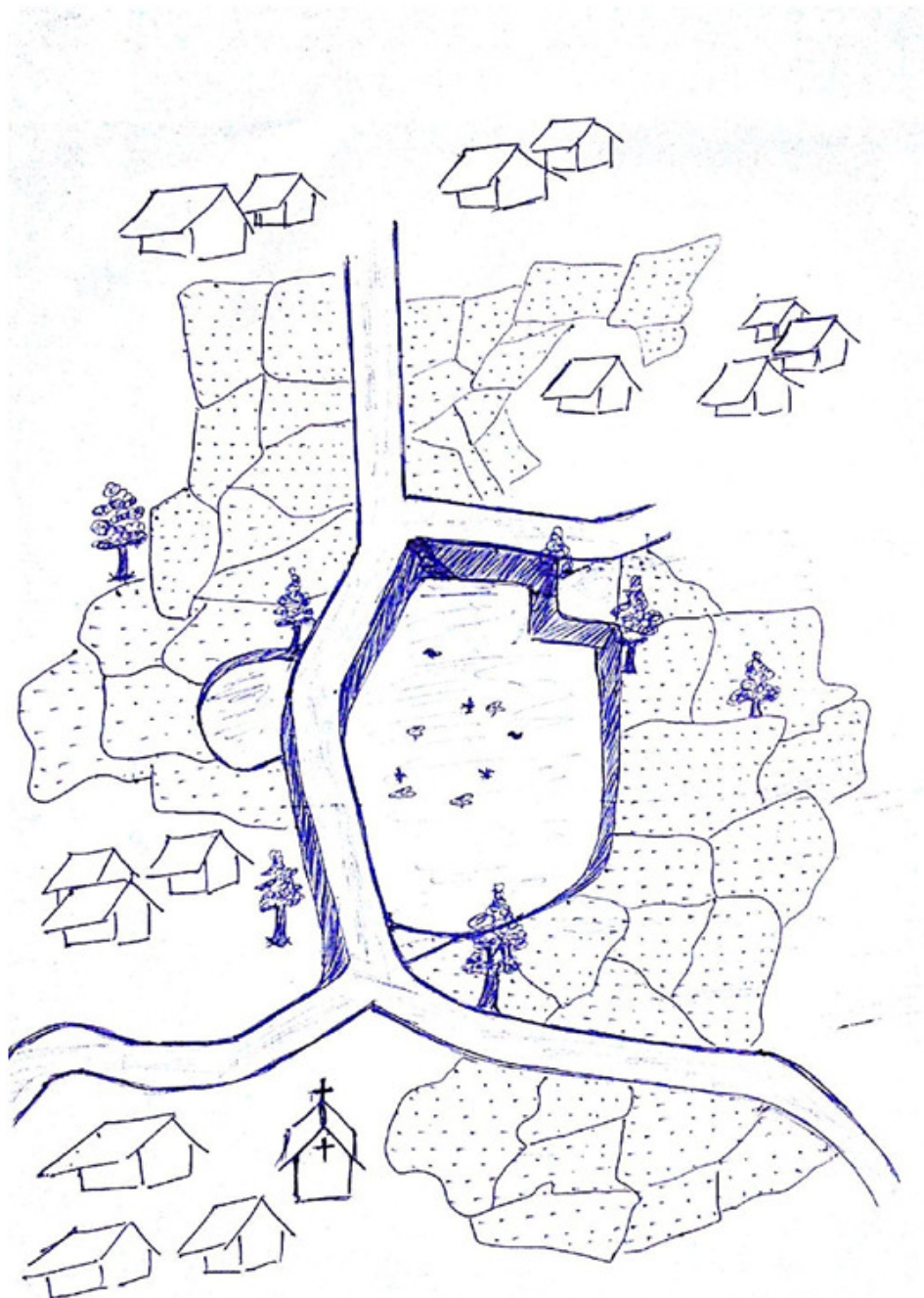


History of the Lake

The history of the lake is not very clear. The local people say it was constructed during the period of Portuguese during 16th Century while some others say it was constructed 200 years ago during the colonial period. The Brahmin community in the area says it was constructed by their forefathers four to five generations ago. Several people from the community including Brahmin people said that fifty

years ago the lake was owned by the Brahmin family, but due to a lack of funds for maintenance, the Brahmin family donated the lake to the village of Akkarbhat. After some years, when the Panchayati Raj system came, the lake came under the ownership of village *panchayat*. Recently, in 2009 when the village got added into Municipal Corporation, the lake's ownership got transferred to the VVCMC.

The primary objective of the lake was to maintain the ground water table which helps the surrounding wells to maintain their water level for agricultural purposes. According to locals, during the rainy season and three to four months after it, the water table remains sufficient, but once summer begins after the month of March, the water table in the wells starts to decrease. Here lies the major role of the lake, which maintains the water table and helps indirectly in the supply of water to agricultural fields.



Research Objective

Growth in the Vasai Virar sub region, which is otherwise known as the dormitory city or third Mumbai after Navi Mumbai, has brought attention of various urbanization aspects. According to the planners of the Corporation, a majority of the people work in Mumbai through the day and use the city for sleeping purpose putting a high load on the infrastructure and amenities for public use. Hence, the peri-urban areas have seen high pressure on natural resources, infrastructure development, real estate attraction and change in land use. In this context, Mundoli, Manjunath, Nagendra, 2014 say, 'The peri-urban interface can be defined as complex mosaic of rural, urban and natural ecosystem. Ecological commons such as lakes, parks and community gardens are often the first casualties of urbanization in PUI. Commons in urban and PUI have often contested uses. For wealthier urban users they represent as recreational spaces valued for aesthetic and recreational services'.

Since such conditions revolve around the Nanbhat lake, this study attempts to understand the lake as a common and its transition from a rural common to something else, whether it can be seen as an urban common or whether the nature of the common is changing to a different form. We would also like to understand the process of transformation with respect to range of users and uses, surrounding community.

Methods used

The method of data collection was qualitative in nature. A majority of the informants were from the Catholic community of age groups varying from twenty to sixty. We also spoke to the small Brahmin community and migrants staying near the lake. The other informants were local political representatives, the former *sarpanch*, the city councillor, government officials and members of the Church. Information was sought about the history of the lake, its uses, how the community is changing, local development issues and how governance systems are responding. From the community, one third of the interviewees were from the older generation and another fifty to sixty per cent were from young and middle age groups. Very few female members agreed to be interviewed. A couple of interviews were done more than once. Visits were made to local ward office, church, and offices of the VVCMC.

Community around the lake

Surrounding villages are Chinchodi, Gholebhat, Vithade. Total population -3192 (Nanabhat), 274 (Akkarbhat). Majority of the population are catholic and few are Hindu Brahmins. Most of the people in these villages belong to the Catholic community. Only four Hindu families stay in Akkarbhat village. A total of eight migrant families stay near to the lake. The growth of population has happened in the last few decades. Change in family types from joint to nuclear is one of the major reasons for growth in built structures like individual houses, wells, and a decrease in agricultural fields. Since a majority are Catholic the community appears to be quite close knit.

In the past, the whole village was engaged in agrarian activities; cultivating vegetables, banana, flowers and milking cattle were the major sources of income in most of the families. During 1980s and the 1990s, the young generation switched to jobs and gradually the delinking from agrarian activities started. At present most of the people are employed outside agriculture while the old generation is still involved in agricultural activities as pastime. Most of the people have a large

chunk of agricultural lands as part of their assets. As per information shared by residents, a majority of the people will fall in the middle class.

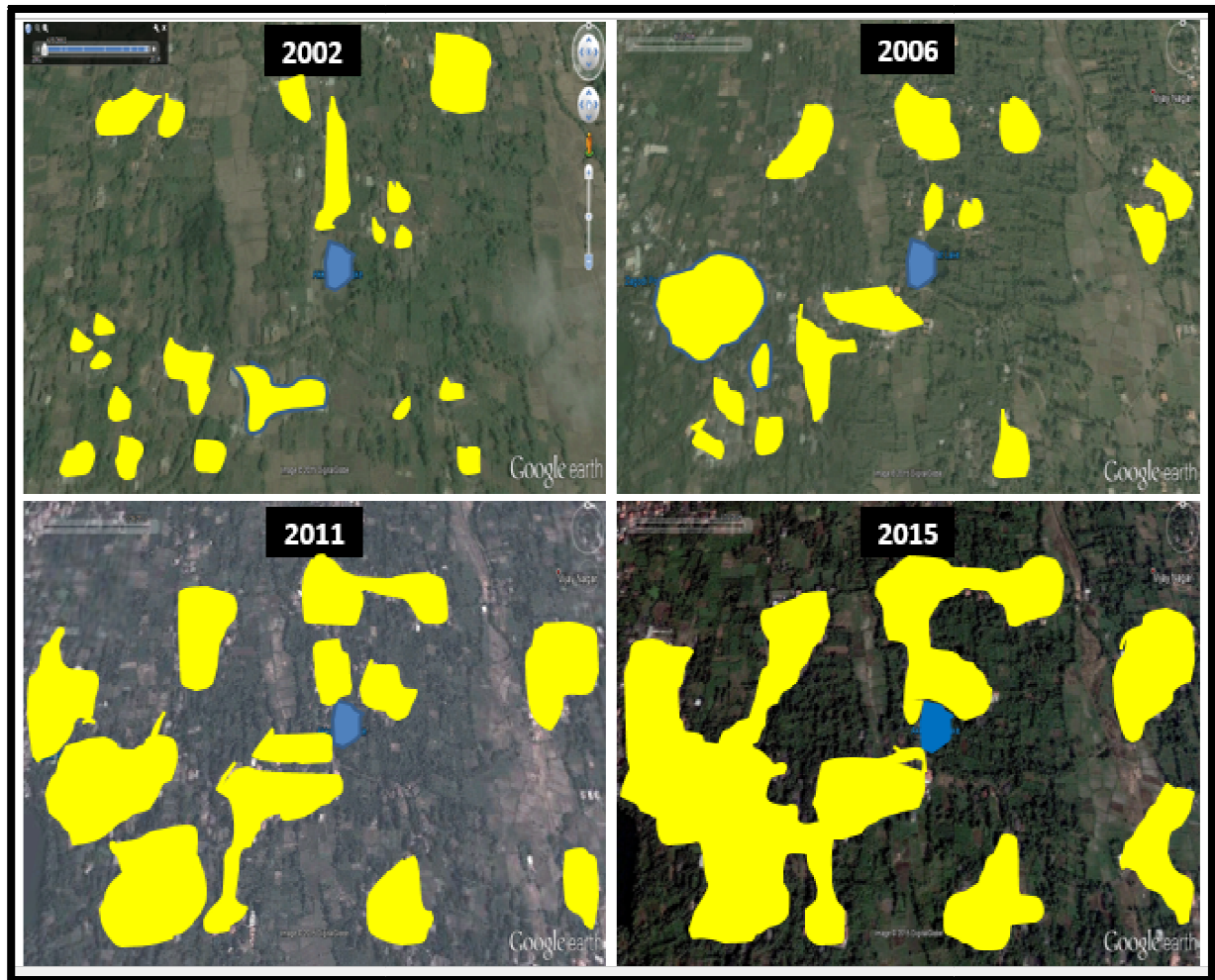


Land use around Nanbhat Lake

The West of the lake lies in the Green zone and the East of the lake is part of the urbanisable zone, according to the 2001 proposed land use from the CIDCO Development plan that is in force.

The land use of the Nanbhat Lake is basically residential and agricultural. There are residential clusters to the North side of the lake which are owned by the Catholic community who are residing in this area from many decades. Many of these residents are engaged in the Merchant Navy, as this occupation was influenced by colonization. Eastern side of the lake consists of the agricultural area which is owned by the Hindu Brahmin community. This community of four families is staying in a small closed cluster. They are all engaged in agricultural activity. To the southern part of the lake, the Bassein Catholic Bank, Church and the School are located. There are some clusters of agricultural and residential land here. Agricultural and residential use land lie close to each other, as all the residential areas like to have some part of their property engaged under agricultural work. The western part of the lake consists of the residential building in which the eight migrants are staying and the building is owned by the Catholic owner.

Transformation from agriculture to built-up land use



2002: The use of lake was mainly for agriculture, bathing, fishing, cattle washing. So, there was the direct link between use of land and the water body. And for this purpose, the water body was kept clean. The built-up area was comparatively less than the agricultural area. The residential areas were located in the clustered manner, which were quite far from each other.

2006: The agricultural fields started becoming residential areas because of change in occupation from the agriculture to other secondary occupations and increasing family size. So, till the year 2006, there was increase in the built-up area and decrease in the agriculture area for making space for increasing family size.

2011: Almost half of the area around lake transformed to the residential land use because of change from agriculture to other occupations. This change in land use resulted in the reducing link of the surrounding land to the lake water. As, the residents started converting their family structure from joint family to nuclear family, the requirement of the construction of the new houses increased.

2015: At present the lake is used as a dumping space. As the land use has changed, the transformation of the lake's nature as a resource emerged. As noted above, residential land use is increasing due to increase in family size and reducing agriculture.



Algae formation over lake



Dumping of garbage in lake

Present day condition of lake, in which the space is seen as a dump yard. At present, the lake is a place for mosquito breeding.

Foul smell due to eutrophied water leading to health issues in and around areas of the lake, which is affecting the residents of this place.

Lake-User Relationship

The lake was used by villagers for a wide range of activities including domestic uses like bathing, swimming, washing clothes, washing utensils and religious practices like idol immersion. The village members used to fish as an annual activity. The agricultural lands surrounding the lakes used to access the lake water from March till the beginning of rainy season so as to not disturb the fishing in the lake. After March when the fishes are taken out and also due to effect of the summer, the farmers used the lake water. The lake water was used for watering and washing domesticated livestock. Since there was no such big place where the livestock owner could wash thirty to forty heads of cattle at a time, the lake was the only place for these activities. Also the three sides of the lake was used as roads for various modes of communication.

But over the last three to four decades, there has been a detachment of local community from the lake in various ways as discussed above. Previously both direct and indirect uses were there, but now only the indirect use is going on. As described above, due to the transformation in the community the people carry out domestic activities at home rather than outside. The activities which were done in public spaces like bathing got converted into activities carried out only inside the house. With a rising number of houses and modern technologies, individual wells per family came up. So, all the domestic activities were stopped at lake. As families moved away from agrarian livelihoods, uses such as washing and watering animals from lake got disconnected. Also due to new houses replacing the agricultural fields the direct water usage from the lake stopped.

One owner of domestic livestock animals said “Twenty years ago, I used to take the cattle to the lake for washing and watering. I stopped it from 2000 because the school has come up and more people are using the road. With people are walking around the road (lake periphery) taking thirty to forty heads of cattle at one time created a traffic problem. Hence I prefer to wash them at home.”

The fishing activity is now on contract basis for a three year period. The tender is conducted by the VVCMC. Earlier it was only the village members who used to fish, but now others are also engaged in the same. Earlier there were no recreational activities, but after modifying the lake bed as a wide

road which connects two public places situated in the corners, more people are attracted for recreation. At one corner there is a community centre where community events happen. During afternoon this place is used by the youngsters and kids for playing cricket. At the other end, there is a chapel which has come up with a Mother Mary statue that brings all kinds of age groups to sit together.

One young person said, “This lake is a dead lake for us. Hence, whoever moves around the lake dumps solid waste here. Even if we want to prohibit this, we can’t. Also due to spread of algae all over the lake, it has become of no use.” By direct observation we found that plastic wastes were floating all over the lake.

Users	Use	Traditionl	Current
Village residents	Washing Clothes, Bathing, Swimming	Yes	No
	Idol Imersion	yes(Once in a year by the brahmin families in the village)	yes(Once in a year by the Brahmin families in the village)
	lake bed as road	Much narrow earlier	Widened, Lake area has been encroached by widening of road
	Solid waste dumping	No	dumping
	Fishing	Yes	No
	Recreation and consumption of alcohol	No	Two corner of lake bed used as recreational and religiois space
Agriculturalists	Water Supply	Yes	Yes(Only Brahmin family)
	Maintaing ground water table	Yes	Yes
Livestock rearers	washing, watering	Yes	No
Non Locals	Fishing(tender holders)	No	Yes

Observations

With the gradual detachment of the lake from the community, the lake has become a dead lake for the locals today. The quality of water has degraded to a very bad condition for which the fishing activity is also becoming impossible. Even the the festival during Christmas has been suspended since last two years. So, when the locals saw other lakes (Chakreshwar and Virar) being ‘beautified’, they requested VVCMC beautify the Nanbhat lake as well. But before this proposal, the residents had requested the local MP for development of the lake. But due to lack of funds the proposal could not move ahead. In April 2014, a village resident named Mr. Marshal Lopez took the proposal to VVCMC on behalf of the village people.¹ After the election when the BVA won in the region, by now

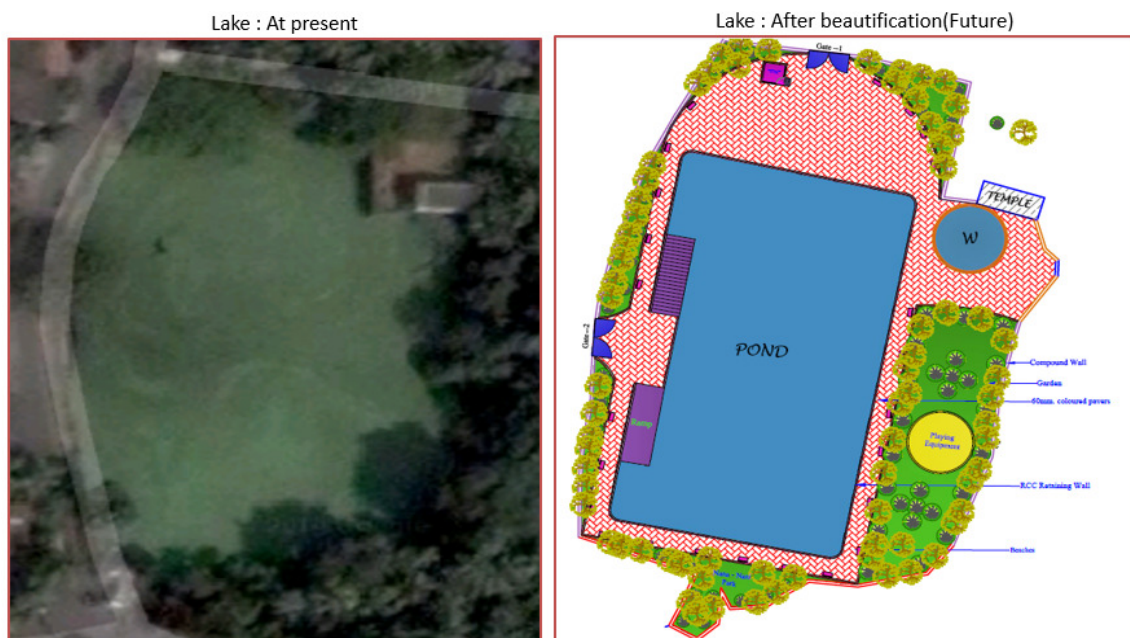
¹Mr. Marshal Lopez is the local president of Political party BahujanVikashAghadi representing ward no. 24. By profession he is a school teacher. Before joining BVA in January 2014, he was working with Congress. From last one year he has been very active in various developmental activates at Nanbhat village.

almost eight different projects have been completed. All these projects were executed by Mr. Lopez in last eight to nine months. When we asked the present councillor about the Nanbhat lake beautification program, it seemed like the councillor's office was not even involved in the total process.²

When the first meeting on Lake Beautification happened in April 2014, the community suggested multiple options for the lake's redevelopment. The suggestions included converting it into a playground by filling it up since it was of no use, converting it into a garden since the area didn't have any recreational places, and others suggested converting it into a club ground where three to four games can be played. But all of these didn't work out and were rejected by the municipality, since, according to Mr Lopez, funds were available only for the Lake Beautification program. After finalization, since the Chakreshwar beautification had got the attention of people it became the model. The demands of the residents were for a space for recreational activities for all age groups.

"Since the Chakreshwar Lake is having all these facilities after beautification (sic), we want our lake to be beautified in the same way. A jogging track, a small park for children, tiles to be used in jogging track should be the basic amenities. All these facilities will help various age groups, genders to use the space in a much better way,"

Members of the community explained that if the area is beautified, it would be maintained properly and algae formation won't occur as at present, which would result in better health of the community. When the beautification process would occur, the depth would be increased by four feet, which would increase the water table of the lake and also the surrounding community and private wells, the argument went. It was claimed that the beautification would not cause any hydrological problem with the increase in depth since it would only deepen the lake by 4 feet.



The design has been finalized and work would start from March 2015, officials said. The process of Lake Beautification started a decade ago, but the proposal got approved in 2014. The beautification

²Ms. FleminaPegadu is the present councilor of ward no. 24. She represents VasaijanAndolonSamiti.

of Chakreshwar Lake inspired the residents of the Nanbhat area to beautify their lake too. The Chakreshwar Lake caters the facilities for all the age groups of the society like exercise equipment and a jogging track. So, the residents and the local leaders asked the Vasai Virar Municipal Corporation to beautify the lake. After getting a formal request from the community, the Executive Engineer of the Vasai Virar Municipal Corporation started the e-tendering. This project was estimated for the cost of about Rs 2.78 crore , according to a design and cost estimation by contractor Mr. Rajesh C. Pitale.

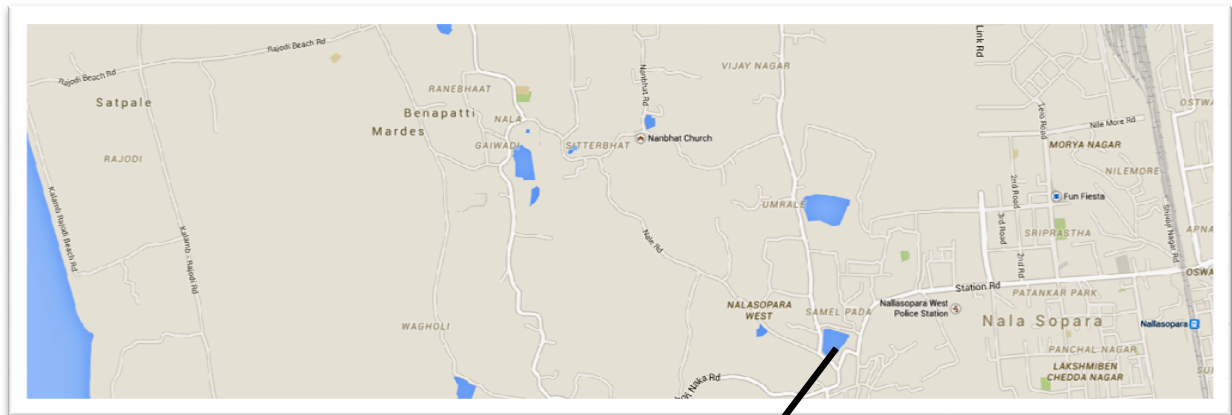
All the localities are excited about the lake beautification. Though the construction work has not yet started, but the next set of norms and rules are already being imagined by the youth. After the beautification the lake will be put into operation by the norms and rules set by the municipality. But the localities will also have a stake in setting the norms too. Activities like during Christmas and whether people coming from outside areas will be allowed will be decided by the locals. Other activities like fishing, timings, operation and maintenance and cleaning will be looked after by the VVCMC. The response of the political party facilitating various developmental activities at the local level just before the municipal elections is also interesting. The representative of BVA, without being an official representative, is more active than the present councillor. Projecting Lake Beautification as the centre of attraction with many other completed projects, also at the same time the acceptance of such class projects by the middle class people from the community seems like a transformation towards the urban from a formerly agrarian and rural setting.

Analysis

Being a part of the natural ecosystem and defined as an urban ecological common, the lake has shown various characteristics till today. While it was under the control of village and later on the *gram panchayat*, the lake was accessible to all. But with time and decline in uses and users, the lake has come to be perceived as a dead space and its value as a common property resource has reduced. The changing community around the lake is also becoming part of the decision making process about new sets of activities to happen with the lake. After the creation of VVCMC the ownership of lakes has come under one single domain – the public. After beautifying the Chakreshwar lake and positioning the region as a dormitory to Mumbai, the municipal corporation has really tried to keep hold of its power over every urban ecological resources. Earlier it was a common, but after beautification the nature changes more towards a public open space with more guidelines and norms. Gradually the state is encroaching on the commons and changing their use in a systematic manner. As described by a local activist, it has become a tread mill for the city. More of the traditional aesthetics are getting converted into a modern view just by viewing the lake differently.

Also the way the lake has got the centre of attraction before municipal elections raises the question of how the political parties using these agendas. As there is a regular maintenance cost involved with the lake beautification model being adopted, it would be of interest to see how the VVCMC is going to make it sustainable without having a revenue model for the same. If they plan user charges, will its character as even a public space undergo further transformation?

Chakreshwar Talav

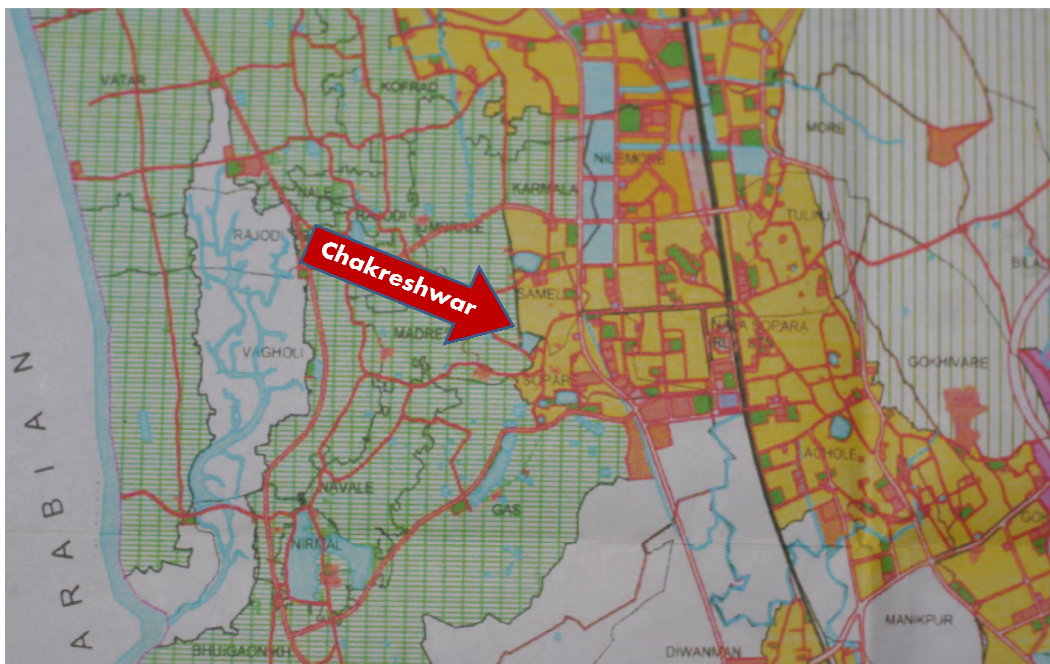


About Chakreshwar and the study

The Chakreshwar Talav is a lake located on the Gass-Sopara-Bollinge road in Nallasopara town of Vasai Virar sub-region. According to many locals, the lake has a long history of being associated with the Chakreshwar Mahadev temple that is located to its West. The Sopara region itself has a long history as an important port with trade ties with West Asia and Egypt, according to the Thane Gazetteer. This was the main port and market of the region in the twelfth century and the Gazetteer records that this area has been recorded in ancient history as the town of Shurparak, capital of the Western end of the Konkan or Aparantak country where a set of Ashoka's rock edicts were engraved. According to a history student and tourism ministry official, Chakreshwar could be the ancient lake mentioned as the Shurparak Teerth in the Mahabharata and the lake from which Padmavati, queen of a local king Burud Raja, picked lotuses for worship. The lake provided lotuses

for worship at the temple and also a safe hiding spot for the temple's idols when invaders attacked the region in the 16th Century. The Chakreshwar Mahadev Devasthan Trust (temple trust henceforth) has held control of the lake although it was always open for public use, according to temple trust as well as Vasai Virar City Municipal Corporation (VCCMC) officials.

The Western Railway line splits Nallasopara, among the most populous towns in the Vasai Virar sub-region, into East and West. Chakreshwar is located in the Western part which largely lies in the plantation or no development zone and it is in Nallasopara East that dense industry and worker housing is seen. It is the Western part where the transition from coastal plantation and agriculture to more and more residential spaces happens and Chakreshwar straddles this zone of transition. The Western and Southern sides of the lake are entirely in the Green zone with non-commercial and older family dwellings and all other sides are flanked by mixed residential and commercial areas.

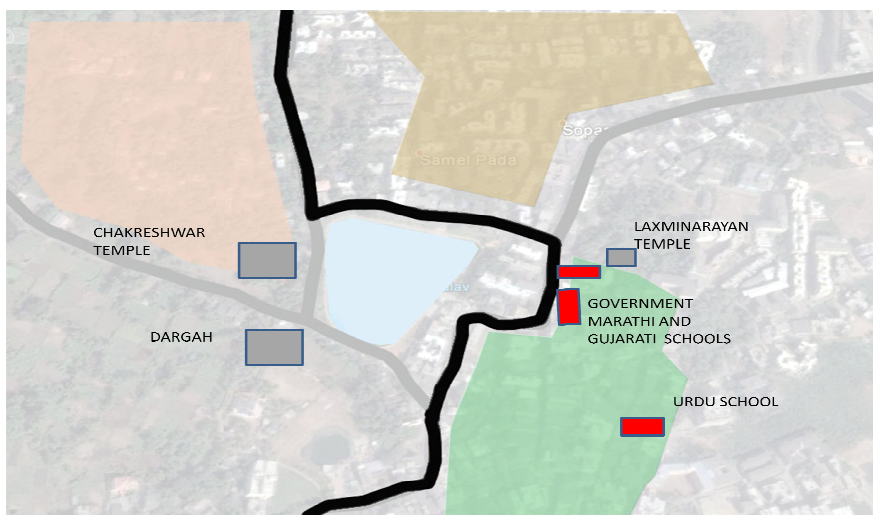
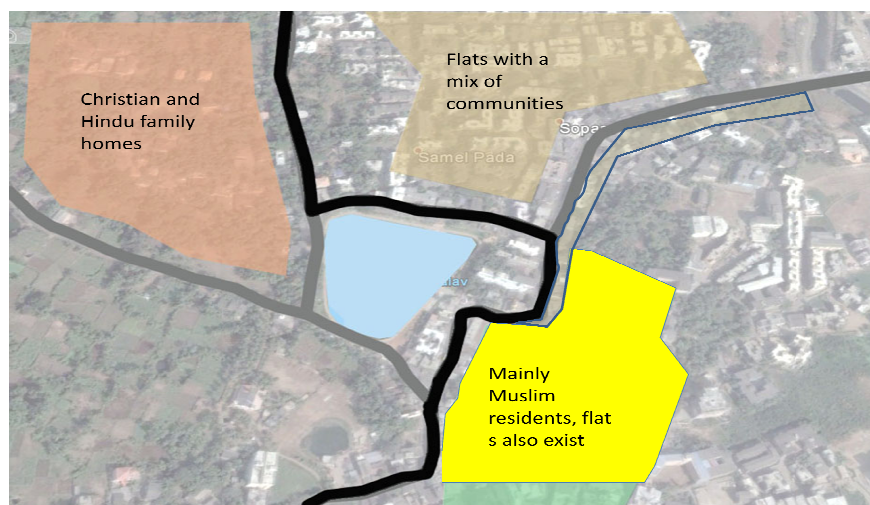


On the Eastern side, the lake's compound lies against the compound walls of residential buildings in Sopara market area that are two to five stories high. On the North side, a road separates the lake from three to four-floor built structures as can be seen from the satellite image below.



Identified by the CRIT (Collective Resources Initiative Trust) report as one among the 170 heritage sites, including 87 talavs, which need to be taken care of, the Chakreshwar talav was a key resource for the communities (a broad mapping below) around it. Residents, including non-permanent ones, used the lake for household use, livelihood use, recreational and religious purposes. Marginal communities such as the tribal households (Kaatkari?) in the area have been reported to have sold the lotuses that used to grow in the lake. They and many itinerant workers, with no access to a stable source of water are reported to have used the lake water for washing themselves, their clothes, animals and vegetables. Fishing too, before the Trust began to contract it out, was carried out by a variety of arguably marginal households. These uses are now prohibited. Also restricted are the throwing of garbage and the letting of sewage from nearby buildings into the lake.

Communities and institutions around the lake:



The Chakreshwar Lake was reconstructed under the Lake Beautification programme of the Vasai Virar Municipal Council/VVCMC between 2009 and 2012. It was reopened for public use in September 2012 after a Rs 4.8 crore 'beautification', which meant deepening the lake, adding a retaining wall and a jogging track along its periphery, creating a gated garden with play areas (see maps and table for changes following beautification). Rs 16.8 lakh for the project was from the MLA local area fund and the rest was from the VVCMC's internal sources, according to officials.



Before beautification - June 2002



After beautification - January 2014

The maps show that the lake's dimensions have reduced (given that the base map relates to the dry period) and also the mainly eastward direction of growth of built form. Prior to reconstruction under the beautification programme, the Chakreshwar talav's western side was flush against a narrow road next to the temple, which has now been turned into a space that belongs to the temple.

Following beautification, a new road has been built connecting Nala Road with Umrula-Bollinge Road, thereby reducing the expanse of the lake and pushing it, in a visual sense, towards the East and the more urbanised area away from the Green zone.

The lake has many wells within it which were used for immersion of idols during Hindu festivals. Post-reconstruction, idol immersion and fishing by contract are the only uses of the lake water that are still permitted.

	Around Chakreshwar lake	Lake dimensions	Real estate prices	Road widths	Lake uses	Sewerage network
Before 2009	Before beautification	Larger	Rs 2,500 per sq foot	Narrow road around temple	Fishing, washing clothes, animals, buffaloes and vegetables, farming, sewerage outlet, immersing idols	Outlets drained into lake and the Naigaon drain
Before 2009	After	23831 sq.meters	Rs 4,000-4,500 per sq foot	Widened to two lanes	Immersing idols, Fishing, Sight for walkers, joggers, users of children's park and gyms. Paddling, Fountain proposed.	Outlets dug underground and joined to Naigaon drain

The lake land has now been reclaimed on its periphery, by as much as one-fourth according to one estimate, for new uses and use-areas such as a garden, jogging track, play area for children, seating, advertising on light-posts and open air gymnasiums for men and women. Some officials and temple trust members mentioned some proposed new uses of the water, such as for paddle-boating and a fountain.

Though only a fraction of lake land has been built upon, one interviewee said that “locally the area which was called the talav (or lake) has now begun to be known as the garden”. Most responses to the question about the lake before the reconstruction began with, “The Lake was open earlier”. Thus, even if the water body is not built upon, as has happened in other peri-urban interface areas including in Bengaluru and Mumbai, its nature has been changed in local experience and imagination.

This case study of the reconstruction through ‘beautification’ of Chakreshwar argues that the project, budgeted under ‘lake conservation’ and ‘other development works’ by the VVCMC, is actually a means of controlling issues such as the perceived ownership, nature, uses and behaviour around the lake in the process converting it into an enclosed product which can be replicated and even sold (through ad space and maintenance contracts). As one citizen put it, it is likely that after fountains and boating, small shops are brought into the lake precinct.

Both the process and outcomes of the project reflect intentional and unintentional control exercised by the municipality. Seen through the lens of theory around bureaucratic disciplining and so-called ‘conduct of conduct’, the present form of the beautification programme raises questions about the future of these urban water bodies for which the project was ostensibly initiated. Philosopher Michel Foucault spoke of social control mechanisms aimed at making populations behave in a way determined by government. The end is to prevent degradation of a common resource through a bureaucracy. Here, the population served by this ‘governmentality’ is the population of those needing a ‘breathing space’, recreation and exercise in a ‘dormitory for Mumbai’ as a planner termed the entire region. Not only does this exclude other groups such as the migrant workers in the region and its local community that is still dependent on agriculture who depended on the lake water, it also leads to recasting of what was a resource into a municipal service, ‘operated and managed’ by a bureaucracy. The populations served may internalise the rules created by the bureaucracy who may then fail to publicly reason their moves with a passive citizenry.

Study methods used

The ‘beautified’ lake was studied using satellite images, interviews with users, controllers of the lake (the Trust that ‘owns’ the lake and the municipality) and residents of the area. Users and communities were understood through transect walks. Proposed land use in the development plan and actual use was considered. Since the lake has already been reconstructed, a nearby lake (Umrale) were studied for understanding, however broadly, a lake which has not yet been ‘beautified’ and its users. Social mapping was also attempted.

Beautification context

By 2004, when the Nallasopara Municipal Council was the urban local body for this area, the Achole lake in Nallasopara east had been reconstructed through ‘beautification’. A news report from the time talks about the temple trust’s opposition to the municipality’s beautification proposal because

of apprehensions that control of the lake will be lost. Still, in 2009, the Trust joined hands with the Council to begin the beautification process. A senior temple trust member said, “People used to do bad things here, they weren’t afraid to bring alcohol and even let toilet water flow into the lake. We wanted to stop these things for which we needed power that we got with the municipality’s coming in. They could have stopped the sewerage flowing into the lake even without the beautification, but this sped up the process.” The then MLA Hitendra Thakur also contributed funds from the MLA local area development allowance to push the beautification process.

Beautification process

Residents living around the lake recount that they first learnt about the beautification project when it had already begun. A resident of a housing society on the lake’s east side recalled that at the time of beautification, buildings on the East and North side were claimed to be encroachments by the municipality but the residents objected and so their buildings were saved.. A shopowner at Sopara Bazaar said they put up a banner saying a path, a garden and all will be built around the lake before they started. Residents belonging to a tribal family living in one of the complexes on the North side said they found out that something was happening when construction work began at the Lake.

Following what a VVCMC official called a ‘typical model’, a reinforced concrete retaining wall was built around the lake so its bathymetry (underwater topography) changed from a basin to a beaker shape. As discussed before, during the ‘beautification’, the lake’s expanse was reduced, a jogging track built around it and the roads outside the outer wall were widened. Two inlets were built for storm water to flow into the lake and one outlet was built at a higher height to act as a sluice to carry overflow during the monsoon into the drain. The sewage from around the lake was diverted into a drain connected to the larger Naigaon drain. (The VVCMC is still working on creating a sewage treatment network, starting from Virar in the North.)

Outcome of the reconstruction: ‘beautification’ as control

It was observed that the reconstruction of the lake for beautification took the form of control of the lake’s ownership, its water, its uses and behaviour of its users. With the branding of beautification, citizens perceive ownership has shifted to some extent though the lake remains under the temple trust’s control (see box).

“The trust still owns the lake. We have only beautified it and are now responsible for its maintenance.’

- VVCMC official

‘We agreed to the beautification because it was not as if we were giving away the lake.’

- Temple trust official

‘It was the Trust’s lake but now the municipality has it.’

Control of uses, behaviour and nature of the water -

As explained above, the reconstruction has reduced the number of uses which the lake water itself is put to when compared with the Umrle lake which lies less than a kilometre away (see table). However, this does not mean that the 'beautified' lake has no users.

As one VVCMC official put it correctly, the "facilities are extremely well used" as can be seen from the images below.

<u>Control of</u> <u>Uses</u>	<u>Before</u> <u>beautification</u>	<u>After</u> <u>beautification</u>
<u>Fishing</u>	<u>Yes</u>	<u>Yes</u>
<u>Washing of</u> <u>clothes</u>	<u>Yes</u>	<u>No</u>
<u>Swimming</u>	<u>Yes</u>	<u>No</u>
<u>Animals</u> <u>drinking and</u> <u>washing</u>	<u>Yes</u>	<u>No</u>
<u>Washing</u> <u>vegetables</u>	<u>Yes</u>	<u>No</u>
<u>Immersion</u> <u>of idols,</u> <u>visarjan</u>	<u>Yes</u>	<u>Yes</u>
<u>Sewage and</u> <u>garbage</u> <u>dumping</u>	<u>Yes</u>	<u>No</u>
<u>Jogging,</u> <u>gym,</u> <u>children's</u> <u>park, play</u> <u>areas</u>	<u>No</u>	<u>Yes</u>
<u>Advertising</u>	<u>No</u>	<u>Yes</u>

The pairs of images that follow show uses in the pre-beautification lake and those in Chakreshwar after reconstruction. They also show that in Chakreshwar the water is not at the centre of use. While

residents welcome the creation of a public space for exercise and interaction, they do not complain to the municipality even when they find the water is stagnating (see box).

Apart from changes shown in the images, the stopping of wastewater and sewage outfall into the lake through diverting sewer water and building a toilet on the southern corner could also be seen as a control of use and behaviour.

They have done a good thing by building a toilet there – some of the people who came to sell fish here at the bazaar had no place to go to toilet and used the lakeside. Women, who didn't come out of their house, now take four-five rounds in the garden.

- Shopowner, Sopara bazaar

There is no fear of traffic or anything inside the lake.

-Resident Umrالا

Beautification means that the lake is now clean. The water is (makes a face). When the level goes down, it begins to smell. They need to circulate air in the water.

- Resident of Umrالا

The images do not show the various means of controlling behaviour employed in the reconstructed lake. Unlike an 'open' lake, the beautified lake has entrance gates, security guards with whistles, fences, wall, benches, jogging track, landscaped garden, play equipment, gym, dustbins and fixed entrance timings. Three levels of lighting around the lake restrict 'bad behaviour' of people. As a security guard at the lake put it, "We just ensure that nobody throws anything in the water. Alcohol consumption and bad behaviour is also not allowed."

The last pair of images shows how the reconstruction has controlled the topography of the lake bed—sloping down for Umrالا and beaker-like for Chakreshwar – a change that may impact the use of the lake by birds and affect the recharge function of the lake. Guidelines for lake conservation programmes from central level agencies suggest the natural incline of land around the lake periphery should be maintained as done initially when Thane's Upvan lake was restored.

Chakreshwar is also walled off with defined storm water inlets and a sluice to let overflow during rainy season into a drain and no longer part of a network of interconnected water bodies. Arguably, the delinking took place as catchments were encroached, but the lack of attention to the connected nature of water bodies and the need to understand and revive catchment areas while deploying the 'largely typical model' of beautification in the name of conservation is what is at issue here.

Mundoli et al (2014) contend that disinterest of communities in resources could lead to their degradation as happened in Bengaluru. To be sure, the current model is well intentioned in the sense that lakes are not simply built over. However, in a public use lake, residents were not consulted and even non-ecologically-harmful uses such as washing of animals, swimming and bathing were restricted. The opposition as existed at the time of the reconstruction has been

painted as merely opportunistic by many residents who have accepted the current model of beautification where the water is not necessarily more beautiful.

Gates are placed to restrict access to the lake between 10 am and 4 pm and entry directly to where play equipment is installed so that some children and residents were observed jumping over or slipping through the fence. The concrete walls in the water body changed the dimensions, slope and depth may inhibit the lake's groundwater recharge function at a time when groundwater use is increasing with growing urbanisation as made explicit by the entrenched dependence on tankers in the region. While the project is called 'Lake Beautification', some residents point out that the water stinks and has stagnated. There were some reports of fish dying in the lake water and it was observed that garbage is still dumped at outside the lake's boundary. Thus, what has been done in the name of lake beautification, conservation and for the welfare has often been neither sensitive to the environmental position and services of the lake nor the use by those easy to ignore (migrant workers, tribal households, birds and animals).











Papdi Lake

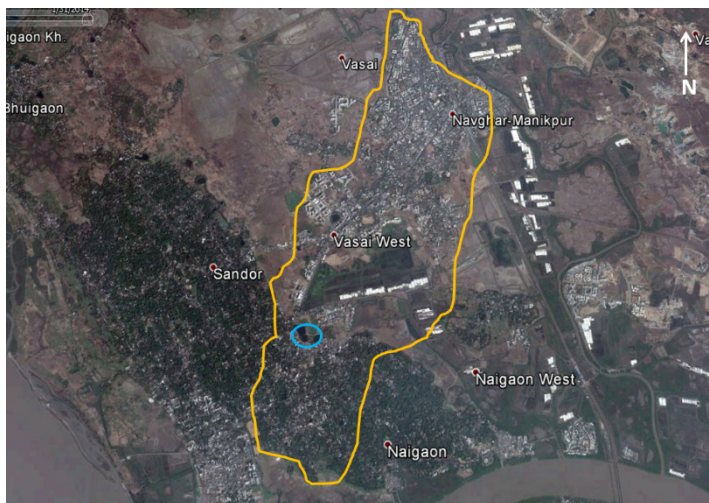
Papdi Lake is a regional level watershed of vital importance, crucial to maintaining the environmental balance. It is reported that the lake was built in 16th Century. It serves as a domestic water source and a place for religious gatherings.

Research methodology

The research study undertaken at Papdi Lake was qualitative in nature. To begin with multiple unstructured interviews were carried out with the communities around the Lake to gain preliminary understanding of the Lake history, user profile, dependence on lakes, changes in land use and other urban transitions. A transect walk was also undertaken. Subsequently, semi-structured interviews were carried out with the communities and social mapping was also attempted. Semi-structured interviews with the Corporator, the Contractor, Temple priest, a local journalist and VVCMC officials were crucial in getting official data about the beautification project.

Location and other attributes

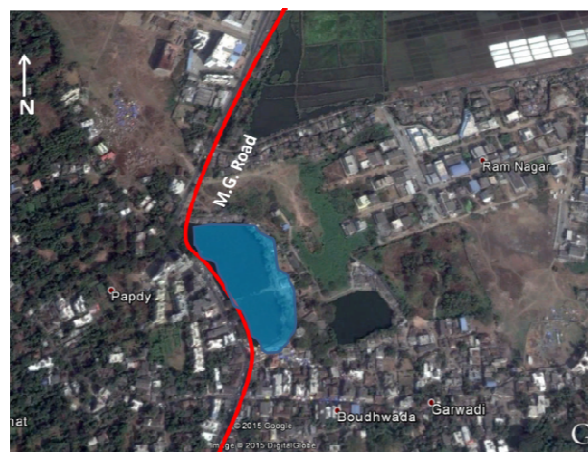
Papdi Lake lies in Vasai West, on M.G. Road connecting Vasai Bus Depot on one side and Vasai Road Station on the other side. It lies in Sector 8 according to the VVSR Development Plan.



The Lake is located in Dhovli village. It has an approximate area of 6.7 acres (270 guntas) and approximate circumference of 720m. The lake has a low-lying bandh that cuts across the lake into 2 parts. Oral histories tell us that there was a drought situation in the region in 1972 which prompted the local government to create the bandh to provide work to the people and to separate water usage for people and for animals.

The depth of the two parts varies. The southern part is shallower with a depth of 15 – 20 feet whereas the northern part is deeper with a depth of 25 – 30 feet.

There are 2 wells within the Lake. The wells within the Lake have steps around them which are used for accessing water from them. There is another talao, called Bondli Talao to the east of Papdi Lake but it is barely used. The Papdi Lake was historically owned by Ram Mandir Trust but 50 – 60 years ago, its ownership was transferred to Vasai Municipal Council. Vasai Municipal Council maintained it till 2009 when the jurisdiction of the Lake fell under Vasai-Virar City Municipal Corporation.



Historical Evolution

Google Earth Historical Imagery was used to get a visual understanding of changes in the area since 2002. The below image from 2002 of region around Papdi Lake shows that the settlements are scattered and are not very dense.



The 2002 visual can be contrasted with the below visual of 2014. The industrial unit has come up on the east side of the Lake. Constructions have come up in the north and on the west whereas the density of the settlement in the south has intensified.

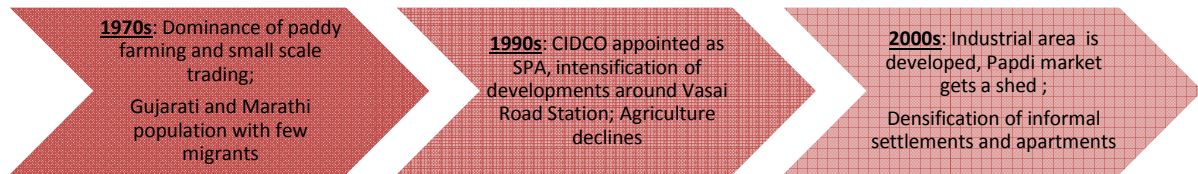


The propagation of the region as a dormitory town and the push by local government to rapidly urbanize the area can be thought as major reasons for these changes.

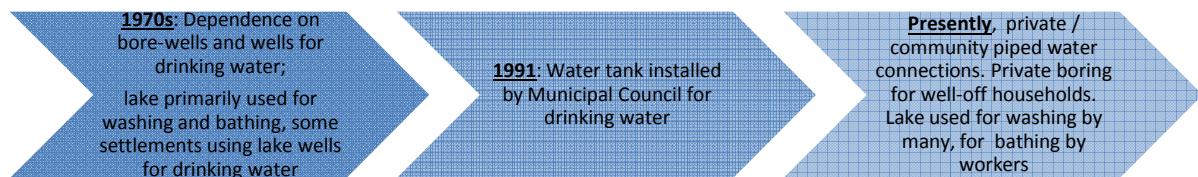
We tried to trace the history of the area after speaking to different people. The area around Papdi Lake was predominantly used for paddy farming and was a mercantile town since before British rule. In the 1970s, Gujarati population was settled in the area and was involved in small scale trading. They lived in independent houses. Marathis and few migrants were also settled here, involved in farming or other labour work. There were mostly living in chawls or kuccha houses around the Lake.

Until 1990, development in the area was haphazard but appointing CIDCO as the Special Planning Authority introduced signs of planned development. We heard that developments around Vasai Road Station intensified, number of migrants increased and paddy farming started declining.

Further in 2000s we see development of the industrial area and the Papdi market along the lake. Informal settlements come up to work in the factories and also to work in new apartments that come up in the area.



Similar to charting the history of the region, we also tried to gauge the changes in dependence on lake since 1970s. We found out that most of the population in the area did not depend on the lake for their livelihood or for taking drinking water. Even back then, majority of the well-off people had private wells or bore-wells and others would walk distances to get drinking water from other wells or relied on boring water provided by the local government. The Papdi Lake water was primarily used for washing and bathing. The area got a Municipal Council water tank for drinking water in 1991. A pipeline network was laid out. So presently all houses, be formal or informal, have access to piped water through private water connections or through community water taps. Private bore-wells are dug by well-off households and the upcoming apartment residents. Lake water is used for washing by many and for bathing by workers.



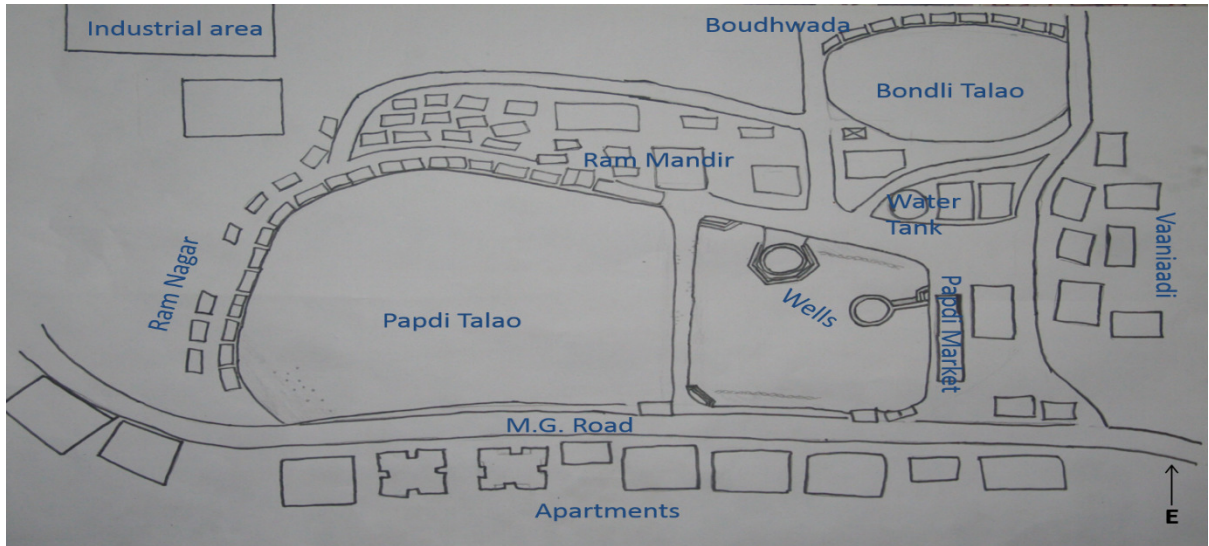
Current lake surroundings

The Lake has diverse uses around it. The lake is surrounded by residential zones, an industrial zone in the backyard, salt pans nearby and green zone farther away.

Moving towards the Vasai station, the road is wider and the residential zone spreads farther away from the road.

Compared to the land uses around the other two lakes, clearly this area saw major development as a result of Urban Land Ceiling Act and still sees major push under the Central Satellite Town scheme.





We can see in the above figure, that the lake is flanked by the famous Papdi market on the south. It's a famous fish, meat and vegetable market and it is also the site for a Weekly market which caters to about 400 vendors³. Towards east of the lake, we have the Ram Mandir next to the bandh entrance, followed by multiple settlements. The Temple Trust land houses Hindu, Marathi population. Slightly farther away from the lake, we have the Bondli Talao around which Boudhwada community is settled. Intermingled with Boudhwada, there is also a Muslim community.

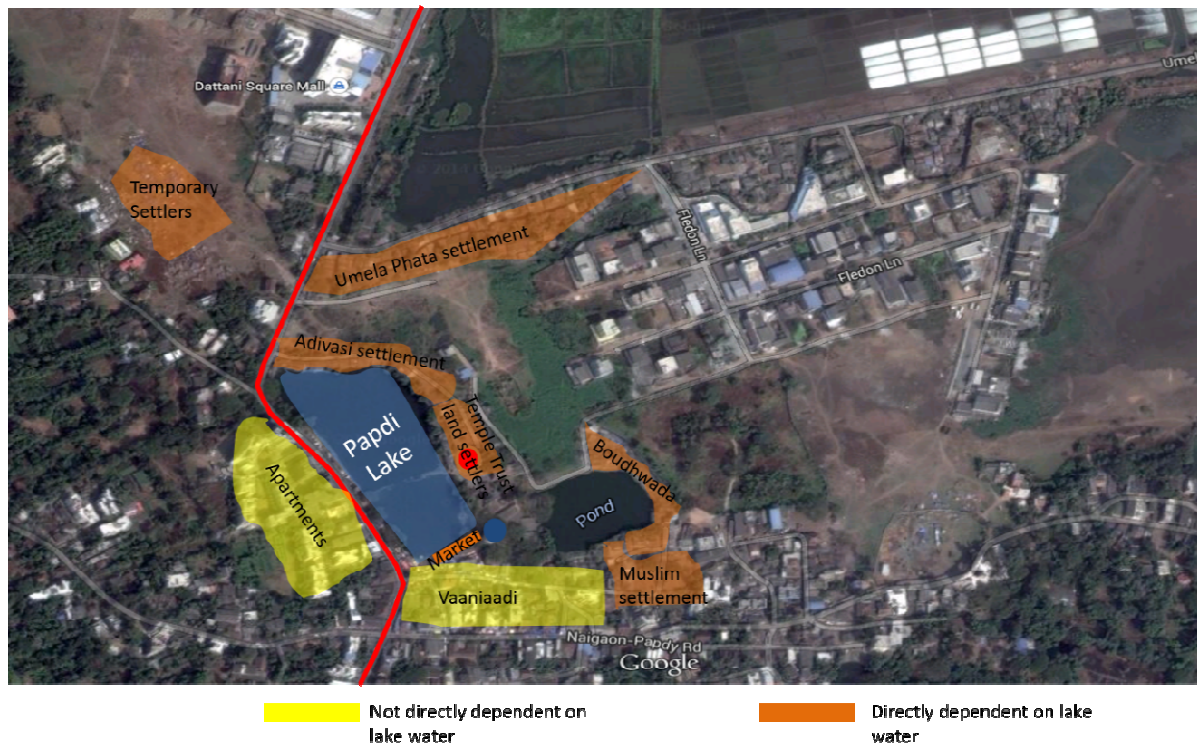


North-east of the Lake is flanked by the industrial units, followed by the salt pans. North edge of the Lake has the Ram Nagar settlement and as you go further up, informal UmelaPhata settlement can be seen. Across the road on the west side of the Lake are existing and upcoming apartment buildings.

³Based on conversations with neighbouring communities.

Neighbouring Communities and Uses

From the previous section, we know that there are diverse communities and users around the Lake. The image below gives a spatial representation of these communities.



Papdi Market

Daily the market area is brought to life by fruit and vegetable sellers, and many fisherwomen. It shuts down only in the afternoon for 2 hours. On Friday, it is the site for a huge weekly market catering to 400 vendors.

The fruit and vegetable sellers are mostly from Uttar Pradesh and they buy their produce for sale from nearby villages. The fisherwomen come from nearby koliwadās of Naigaon, Nirmal etc. They don't fish from the Lake. Fishing rights of the Lake are auctioned to a single party on a yearly basis. The market is partly covered by a shed which has lighting facility.



The migrant fruit and vegetable sellers say they don't have access to this and need to make provision for their own lighting. They pay a daily fee of Rs. 40 to VVCMC. On the other hand, the fisherwomen pay Rs. 10 per day.

The fisherwomen use water from the Lake's well next to the market (this well isn't used for washing clothes) for cleaning the market floor and also washing fishes at times.

The market also has a designated VVCMC cleaner (a contract worker with Shivam Enterprise). He comes to clean the market twice during the day and also uses water from the well. He told us that

his instructions were 'keep the market clean, no matter where you get the water from'. For collecting the solid waste he uses VVCMC dustbins which are later emptied out by the VVCMC waste collection truck. The waste water from all the cleaning, however, flows into the Lake itself.

“Market will be shifted, grill to shift market”

“Fisherwomen recently told they will be relocated but want to stay here”

Ram Mandir Trust settlement

The temple came across as a very non-lively place with no visitors. The priest was also very hard to get a hold of. The prayer timings are from 6am to 10am and 7:30pm to 8pm. The temple comes alive at the time of festivals like ram navmi, gudipadwa and hanuman puja. The temple has been recently renovated and opened after redevelopment on June 2, 2014. The entire temple trust land is also proposed for redevelopment but no progress has been made on that front yet.



There is informal-looking housing on temple trust land. The temple priest told us that a trust member, MurlidharSwamy had built these quarters 20 – 25 years ago to provide housing to Hindu Marathi people. All these families have got houses on the Pagdi system.

They have community taps for water since 12 years now for which they pay Rs. 840 / year to the VVCMC. The water comes only for an hour from 8 – 9pm. All of them also have metered electricity connection. They have common toilets and some houses have bathing area within the house. They use the Lake for washing clothes and also fill water for other cleaning purposes.

People know they will be removed but okay with redevelopment if they get that much space

If they put wall around lake, we wont like

Will use tap water for washing clothes, fill up our containers

Know they will be moved to a new place, informed by developer

It's not ours, nagarpalika ka talao. Ek aadmi ke bolne se kuch nahi hone wala, kuch accha karenge to karon

No survey udertaken

Ram Nagar settlement

The settlement majorly has an Adivasi population. They claim to be living in this place since 40 years but originally hail from Boisar village. The women work as maids *intawdi class ke bungalows*, whereas the men work as labourers, cut grass, paint houses etc. They say they have never had

access to a well for getting water and before getting the common municipality taps 12 years ago, they had to walk long distance to get water from a boring.

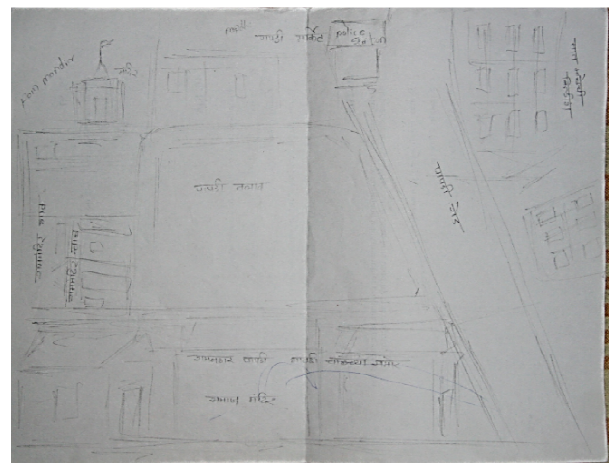
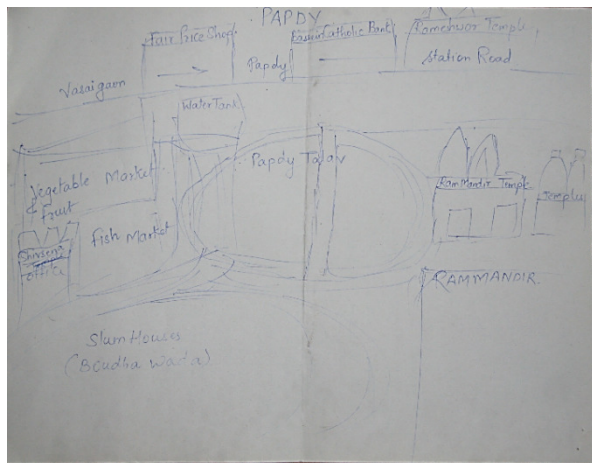
The Lake is bounded by their houses on the North and so these families have direct access to the Lake water. Even though they get tap water from 9 to 10pm, they can be seen washing clothes, cleaning utensils, bathing and filling water from the Lake for other household chores.



Besides using lake water on a daily basis, they also use it for festivities, performing *peend* (death ceremony) and *mundan* puja of infants. Like Temple Trust land settlers, they too have individual electricity meters however, they feel neglected by the officials as they have no facility of a public toilet and need to walk long distances. They say that the paver block road in front of their houses was laid out only a year back.



“Sab log gareeb hain yahan”



Umela Phata settlement

The settlement has families from UP, Gujarat and Maharashtra. From our conversations, we could deduce that the settlement started off with 2 – 3 Gujarati families and has been slowly spreading out. A family from Sultanpur had settled there just 2 months ago. This family was filling water from Papdi Lake for their daily chores and got drinking water from the Papdi market tap. However, older families could be seen as having access to community tap, electricity connection and pucca housing.

But all of the families do depend on Papdi Lake in some way or the other, mostly for washing clothes and bathing.

Many of them work in the industrial units nearby, some are rickshaw drivers and others work as casual labourers.

“Jab rokenge, tab dekhenge”



Temporary settlers

These are temporary migrant workers from regions of Maharashtra and Gujarat that come to the



area for 2 – 3 months in a year. They set up temporary hutments and go out to Vasai Virar sub-region and Mumbai for casual work. We were told by a Gujarati migrant lady that they pick out gold shreds from dust at jewellers’ shops and making a living out of that trade.

They defecate in the open and access water from a VVCMC tap nearby. But use the Papdi Lake for

bathing and washing. The men can be seen bathing in the Lake especially in the evening as they return from day’s labour work.

Boudhwada and its adjoining Muslim community

The settlement has a wide variety of communities, ranging from Hindu Marathis, Gujaratis, migrants from Uttar Pradesh, few Buddhists, and Muslims. The settlement has been around since 30 years or so but the size has been increasing slowly. New migrant families come to settle here often. Majority of the houses are pucca houses but recent constructions are kuccha in nature. One of the earliest resident of the place told us that ‘pehle to jhophditha’ and they themselves made their home.

See Papdytalao beautification as resembling Virarlake.

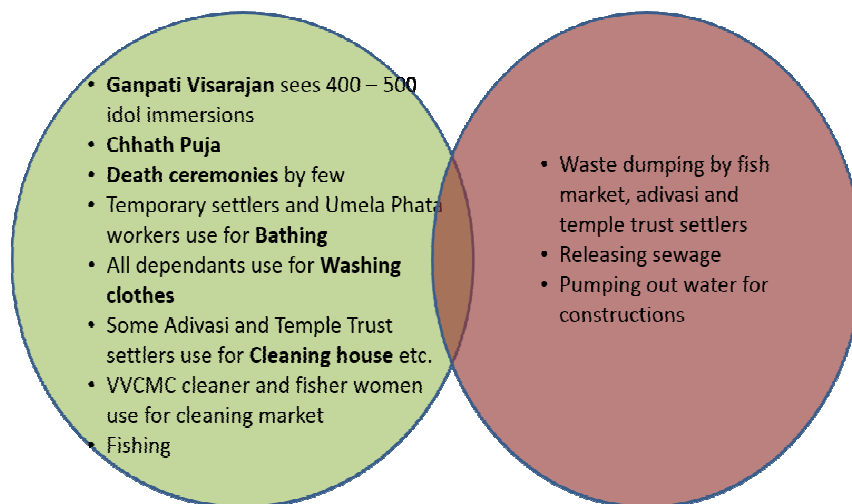
Might get boring water for washing, in morning

“water doesn’t come everyday, paani nai milta hai jyada, koi dhyan nai deta, don’t have any place to go”

“Talao humara thodi na hai “

Roughly there are 180 houses in Boudhwada. The families living in own houses pay about Rs.120 / month to VVCMC and those living in rented houses pay about Rs.2000 to their landlords. They get water in the community tap from 8 – 9pm and need to pay Rs180 / month for this. They use Papdi Lake for washing clothes. The settlement is adjacent to the Bondlitalao but no one fetches water from it. The perception is that it is polluted and sewage waste in flowing into it.

After interactions with all the communities, we can summarize different uses and abuses of Papdilake by the neighbouring settlements and also Vasai region.



It is important to point out here that the lake is considered the most important lake in Vasai West and is the first to be beautified under the VVCMC lake beautification Scheme.

The Lake is also listed as a Heritage site so special emphasis is being given to the beautification of the Lake and that is serving as

a selling point. What we must not forget is that Papdi Lake is part of a crucial groundwater recharge structure for the area. In an area where the Lake serves multiple purposes and where all private houses have boring systems for drinking water and traditionally dependence on wells has been immense, it is important to not turn a blind eye towards these inter-linkages when ‘beautifying’ the Lake.

Research Objective

Planning is just one of the forces interacting in the urban domain, along with other forces of social, economic and political nature. The social aspects of planning are often ignored and planning becomes a top-down process. Planning can especially be exclusionary of weaker sections in a community, in order to represent the interests of alliances of landed sections of the society (Molotch: City as a Growth-Machine).

In light of this, we decided to explore the planning and approval process for Beautification of Papdy Lake and how it represents the exclusion of different communities.

Before getting hold of the official plan for the Lake, we had asked many people about what they thought was happening to the Lake. While some came close to pointing out the markers of a ‘beautified’ lake, many were unaware and shared their imagination of it.

People's imagination on Papdi Lake development

This was an attempt to gauge differences in official plan and manifestations of it on ground due to no communication with the different communities. Some of the responses we got are as follows:

- There will be a bridge between the lake, connecting Ram Mandir and Hanuman Mandir
- Development like Virar lake
- Carbon copy of Chakreshwar lake
- Only half of the lake being developed
- Jogging track and garden around the lake
- Fish and meat market will be relocated
- Vegetable vendors fear they will be asked to move
- No access to lake water and wells post development
- 1 well (next to fish market shed) will be demolished
- Proposal for boating
- There will be a security guard at lake and lake will be open for 24 hours

- Lake contaminated by washing
- Beautification will improve lake
- Kids will have place to play

Apartment residents



- Sab logon ko accha lagega, hum logon ko thodi lagega. Poora Vasai ke liye bana rahe hain, humse nai poochenge
- Been given eviction notice but have been living since 40 years

Ram Nagar residents



- Temple land is being developed by private developer
- Redevelopment is in limbo
- Have security of being rehabilitated

Temple Trust residents



- Uncertainty about source of water after lake is shut for their use
- Some hope to get enough water from boring
- Some feel helpless, even present water supply is irregular

Boudhwada



- Possible reduction in area
- Hope for redevelopment
- Speculation about relocation

Market



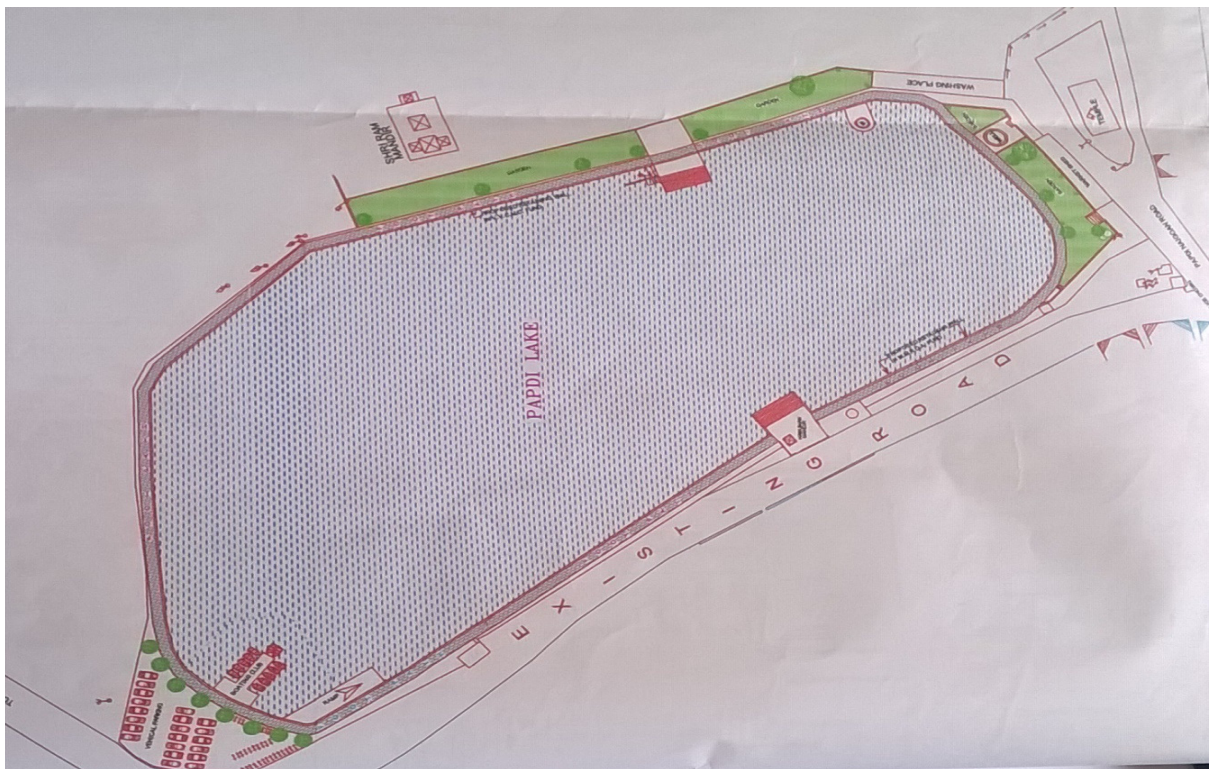
- It's VVCMC lake, they can do whatever
- It's good that the lake will be cleaned

Vaani aadi



Beautification Plan

The actual plan for the beautification of the Papdi lake was titled the as the “Conservation and Bioremediation of Papdi Lake”, by the consultants who prepared the plan. It was prepared based on certain requirements given out by the VVCMC to the contractors. From interactions with officials it was found that one of the major requirements given by the corporation was to prepare a design sensitive to the fact that the lake was a heritage resource. The CRIT report, which came out in 2008, mentions that this lake has been constructed in the 16th century and was categorised as an important heritage resource of the Vasai-Virar region. Also, taking into account the current use of the lake too certain requirements specific to the lake were given to the consultant. The image below shows the plan for the beautification of the lake as submitted by the consultant.



Some elements of the above plan are:

- Peripheral Boundary Wall, with grill
- Stepped retaining wall with ashlar stone construction
- Beautification of existing wells within the lake
- 3m wide paver block jogging track around the lake
- 2 wide gateways with proper ramps/steps, made for easy access during Ganesh VIsarjan
- A place for washing of clothes, with connection to the sewerage system for waste disposal
- 2 gardens/play areas
- A boating club with attached parking space

Unlike many of the other lakes, the retaining wall being constructed for Papdi lake is using stone construction, with ashlar stones on the surface rather than having a reinforced cement concrete structure. The retaining wall is also not flat sided, but having stepped design. These design elements are a major departure from the usual design used for beautification of lakes, due to the “heritage

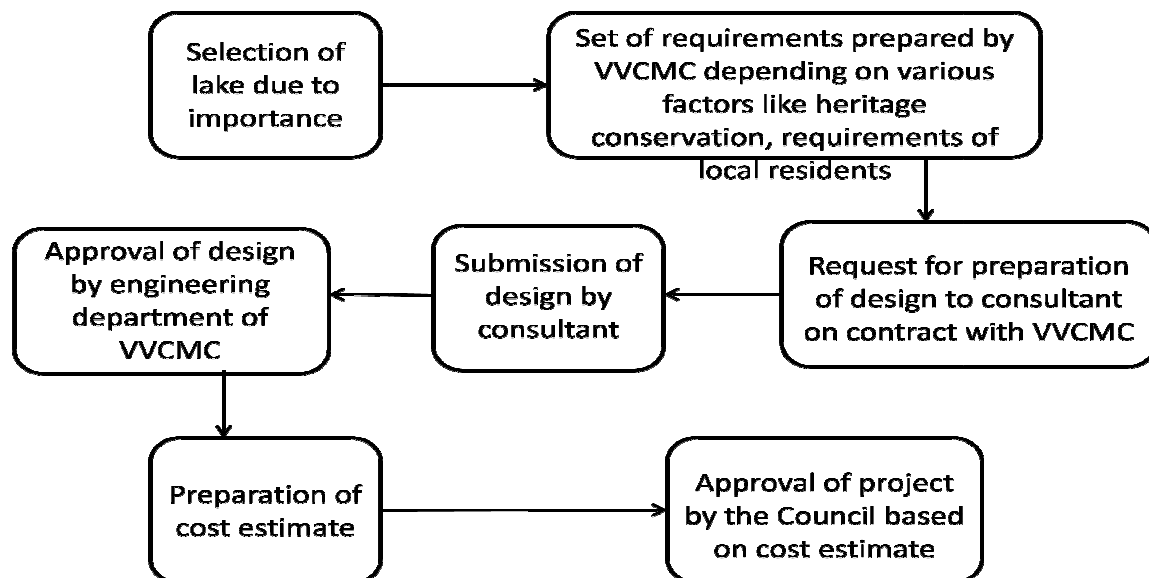
factor”. Similarly, the intrusion into the lake area has been kept at a minimum as well. Thus, we don’t have a wide garden/play area around the lake as can be seen in Chakreshwar Talav. In fact one of the two gardens and the washing place shown in the plan above is to be built on land outside the present lake that VVCMC claims to own. A place for washing of clothes too is not something found in most beautified lakes, but has been included keeping in mind the extensive use of the lake for that purpose. Also worth noting is the fact that, while the plan that was given to the VVCMC by the consultant includes a boating club along with adjoining parking space this part of the plan is not being implemented at present. The officials cited the reason that having the boating club at the proposed location would mean shifting at least some of the houses of the Ram Nagar community.

Also from the actual plan, we can see that many of the imaginations of the people around the lake about its development are not true at all. There is no bridge across the lake, nor is the market going to be demolished and the access to the wells is likely to continue in some form.

The above design was prepared by Centroid Consultants in Vasai West and submitted to the VVCMC in 2012. The estimated cost of the project, as prepared by the engineering department of the VVCMC, is Rs, 4,48,65,838. The tender for the beautification work has been given to messers Mukesh Brothers who are presently working on the lake site. The work is estimated to be completed in one years time.

The Planning Process

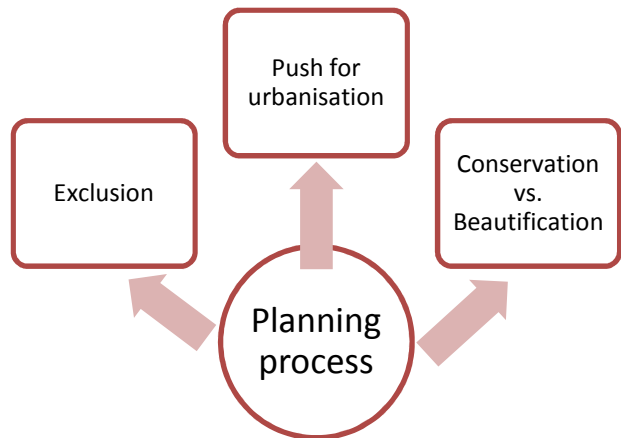
The flow chart below describes the process followed by the VVCMC to come up with a plan to beautify the lake. It was obtained from interviews with VVCMC officials as well as a short conversation with the consultants involved in the process.



Findings – Consequence of this planning process

Our interaction with the communities as well as officials confirmed that there has been no community participation in planning for the development of the lake. Local uses and grievances haven't been heeded.

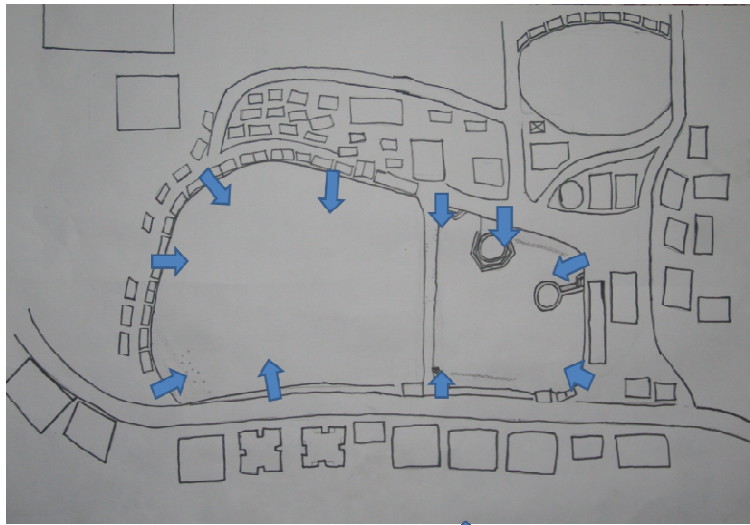
- The people around the lake, including the Corporator have no information about the current beautification design as no they haven't been shown any design and also no plan layout is displayed on site (This was done at Chakreshwar and plan is also on display at Nanbhat)
- As discussed earlier, there are multiple conjectures about the plan which has resulted in uncertainty among people about security of their future housing and livelihood. The Ram Nagar residents have fear of eviction whereas the market vendors have been told about possible relocation. A lady in Boudhwada told us that the lake is being beautified like the VirarLake and that they are aware of possibility of barring them from using the Lake.
- Exclusionary planning in this manner can be seen in lack of public awareness about need for conservation. The users of the Lake are not aware about the health of the Lake. We felt that it is taken for granted as we can see people dumping waste in it, leaving behind plastic packages and releasing sewage into it.
- Exclusion at the planning stage leads to people feeling no connect towards the Lake. We heard from many that the Lake doesn't belong to them, it is the property of VVCMC. Since they are already unaware about the need for conservation of the Lake, no community participation in development planning manifests in the form of no stake of community in managing the resource after beautification. There is complete emotional and social de-linking from the Lake.
- Lake becomes a site of possible conflict. Latent feelings of oppression through exclusion are bound to surface when people come to terms with the gravity of the situation. We did hear grumblings from some that they would voice their concerns when the work starts along their houses or if they are not provided with an alternative source of water.



We are left with the question, so who benefits?

Exclusionary design and implementation?

The design of the Papdi Lake Conservation and Bioremediation plan clearly shows that the Lake is being cordoned off by grills all around and a jogging track with just 2 gates for entrance.



↑ Entry points

- Presently there are multiple entries to the Lake, about 10 that we could easily spot. But there are many families with houses around the Lake which have direct access through or between their houses. All these multiple direct access points at Ram Nagar and Temple Trust settlements will be walled off. The only 2 entrances being left open are at the Ram Mandir and the Hanuman Mandir

on the main road, with the purpose of easing and securing Ganpati Visarjan.

- The garden being proposed on the Temple Trust land is eating into the present settlement on that land. There is a proposal for redevelopment of that land and an apartment building is proposed behind the temple. However, there is no progress on this resettlement plan. Even though the work on the Lake beautification has started, the resettlement is in limbo.
- There are 2 wells within the premises of the Lake. The one next to the fish market is being cordoned off the garden and the boundary wall. The other well being used for washing clothes is also getting blocked by the wall and jogging track. The bandh in the middle of the Lake will also be removed. This presently allows many to wash clothes and bathe. Though there is provision for washing clothes on one extreme of the Lake, near the market, there is none for bathing and the location of this washing area can be a strong impedance for people of Ram Nagar, Umela Phata and the temporary migrant settlers.
- Blocking of present entry point at Ram Nagar entrance will disadvantage the above mentioned groups. This is the area where boating club and parking is proposed. Though this is not getting implemented at this stage, but the entrance will nevertheless go away and the settlement will be walled away. This raises the question that what will happen to the tube-well at that entrance that is used by many to fill water for daily household chores.



- The fisherwomen have been recently told about their relocation but they don't know exactly where and what the place is like. They fear loss of business. The fruit and vegetable sellers think they will be pushed around and will not be considered for any formal relocation.

We can easily conclude that all communities have been excluded from the process of developing this local resource and this has manifested in form of alienation from the lake, as discussed in the earlier section.

Push for urbanisation

Selection of Vasai-Virar sub-region under the Central Scheme for Development of Satellite Towns pushed influx of outsiders in Vasai West due to presence of Vasai Road station nearby and also the Vasai Depot.

This influx of a migration population has led to increased pressure on infrastructure services like water supply, solid waste management system etc. In this context Papdi lake provides a convenient alternative to many, acting as a source of water and also an easy dumping ground. At the same time, dense urban built forms have adverse impact on catchment area of the lake.

Despite this, beautification of Papdilake, packaged by VVCMC as an attempt towards conservation, is being used as a showcase project to attract investment and develop Vasai West further as a dormitory town.

Conservation vs. Beautification

The project plan is titled 'Conservation and Bioremediation of Papdi Lake' but Bioremediation has been postponed for later and no finite deadline has been set either. Meaning of conservation and what measures to ensure it are also unclear.

- Though the Lake is listed as a Heritage site by CRIT and the plan also calls the Lake a heritage site but Heritage Conservation is only seen as putting up Ashlar stone to give it an ancient look and avoiding large scale reduction of lake size. Thus, there are serious limitations to VVCMC's idea of conservation.
- Making Ganesh Visarjan easy and secure is highlighted as key to Papdi lake beautification plan. It is unclear why other current uses of the Lake are being conveniently side-lined in developing the Lake. Why is there no talk of preserving it as a source of water, despite the fact that the Vasai Virar sub-region is deficient in water supply?
- Environmental Impact Assessment of Project is lacking. Before any development project, it is essential that a Socio-environmental impact assessment is undertaken. With the Lake being the site of this development, this has been ignored completely. Impact on catchment area of lake and linkage to groundwater levels in the area have not been studied.

In effect, the beautification process turns the Lake into a peg to hang other amenities like garden, jogging track, etc. with complete ignorance of the health of the lake.

Our Findings

The Vasai-Virar Sub-region is undergoing fast paced changes and its structural characteristics are changing. Its transforming from a primarily rural hinterland of Mumbai, to a peri-urban satellite dormitory town in the Mumbai Metropolitan Region. The infrastructural requirements are also increasing with the continuing rise in population. Also with the inflow of new people and changing nature of the region, the region is also seeing increasing conflicts among its varied communities. In the water sector, direct dependence on the lake system for water supply requirements, irrigation requirements etc is reducing. But at the same time the water supply requirements are increasing with increasing population. This has led to increased dependence on reservoirs outside the region for fulfilling water needs of the city. At the same time new needs of the citizens like space for leisure, recreation and open spaces are emerging. These needs are being met by the Beautification Project being undertaken by the VVCMC. It was observed that while the nature of the use of lakes changing, there continue to be many communities, especially among the poor and marginalised, who continue to be directly dependent on the lakes as a source of water. Also there continues to be use of ground water resources for all kinds of water use.

While there is definite need to take care of the lakes of Vasai-Virar Region, there has been limited public participation in the formulation and implementation of the Lake Beautification Project. There has also been limited effort on part of the local authorities and institutions to study and spread awareness about the importance of the lakes in the regions ecosystem and the problems that the lakes face.

Overall it seems like in the process of “beautification” of the lakes, the lakes themselves, their health and their conservation have not received a high enough priority. The VVCMC has recognised the newer needs of the citizens of the city and tried to address them by within the process of Lake Beautification. But in the process it seems to have lost sight of the fact that the beautified lake should be a lake first, and then a place for recreation and leisure.

Shouldn't the health of the water bodies given primacy while putting them to use as per the new needs of the society in an ecologically and financially sustainable way?

An Alternative: Lake Conservation in Thane

The close by municipal corporation of Thane also is home to a number of lakes within its jurisdiction. It has also undertaken a number of projects to improve the lakes. But the flow of works undertaken in these projects is different from those in Vasai-Virar. The work in Thane is undertaken in three phases which are:

- Phase I: Ecological Restoration
- Phase II: Beautification of Lake and its surroundings
- Phase III: Provision of Lake Amenities

Below are a few images of the beautification work as well as the final result of the work.



Also another difference between the two projects has been the levels of participation from the community. The Thane Municipal corporation has taken on a variety of institutions, like local NGOs, CBOs, educational institutions, technology providers as well as citizens and resident associations. For example the educational institutions have been roped in to continuously monitor the water quality in the lakes. The Corporation has also undertaken public awareness programmes to inform the citizens about the lakes, their importance and issues faced by the lakes. Such programmes have been met with good response during Ganesh Visarjan during which a large number of idols were immersed in alternate immersion ponds rather than in the lakes themselves.

While it would be wrong to call the process in Thane as an ideal, but still its an alternative approach to “Lake Beautification” that is worth looking at.