

**LAKES IN**  
**KALYAN-DOMBIVLI MUNICIPAL CORPORATION LIMITS :**  
**A STUDY REPORT**



**(LAKE VASAR)**

Ref.No. BET/2001/MMRREF

Dt. 22<sup>nd</sup> Sept., 2001

*Prepared by :*  
*Bhavani Envirotech*  
*W-198 (A), MIDC, Sonarpada,*  
*MIDC, Dombivli (E) – 421 204.*  
*Tel. No.: 0251-871693, 891090*  
*Fax No. : 0251-871120*  
*Email : durgadi@bom4.vsnl.net.in*



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EXECUTIVE  
SUMMARY

## **EXECUTIVE SUMMARY**

Environment & Public health are inter-related. Good environment leads to good public health. To study the environment, natural features i.e. air, water, soil are to be studied from time to time. Hence BET gave a thought to study the natural lakes in KDMC limits & undertook the project of Study of Lakes in KDMC limits.

For the successful execution of the project, a definite programme was finalized to satisfy the Scope of Work. A definite methodology was adopted at each stage of study & is as follows:

### **Study Methodology**

- **Stage I - Stage I Study** includes preparation of - List of Lakes, Identification of Lakes, Lake Status Report along with Site Plan.

List of lakes: BET procured KDMC Draft Development Plan-Map to identify the total no. of lakes. Total 29 No. of lakes were identified from this Draft Development Plan-Map. List of 29 no. of lakes was prepared, each lake given a Lake ID No .

Identification of Lakes : The KDMC Draft Development Plan-Map was divided into 8 Separate maps, each map given Map ID No. Site Plan was drawn & site visits were planned for identification & assessment of Physical status of lakes.

BET team members were grouped into different teams, each given a Team ID No. Lakes were divided into 4 groups considering geography i.e.

1. Part of Dombivli- Rural and Kalyan East- Rural to include total 7 lakes:

2. Remaining part of Dombivli - Rural and Dombivli -Surrounding to include total 8 lakes:

3. Kalyan City and Kalyan - Rural visited to include total 6 lakes

4. Atali- Ambivali and Manda- Titwala to include total 8 lakes :

5. Dombivali City and Kalyan East do not have notable lakes:

Each lake was visited, data gathered & finally assessment of lake was done. Lake Status Report along with Site Plan was prepared for each lake.

- **Stage II - Stage II** includes Sample Collection & Analysis of Lake Water Samples.  
Sample Collection

Sample Collection Programme was prepared for the collection of samples to include different teams, each team given a Team ID No. Sample Collection Programme was prepared in local language Marathi. Each team member was insured, life jackets were provided for the team members for safety during the sampling.

Actual Sampling Collection Programme was carried out by the different teams to include sampling of all the lakes. Samples collected were given Sample ID No. & were preserved properly for further analysis.

**Analysis :**

Temperature, Dissolved Oxygen, pH analyzed immediately. BOD analysis started on the same day of sampling. TSS, TDS, COD, Hardness, Alkalinity, Turbidity & conductivity were analyzed further. All the parameters are analyzed for all the lakes.

In case of contaminated lakes parameters like Sulphates, Chlorides, Total Phosphates, Total Nitrogen, Metals to include arsenic, Cadmium, chromium, Cobalt, Copper, Lead, Mercury, Nickel & Zinc were analyzed depending upon the possible sources of contamination.

Analytical Methods followed for analysis as per the list of analytical methods as under:

**List of Analytical Methods**

Sr.No	Parameter Analyzed for	Method of Analysis
1	Colour	Visual
2	pH	pH Meter
3	Temperature	Thermometer
4	D.O.	D.O.Meter
5	TDS	Evaporation & Drying
6	TSS	Fibre Glass Filter GF/C
7	COD	Closed Reflux Method
8	Hardness	EDTA Method
9	Alkalinity as CaCO <sub>3</sub>	Titration Acid/Base
10	Turbidity	Nephelometry
11	Conductivity	Conductivity Meter
12	BOD <sub>5</sub> at 20deg.C	Incubation
13	Chloride as NaCl	Argentometry
14	Sulphate as Na <sub>2</sub> SO <sub>4</sub>	Barium Chloride Method / Visual
15	Nitrogen	Kjeldhal's Method
16	Total Phosphorous	Spectroscopy(Colorimetry)
17	Arsenic	Atomic Absorption Spectroscopy
18	Cadmium	Atomic Absorption Spectroscopy
19	Chromium	Atomic Absorption Spectroscopy
20	Cobalt	Atomic Absorption Spectroscopy
21	Copper	Atomic Absorption Spectroscopy
22	Lead	Atomic Absorption Spectroscopy
23	Mercury	Atomic Absorption Spectroscopy
24	Nickel	Atomic Absorption Spectroscopy
25	Zinc	Atomic Absorption Spectroscopy



- **Stage III – Final Stage study includes :**
- 1. Review of the data collected, characterization of the lakes depending upon the depth, status, condition, location, general aesthetic status & area of the lakes.
- 2. Identification & Analysis of at source contamination.
- 3. Preparation of Lake Improvement Programme for individual lakes.

### **Major Findings**

Based on the complete study following are the key findings :

- Very few lakes are existing in the main city areas.
- Very few lakes ( 4 Nos. ) are observed to have good depth. Most of the lakes are getting deteriorated with respect to the depth.
- Most of the lakes are severely impacted or impacted due to various reasons like, Ganesh idol immersion, dumping of garbage, nirmalaya etc.
- Aesthetic status of most of the lakes is unpleasant, only few lakes were observed to be pleasant.
- Majority of the lakes are of average 3-5 acre area. The lakes with wide area are very few ( only 3 nos.). The lakes, with respect to width are getting deteriorated.
- Lake water is no where used for drinking purpose indicating the no good quality of lake water.
- Lake water quality is not good in most of the cases due to increasing silt, water getting polluted due to mixing of industrial waste water, domestic water, dumping of nirmalaya, dumping of garbage, Ganesh Idol Immersion etc.

### **Recommendation**

Reviewing of all the available, collected & generated data, BET recommends following for the preservation & improvement in general to convert lake into alternative water reservoir source as a part of Environmental Protection :

- To construct protective wall around lake so that flood water with silt will not enter into lake.
- To desilt lake wherever economical.
- To stop the sources of contamination like garbage, gutter water entering into the lake, nirmalaya, Ganesh idol immersion.

**Action Plan**

BET recommends immediate elimination of sources of contamination to lakes as first step of action to be followed by desilting and beautification.

Priority should be given to severely impacted lakes like Kala Talao, Titwala Ganapati mandir Lake and Ratale. Few impacted lakes like Vasar, Sapad, Usarghar etc do not require much efforts for improvement and hence can be considered simultaneously.

Detail action plan for individual lakes follows in the report.



CHAPTER -1

PREAMBLE

## **CHAPTER 1 PREAMBLE**

### **Introduction**

Kalyan Municipal Corporation was established in the year 1983. It included Ambernath, Dombivli, Kalyan & 82 villages. In 1992, Ambernath, Badlapur-Kulgaon area were separated. At present there are 62 villages & two councils Dombivli & Kalyan.

Initially, the area included under KDMC limits was not much developed. But since last few years, Industrialization & Urbanization has spread up very fast.

Environment is a factor very much dependent upon Industrialization & Urbanization. Industrialization & Urbanization leads to various commercial activities. These activities lead to the discharge of waste in the form of wastewater, gases, domestic waste, which finally contribute to the deterioration of Environment.

Bhavani Envirotech (BET) is an environmental engineering firm dedicated for undertaking the projects of survey, study, analysis & of water & waste water treatment.

Mumbai Metropolitan Regional Development Authority (MMRDA) is playing a vital role for the maintenance & development of the area coming under Kalyan-Dombivli Municipal Corporation.

BET during various surveys found that the health of the region in KDMC limits with respect to the natural features one of them - the lakes, is getting degraded. Lakes, if maintained in proper condition can be :

- Alternative source of water for the use of people.
- Source of Income, if fishing activity is planned from commercial point of view
- Picnic Spot for public.

Hence it was felt essential to study the lakes & prepare a report giving action plan to the MMRDA authorities, for them to look into the matter for improving the conditions of the lakes.

BET was assigned the project for the study of lakes in KDMC limits with the following Scope of Work.

### **Scope of Work**

The Scope of work for the project included :

1. Survey of natural lakes situated in Kalyan-Dombivli Municipal Corporation Limits.
2. Sampling & analysis of water samples in respective lakes.
3. To prepare scheme for maintenance & utilization of lakes.
4. Preparation & submission of report.

### **Outline Of The Report**

This interim report includes the details of the complete study conducted for the project .

The report consists of total 4 chapters. Following are the chapter details :

#### ***Chapter 1 – Preamble***

This chapter gives the Introduction, Scope of Work and Report Format.

#### ***Chapter 2 – Introduction***

Background, Aim of Project, Need for study.

#### ***Chapter 3 – Present Status of lake***

List of Lakes, Total No. of Lakes, History, Existence, Present Use etc.

Survey Reports Lake Status Reports & Plan for the Beautification of the Lakes.

#### ***Chapter 4 – Lake Management Plan***

Individual for each lake , Analysis Reports of Individual Lakes.

#### ***Chapter 5 – Paper Cuttings, Photographs, Acknowledgement.***

CHAPTER -2  
INTRODUCTION



## CHAPTER 2 – INTRODUCTION

### **Brief Recital**

Nature is getting badly affected due to Economic development resulting in urbanization & increase in industries and vice a versa.

Natural Lakes are one of the important feature, the study of which will reveal the present situation of the environment. BET found it essential to study the natural lakes – wealth & prestige of the village / city, with respect to existence, use, analyze the quality of water & accordingly plan a action to be taken for maintaining them in proper condition.

BET thus undertook the project entitled Study of Lakes in Kalyan-Dombivli Municipal Corporation sponsored by MMRDA.

Initially information about the existence of the lakes in KDMC limits was collected by BET by contacting the local persons. Accordingly 24 No. of lakes were noted. BET collected the KDMC Draft Development Plan – Map from KDMC & reviewed the same. It was observed that 29 No. of lakes were existing in KDMC Municipal Area.

Kalyan – Dombivli Municipal Area is divided geographically into 12 different sections as per the Draft Development Plan – Map and is as follows :

- 1 **Kalyan City**
- 2 **Kalyan Chikkan ghar**
- 3 **Kalyan (East)**
- 4 **Dombivli City**
- 5 **Kalyan North (Rural)**
  
- 6 **Kalyan South (Rural-East)**
- 7 **Dombivli Area (Kopar -Aayre)**
  
- 8 **Dombivli Area (Nandivali, Kopar)**
  
- 9 **Dombivli Area (Thakurli, Gaodevi)**
- 10 **Atali-Ambivli**
  
- 11 **Titwala Manda**
- 12 **Dombivli Rural**

The map & the survey showed that the maximum no. of lakes are existing in Dombivli Rural & no lakes are existing in Kalyan Chikkan Ghar, Kalyan (East), Dombivli City, & Dombivli Area (Kopar-Aayre).

**Aim Of Project**

Study of Lakes in Kalyan-Dombivli Municipal Corporation.

**Need Of Study**

It is very essential for every person to take care of surroundings to keep the environment good, clean & healthy. Good, Clean & healthy environment gives good impact on the health of the people.

Lakes, one of the important feature found in the environment, if maintained properly, can result into better environment. It can also become a alternative source of water to the people dwelling nearby the area of the lake. It can also become a major source of income by making fishing activity from commercial point of view.

Keeping all this in mind, BET decided to study the lakes in KDMC region with the help of MMRDA.

CHAPTER -3  
PRESENT STATUS  
OF LAKE

## CHAPTER 3 – PRESENT STATUS OF LAKE

### Lakes In KDMC Limits

According to KDMC Proposed City Development Plan, about 29 lakes are listed in the municipal area

Municipal area is divided geographically into 12 different section each having lakes as follows :

#### List of Lakes :

1.	<b>Kalyan City :</b>	Dawaje, Kala Talao (Shenale), Ratale	Total 3 No.
2.	<b>Kalyan Chikkan ghar :</b>	No lakes	
3.	<b>Kalyan (East) :</b>	No lakes.	
4.	<b>Dombivli City :</b>	No lakes	
5.	<b>Kalyan North (Rural) :</b>	Gauripada, Sapad, Umbarde -.	Total 3 No
6.	<b>Kalyan South (Rural-East) : -</b>	Adavali,Dhokali,Koli-Nandivali, Chakki Naka	Total 3 No.
7..	<b>Dombivli Area (Kopar - Aayre):</b>	No lakes	
8.	<b>Dombivli Area (Nandivali, Kopar) :</b>	Nandivali, Kopar -	Total 2 No
9.	<b>Dombivli Area (Thakurli, Gaodevi) :</b>	Kanchangaon -	Total 1 No
10.	<b>Atali-Ambivli : -</b>	Vadavali,PatilNagar-Mohane, Atali,Ambivli, Balyani	Total 5 No
11.	<b>Titwala Manda :</b>	Manda, Titwala Ganapati Mandir, Titwala-Ganeshwadi	Total 3 No
12.	<b>Dombivli Rural :</b>	Umbroli, Vasar, Bhal, Usarghar, Dawadi, Sonarpada, Katai, Nilaje-1, Nilaje-2.	Total 9 No

### History of Lakes

While submitting proposal to MMR, BET team prepared list of 24 Lakes by contacting local persons.

BET team visited lakes and made preliminary survey. BET found some of the lakes not existing ,some private properties, some too small to be noted. BET procured KDMC Draft Development Plan-Map to locate the lakes & to avoid discrepancies of existence of lakes.

In past lakes were existing in Kalyan-Chikkanghar, Kalyan (East), Dombivli City & Dombivli area (Kopar-Aayre), but now extinguished due to negligence. Kala Talao lake in Kalyan is of historical importance.



### **History for deterioration of lakes**

Once upon a time the lakes were in good condition and were used regularly. The lake water was even used for drinking purpose. All the lakes were prestige points of the villagers and the villagers used to take proper care of the lakes. During the period of Holi festival, villagers used to do fishing, collecting and drain out the silt & spread it in their farm due to which the lakes used to be cleaned & farm had become fertile.

Due to urbanisation, tap water was made available to villages & hence lake water is no more used resulting into negligence of the lakes.

### **Existence Of Lakes**

Survey & Study of BET revealed the fact that "existence" of lakes has become a very important issue. The number of lakes are getting reduced also the existence considering the size of lake i.e. area wise & depth wise is getting reduced. Area of lakes are found to be minimum 0.5 acres & maximum 20 acres. Average area of lakes is about 3-5 acres. Kala Talao & Nilaje lakes are bigger in sizes. Average depth of the lakes is about 2-3 Mts. Summary is enclosed herewith.

It has become very important to maintain & also to develop the existing lakes by reducing the probabilities which affect the existence of lakes like :

- Desilting the lakes
- Building walls around the lakes to reduce the probability of encroachment by local people.
- Creating the awareness amongst the local people, the importance of maintaining the lake in good condition.

### **Present Use Of Lake**

Lakes are used as per its quality & generally for fishing, drinking water for animals, bathing/swimming, brick making & for growing vegetables. Lake water is no where used as drinking water.

### **Usage of Water**

Usage of water is corresponding to its quality.

- Drinking
- Bathing/Swimming
- Bathing / Drinking water for animals
- Fishing
- Growing of vegetables

Survey of each lake conducted revealed that lake water is no where used for drinking purpose indicating impacted / severely impacted lake.

Water of few lakes is used for Bathing, Swimming or drinking water for animals explaining better quality of water.

BET conducted survey of each lake & collected water sample for analysis.

**Survey Report**

BET conducted survey of 29 no. of lakes as per the list give above.

BET collected the water samples for the analysis during the survey. Analysis of the few lake water samples showed that the lake water is contaminated. Few more samples were collected to conduct the detail analysis of the water samples for detection of metals etc. in the water.

The Lake Status Report & Analysis Reports follows .

### Lake Status Report of Lake Dawaje

Name of the Lake: Dawaje

Lake ID No.: 4101

Location of Lake: Bail Bazar, Kalyan City

Map ID No.: 1.1

Date of visit :12/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Bail Bazar on Valli Pir Naka -Muslim Mohalla- Durgadi Fort Road off Valli Pir Naka. Small boat is seen in the lake. Durgah is situated at the corner of the lake on South-East side. A Masjid is also seen on North- East side . Koliwada is also nearby.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 6 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Slightly developed and not appealing.

Note:

Lake is drainage type, outlet present.

Water is present for all seasons. Lake is used for fishing activity. Bad for swimming.

75% of the lake is covered with Hyacinth plants.

Lake is contaminated due to discharge of drainage water into it ,using lake bank for toilet purpose by slum dwellers.

IIT, Mumbai has noted in its Environmental Audit Report (January 1996), catching of 100 kg fish per week excluding mansoon season.

Kalyan Dombivali Muncipal Corporation has given this lake on lease to a society promoted by Mr. Javed Pathan of Kalyan. Society has started cleaning the lake. Society intends to construct floating hotel and use this lake for fishing and boating etc. on commercial basis.

**Lake Status Report of Lake Shenale (Kala Talao)**

Name of the Lake: Shenale(Kala Talao)  
Lake ID No.: 4102  
Location of Lake: Beturkarpada, Kalyan City  
Map ID No.: 1.1  
Date of visit :12/1/1999  
Team ID No.:1

Lake Identification:

Lake is situated at Beturkarpada on Beturkarpada- Barave Road off Kalyan- Bhivandi Road in Kalyan city. Small boats are seen in the lake. Fisherman Society' s office is situated at one corner North- West side and Kali Masjid at other corner on South- West side. Ram Temple, Shankar Temple are on West side and Rani- Makabara are situated on East side. Slums are seen on the banks of South, East and North side.

Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 20 Acre  
General biotic integrity: Severely impacted  
General aesthetics: Slightly pleasant  
General assessment of lake: Slightly developed and slightly appealing

Note:

Lake is drainage type, outlet present.

Water is present for all seasons. Lake is used for heavy fishing activity. Bad for swimming.

Lake is contaminated due to discharge of drainage water into it from Beturkarpada area, presence of latrines on the lake bank, dumping of garbage by slum dwellers and dumping of waste flowers/garlands offerings(Nirmalya), cleaning of clothes. Shankar Temple bank(Ganesh Ghat) is used for performing religious rituals and immersion of Ganesh idols.

Lake is also filled with silt due to silt coming from drainage water, monsoon water, Ganesh idol immersions.

IIT , Mumbai has noted in its environmental report in January 1996, catching of about 300 kg of fish per week excluding monsoon season. Fishing activity is being reduced because of contamination due to discharge of drainage/ sewerage from adjoining areas and is being used for religious rituals. Lake is not been cleaned since year 1964.

Kalyan Dombivali Municipal Corporation has prepared development plan for this lake. Development plan includes desilting, shifting slum area, diverting drainage line away from lake and will be laid along side of lake bank and to be discharged into Jari Mari Nalla, construction of protection walls at the bank, construction of island with fountain, lawn etc. at the centre of the lake.



### Lake Status Report of Lake Ratale

Name of the Lake: Ratale

Lake ID No.: 4103

Location of Lake: Adharwadi, Kalyan City

Map ID No.: 1.1

Date of visit :12/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Adharwadi on Highway Road in Kalyan City. Proposed Science Park is situated at one corner on South side. Wadeghar Village is on West side and Annapurna Nagar is on North- East side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 12 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Pristine and not appealing.

Note:

Lake is seepage type, no outlet present.

Water is not present for all seasons. Lake cannot be used for any purpose.

Complete lake area is covered with Hyacinth and other water borne plants.

Lake is contaminated due to discharge of drainage water into it from adjoining Wadeghar area, immersion of Ganesh idols.

Lake is completely filled with silt coming from drainage water, monsoon water, Ganesh idol immersions.

### Lake Status Report of Lake Gauripada

Name of the Lake: Gauripada lake  
Lake ID No.: 4301  
Location of Lake: Gauripada, Kalyan Rural  
Map ID No.: 3.0  
Date of visit :12/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Gauripada off Highway Road, on Birla College- Milind Nagar- Gauripada Road in Kalyan Rural. Ghat is situated at one corner on North- East side. Small memorial is seen behind Ghat across the road. Gauripada village seen nearby. Chawls are seen beyond lake on West and South side. Small boat is seen in the lake. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Slightly developed and slightly appealing

#### Note:

Lake is seepage type, no outlet present.  
Water is present for all seasons. Lake water is used for fishing, growing vegetables, drinking water for animals, bathing of animals. Lake is good for swimming.  
Red lotus is found in lake. Water borne plants are grown on bank side in dry area.  
Lake is contaminated due to discharge of manson water into it from adjoining area, cleaning of clothes, immersion of Ganesh idols in manson.

### Lake Status Report of Lake Sapad

Name of the Lake: Sapad lake  
Lake ID No.: 4302  
Location of Lake: Sapad, Kalyan Rural  
Map ID No.: 3.0  
Date of visit :12/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Sapad off Highway Road, on Wadghar-Sapad Road in Kalyan Rural. Mahadev temple is situated at one corner on South- East side. Barren beach is seen on East side of lake. Sapad village is seen nearby. Vegetables are seen grown on South, West and North side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre  
General biotic integrity: Impacted  
General aesthetics: Pleasant  
General assessment of lake: Pristine and appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present for all seasons. Lake water is used for fishing, growing vegetables, drinking water for animals, bathing of animals. Lake is good for swimming.

Floating plants are observed in 50% of the lake area. Water borne plants are grown on bank side in dry area.

Lake is contaminated due to discharge of monsoon water into it from adjoining agricultural lands, cleaning of clothes, immersion of Ganesh idols in monsoon.

Lake can be developed into model lake.

### Lake Status Report of Lake Umbarde

Name of the Lake: Umbarde lake

Lake ID No.: 4303

Location of Lake: Umbarde, Kalyan Rural

Map ID No.: 3.0

Date of visit :12/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated at outskirts of Umbarde village on Adharwadi- Jail- Umbarde Road off Highway Road in Kalyan Rural. Ghat is situated at one corner on South- West side. Umbarde village is seen nearby. Well is seen in the lake area on East side. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 7 Acre

General biotic integrity: Impacted

General aesthetics: Some what pleasant

General assessment of lake: Slightly developed and slightly appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used for fishing, growing vegetables, drinking water for animals, bathing of animals. Lake is good for swimming.

Water borne plants are grown on bankside along the dry area.

Lake is contaminated due to discharge of monsoon water into it from adjoining agricultural lands ,cleaning of clothes, immersion of Ganesh idols in monsoon.

**Lake Status Report of Lake Adavali**

Name of the Lake: Adavali lake

Lake ID No.: 4401

Location of Lake: Adavali- Dhokali, Kalyan- East Rural

Map ID No.:4.0

Date of visit :5/1/1999

Team ID No.:1

Lake Identification:

Lake is situated near Adavali- Dhokali village, on Adavali Pathway passing through agriculture fields off Kalyan- Haji Malang Road. Haji Malang Road is seen East side.

Adavali village is on North West side nearby.

Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 3 Acre

General biotic integrity: Severely impacted

General aesthetics: Some what pleasant

General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used for fishing, growing vegetables, drinking water for animals, bathing of animals. Lake is bad for swimming.

Water borne plants are grown on bankside along the dry area.

Lake is contaminated due to discharge of monsoon water into it from adjoining agricultural lands ,cleaning of clothes, immersion of Ganesh idols in monsoon.

### Lake Status Report of Lake Nadivali

Name of the Lake: Nadivali lake

Lake ID No.: 4402

Location of Lake: Koli- Nadivali, Kalyan- East Rural

Map ID No.:4.0

Date of visit :5/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Koli- Nadivali -village, on Nadivali Road off Kalyan- Haji Malang Road. Haji Malang Road is seen on North- West side . Brick kiln is situated at the corner of the lake on West side. Nadivali village is on South- East side nearby. Small island is seen in the lake.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 3 Acre

General biotic integrity: Impacted

General aesthetics: Some what pleasant

General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used for fishing, growing vegetables, drinking water for animals, bathing of animals and for nearby brick kiln. Lake is good for swimming.

Water borne plants are grown on bank side along the dry area.

Lake is contaminated due to discharge of monsoon water into it from adjoining agricultural fields ,cleaning of clothes, immersion of Ganesh idols in monsoon.

### Lake Status Report of Lake Chakki Naka

Name of the Lake: Chakki Naka lake

Lake ID No.: 4403

Location of Lake: Chakki Naka- Tisgaon, Kalyan- East Rural

Map ID No.:4.0

Date of visit :5/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Chakki Naka, on Suchak Naka- Vithhalwadi Road off Kalyan- Shil Road. Haji Malang Road is seen on upper South- West side . Chakki Naka is seen at the corner of the lake on upper West side. Small temple is situated on the bank on North - East side. Chemical factories e.g. M/s Prakash Udyog, S.B. Plastics, Sunrise Chemicals, Sreeji Chemicals are located nearby on Suchak Naka- Chakki Naka Road on West side of the lake. Drainage water inlet is seen on upper South- West side. Cow sheds are seen on South- East side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Slightly developed and not appealing

Note:

Lake is drainage type, outlet present. Lake was formed due to abandoned quarry.

Water is present for all seasons. Lake water cannot be used for any purpose.

Water Hyacinth has occupied entire lake water area.

Lake is contaminated due to discharge of drainage water into it from adjoining areas, industrial waste water from nearby chemical factories, garbage dumping by local people, waste generated from adjoining cow sheds.

**Lake Status Report of Lake Nandivali**

Name of the Lake: Nandivali lake

Lake ID No.: 4501

Location of Lake: Nandivali, Dombivali Surrounding

Map ID No.:5.2

Date of visit :6/1/1999

Team ID No.:1

Lake Identification:

Lake is situated at Nandivali on Ramchandra Nagar -Nandivali- Bhopar Road, off Manpada Road. Nandivali is on the outskirts of Dombivali. . Ramchandra Nagar - Bhopar Road is on North- East side . Temple is situated at the corner of the lake on South side. Nandivali village is on South- West side nearby.

Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 0.5 Acre

General biotic integrity: Excellent

General aesthetics: Some what pleasant

General assessment of lake: Developed and not appealing

Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used only for Fishing.

Water borne plants are grown on bank side along the dry area.

Lake is not contaminated. Local people have taken keen interest in improving the lake. Ka;lyan Dombival Municipal Corporation has implemented beautification plan by constructing protective walls on all side. Local people have stopped Ganesh idol immersions, garbage dumping, cleaning of clothes in the lake.



Ref. No. BET/MMR/Lakest11

Dt.27/1/98

**Lake Status Report of Lake Bhopar**

Name of the Lake: Bhopar lake

Lake ID No.: 4502

Location of Lake: Bhopar, Dombivali Surrounding

Map ID No.:5.2

Date of visit :6/1/1999

Team ID No.:1

Lake Identification:

Lake is near Bhopar by pathway passing through agricultural fields from Shri Eknathshet's house, on Nandivali- Bhopar Road, off Manpada Road. Bhopar is on the outskirts of Dombivali. Lake is surrounded by agricultural fields. Nandivali - Bhopar Road is seen on North- West side. Abandoned well is situated at the corner of the lake on East side. Bhopar village is on South- West side nearby. Brick kiln and Dutta temple on the small hill is seen near on South- West side. Quarry in working is seen near on South side

Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 1 Acre

General biotic integrity: Severely impacted

General aesthetics: Some what pleasant

General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.

Very little water is present. Lake get dried up in summer. Lake water is used only for brick kiln.

Water borne plants are grown in the entire lake area and on bank side along the dry area.

Lake is contaminated because of silt coming with manson water from adjoining fields and is not in use as are far away from nearby villages, hence neglected. This lake and adjoining well were in use 5/6 years back.

### Lake Status Report of Lake Kanchangaon

Name of the Lake: Kanchangaon lake

Lake ID No.: 4503

Location of Lake: Kanchangaon, Dombivali Surrounding

Map ID No.:5.3

Date of visit :6/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Bhoirwadi, Kanchangaon by small village road on Kalyan-Dombivali -MIDC Road, off Kalyan- Shil Road. Kanchangaon is on the outskirts of Dombivali near MIDC Industrial Area Phase- I. MIDC pipe line and beyond that MIDC Road and industries are seen on East side. MIDC drainage nallha is seen by South side. Cow sheds, residences are seen on South West side nearby beyond nallha. Buildings habituated by Bohri Muslims are seen on North- East side behind village road. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 1 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used bathing and drinking for animals. Bad for swimming.

Water borne plants are grown on bank side along the dry area.

Lake is contaminated due to flood water from industrial area , seepage from MIDC drainage open nallha, bathing of animals, waste coming from adjoining cow sheds, immersions of Ganesh idols.

### Lake Status Report of Lake Balyani

Name of the Lake: Balyani Lake

Lake ID No.: 4601

Location of Lake: Balyani, Atali- Ambivali

Map ID No.:6.0

Date of visit :13/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated at Balyani village, by pathway from a Masjid on Mohana- Manda Road. Balyani is in the Atali- Ambivali sector. Balyani village is on South- East side of lake. Small Durgah is situated on the constructed bank of the lake at the corner on North side. H.T. line is seen nearby on South- East side. Small hills are seen beyond Mohana- Manda Road on South- West side. Vegetable farm is at other corner on West side. Wooden pole is seen at the centre of the lake.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 0.5 Acre

General biotic integrity: Impacted

General aesthetics: Some what pleasant

General assessment of lake: Slightly developed and slightly appealing

Note:

Lake is seepage type, no outlet present.

Water is present. Lake get dried up in summer. Lake water is used for fishing, growing vegetables, and drinking for animals. Good for for swimming.

Water borne plants are grown on bank side along the dry area.

Lake is contaminated due to silt coming from monsoon water from adjoining area , fallen leaves of trees on the bank., bathing of animals, immersions of Ganesh idols.

### Lake Status Report of Lake Ambivali

Name of the Lake: Ambivali Lake  
Lake ID No.: 4602  
Location of Lake: Ambivali, Atali- Ambivali  
Map ID No.:6.0  
Date of visit :13/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Ambivali , by pathway from Ambivali village on Atali- Ambivali Road. Ambivali is in the Atali- Ambivali sector. Ambivali village is near on South side of lake. Vegetable farms are seen on South- East, North- West and North- East side. NRC Nylon plant is seen beyond railway line on South- East side. Drainage water inlet into the lake is seen at the corner on East side. Pole is seen at the centre of the lake. Kalu river is near on North- West side.  
Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 2 Acre  
General biotic integrity: Severely impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and not appealing  
Note:

Lake is drainage type, outlet present.  
Water is present in the lake for all the seasons. Lake water is used for growing vegetables. Bad for fishing, swimming.  
Water borne plants are grown on bank side along the dry area.  
Lake is contaminated due to silt coming from monsoon water from adjoining area , industrial waste water discharged from National Rayon Corporation- Nylon plant.

**Lake Status Report of Lake Vadavali**

Name of the Lake: Vadavali Lake  
Lake ID No.: 4603  
Location of Lake: Vadavali, Atali- Ambivali  
Map ID No.:6.0  
Date of visit :13/1/1999  
Team ID No.:1

Lake Identification:

Lake is situated near Vadavali village , by pathway from Saibaba temple on Vadavali-Atali Road. Vadavali is in the Atali- Ambivali sector. Vadavali village is near on South side of lake. Vadavali- Atali Road is on West side. Overhead water tank is seen on South-West side. NRC factory is beyond nearby railway line on North- East side. Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 3 Acre  
General biotic integrity: Severely impacted  
General aesthetics: Unpleasant  
General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.  
Water is present in the lake. Lake get dried up in summer. Lake water is used for fishing, bathing and drinking for animals. Swimming not possible.  
Water borne plants are grown in almost 75% of lake area, on bank side along the dry area.  
Lake is contaminated due to silt coming from monsoon water from adjoining area and is totally neglected.  
Ganesh idol immersions are not done in this lake but in nearby Kalu river.

### Lake Status Report of Lake Atali

Name of the Lake: Atali Lake

Lake ID No.: 4604

Location of Lake: Atali, Atali- Ambivali

Map ID No.:6.0

Date of visit :13/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated near Atali village , opposite Balkrishna Paper Mill on Atali- Ambivali Road. Atali is in the Atali- Ambivali sector. Atali village is near on South - West side of lake. Balkrishna Paper Mill is beyond Atali- Ambivali Road on South- East side. Abandoned chemical factory, M/s Vijay Industry is located on North side and Kalu river is beyond this. Approach road to the lake passes through the private property of Vijay Industry and beyond that forest land of Social Forestry is seen South- West side. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Pristine and not appealing

Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake get dried up in summer. Lake water is used only for small time fishing. Bad for swimming.

Water borne plants are grown in almost 50% of lake area, on bank side along the dry area. Floating type plants are seen almost 50% of lake water.

Lake is contaminated due to silt coming from monsoon water from adjoining area and contaminated storm water coming from abandoned chemical company, Vijay Industry. .

Ganesh idol immersions are not done in this lake but in nearby Kalu river.

**Lake Status Report of Lake Patil Nagar lake**

Name of the Lake: Patil Nagar Lake  
Lake ID No.: 4605  
Location of Lake: Mohana, Atali- Ambivali  
Map ID No.:6.0  
Date of visit :13/1/1999  
Team ID No.:1

Lake Identification:

Lake is situated near Patil Nagar (Mohana) village , by pathway through agricultural fields on Vadavali- Atali Road. Mohana is in the Atali- Ambivali sector. Patil Nagar is near on North side of lake. Vadavali- Atali Road is on North- West side. Railway line is seen on North- East side. Chimney of NRC factory is seen on North side beyond railway line. Farm belonging to Shri Raghusheth is on East side.  
Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 1 Acre  
General biotic integrity: Severely impacted  
General aesthetics: Unpleasant  
General assessment of lake: Pristine and not appealing  
Note:

Lake is seepage type, no outlet present.  
Very little water is present in the lake. Lake get dried up in summer. Lake water cannot be used for any purpose. Water borne plants are grown in entire lake area.  
Lake is contaminated due to silt coming from manson water from adjoining area and is totally neglected.  
Ganesh idol immersions are not done in this lake but in nearby Kalu river.

### Lake Status Report of Lake Manda

Name of the Lake: Manda Lake

Lake ID No.: 4701

Location of Lake: Manda, Manda- Titwala

Map ID No.:7.0

Date of visit :13/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated at Manda , by pathway on Balyani- Manda Road. Manda is in the Manda- Titwala sector. Titwala railway station, also in Manda, is nearby on North- West side. Ghat to the lake and beyond that Balyani- Manda Road is on West side of the lake. Hanuman Mandir is situated on the corner of the lake on South- West side. Well is seen on South- West side and bore well on North- West side. Small hills are seen far away on East side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 2 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Slightly developed and not appealing

Note:

Lake is seepage type, no outlet present.

Very little water is present in the lake. Lake get dried up in summer. Lake water cannot be used for any purpose. Water borne plants are grown in 75% lake area. Plants , floating type plants are observed on 50% of lake water.

Lake is contaminated due to silt coming from monsoon water from adjoining area, used flowers/ garlands, garbage dumped by local people and incoming drainage water .

Ganesh idol immersions are done in this lake.



### Lake Status Report of Titwala Ganapati Mandir Lake

Name of the Lake: Titwala Ganapati Mandir Lake

Lake ID No.: 4702

Location of Lake: Titwala, Manda- Titwala

Map ID No.:7.0

Date of visit :13/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated at Titwala , behind Titwala Ganapati Temple on Titwala Railway Station(Manda)- Titwala Road. Manda- Titwala Road is on South side of the lake. Ganapati Temple is on the bank of North- East side of lake. Small lake is seen on the corner on South- East side separated from main lake. Small hills are seen far away on North- West side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 6 Acre

General biotic integrity: Severely impacted

General aesthetics: Unpleasant

General assessment of lake: Slightly developed and not appealing

Note:

Lake is drainage type, outlet present.

Water is present in the lake for all seasons. Lake water cannot be used for any purpose.

Water borne plants are grown in entire lake area in case of small lake and dry area of main lake. Water Hyacinth is covering entire lake water in case of main lake.

Lake is contaminated due to silt coming from monsoon water from adjoining area, plastic bags, flowers/ garlands offerings, garbage dumped by Temple managers and large number of visiting devotees and incoming drainage water .

Ganesh idol immersions are done in this lake..

Ganapati Mandir being famous pilgrim centre , deteriorated state of the lake needs urgent attention.

Ganapati Mandir Trust has prepared beautification plan for lake.

### Lake Status Report of Lake Ganeshwadi

Name of the Lake: Ganeshwadi lake  
Lake ID No.: 4703  
Location of Lake: Ganeshwadi, Titwala- Manda  
Map ID No.:7.0  
Date of visit :13/1/1999  
Team ID No.:1

Lake Identification:

Lake is situated near Ganeshwadi (a Katkaripada) on Titwala Ganapati Mandir-Overhead Tank- Ganeshwadi Pathway passing through agricultural fields. Ganeshwadi is near on North- East side of lake. A small Durgah is seen nearby on North side. Well is situated in lake area on North- West side. Small hills are seen on South- West side. Site plan of lake is enclosed herewith.

Physical status:

Area of lake: About 1.5 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and slightly appealing

Note:

Lake is seepage type, no outlet present.  
Water is present in the lake. Lake dries up in summer for all seasons. Lake water is used for fishing, bathing and drinking water for animals. Lake is good for swimming. Water borne plants are grown along the bank in dry region and is about 50% of the lake area. Plants floating type are covering about 50% of lake water.  
Lake is contaminated due to silt coming with mansoon water from adjoining area and cleaning of clothes. Lake is getting filled up with silt year by year.  
Ganesh idol immersions are done in this lake.

### Lake Status Report of Lake Katai

Name of the Lake: Katai lake  
Lake ID No.: 4801  
Location of Lake: Katai, Dombivali Rural  
Map ID No.:8.0  
Date of visit :6/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated at Katai on Katai village Road off Kalyan Shil Road. Village Road is on North- East side of lake. Kalyan- Shil Road is nearby on South- East side. Shri Kailash Patil' s bungalow and statue of Late Sakharamsheth on East side. Diva- Panvel railway line is seen on West side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 3 Acre  
General biotic integrity: Excellent  
General aesthetics: Pleasant  
General assessment of lake: Slightly developed and appealing

#### Note:

Lake is drainage type, outlet present.

Water is present in the lake for all seasons. Lake water is used for fishing (4-5 times a year), bathing and drinking water for animals. Lake is good for swimming.

Water borne plants are grown along the bank in dry region and plants .

Lake seems to be clean and is maintained by Shri Kailash Patil. Small time cleaning of clothes activity is done.

Ganesh idol immersions are done in this lake.

A model lake!

### Lake Status Report of Lake Nilaje-1

Name of the Lake: Nilaje-1 lake  
Lake ID No.: 4802  
Location of Lake: Nilaje, Dombivali Rural  
Map ID No.:8.0  
Date of visit :6/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated at the entrance of Nilaje village on Village Road off Kalyan Shil Road. Village Road is adjoining the lake on West side. Kalyan- Shil Road is also on west side nearby. Funeral ground is seen on South side of lake. Temple is seen at the corner of lake on South- West side. Brick kiln is seen across the Village Road on North- West side. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 20 Acre  
General biotic integrity: Severely impacted  
General aesthetics: Unpleasant  
General assessment of lake: Pristine and not appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer for all seasons. Lake water is used for bathing and drinking water for animals and by nearby. Lake is bad for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants floating type are covering entire lake water.

Lake is contaminated due to silt coming with monsoon water from adjoining area and cleaning of clothes and use of lake bank for toilet purpose by villagers. Lake is getting filled up with silt year by year.

Ganesh idol immersions are done in this lake.

Kalyan Dombivali Municipal Corporation has prepared improvement plan for this lake.

### Lake Status Report of Lake Nilaje-2

Name of the Lake: Nilaje-2 lake  
Lake ID No.: 4803  
Location of Lake: Nilaje, Dombivali Rural  
Map ID No.:8.0  
Date of visit :6/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated at the outskirts of Nilaje village, across Railway Crossing on Village Road off Kalyan Shil Road. Railway Crossing is on South- East side of lake. Brick kiln is situated near the Railway Crossing. Nilaje Village is beyond Railway Crossing on South- East side. Kalyan- Shil Road is seen on North- East side nearby. Lodha Housing complex is seen on North- West side. Abandoned well is situated on bank by East side. Nilaje Railway Station is far off on South side. Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 4 Acre  
General biotic integrity: Impacted  
General aesthetics: Unpleasant  
General assessment of lake: Pristine and not appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer for all seasons. Lake water is used for fishing, bathing of animals and drinking water for animals, growing vegetables, brick kiln. Lake is bad for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants floating type are covering about 75% of lake water.

Lake is contaminated due to silt coming with monsoon water from adjoining area and cleaning of clothes.

Ganesh idol immersions are done in this lake.

### Lake Status Report of Lake Usarghar

Name of the Lake: Usarghar lake  
Lake ID No.: 4804  
Location of Lake: Usarghar, Dombivali Rural  
Map ID No.:8.0  
Date of visit :6/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Usarghar village, on Manpada- Diva- Dativali Road off Kalyan Shil Road. Usarghar is near on South side of lake. Manpada-Diva- Dativali Road is on North side adjoining lake. Rear side of Premier Automobile factory is on East side. Lake is divided vertically on North- South into two lakes.  
Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and slightly appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer. Lake water is used for fishing, bathing of animals and drinking water for animals , growing vegetables, . Lake is good for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants floating type (lotus present) are covering about 25% of lake water.

Lake is contaminated due to silt coming with mansoon water from adjoining area, bathing of animals and cleaning of clothes.

Ganesh idol immersions are done in this lake.

Lake has a beautiful location on the road and can be developed into a picnic spot.

### Lake Status Report of Lake Umroli

Name of the Lake: Umroli lake  
Lake ID No.: 4805  
Location of Lake: Umroli, Dombivali Rural  
Map ID No.:8.0  
Date of visit :5/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Umroli village, by pathway on Manpada- Umroli Road off Kalyan Shil Road. Pathway, Umroli, Manpada- Umroli Road and Kalyan- Shil Road are on West side of lake. Badalapur Pipeline Road is nearby on South side of lake. Small open temple is seen at the corner of lake on West side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 1.5 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and not appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer. Lake water is used for fishing, bathing of animals and drinking water for animals . Lake is good for swimming.

Water borne plants are grown along the bank in dry region and is about 75% of the lake area.

Lake is contaminated due to silt coming with monsoon water from adjoining area, bathing of animals .

Ganesh idol immersions are done in this lake.

Lake is neglected one.

### Lake Status Report of Lake Dawadi

Name of the Lake: Dawadi lake

Lake ID No.: 4806

Location of Lake: Dawadi, Dombivali Rural

Map ID No.:8.0

Date of visit :5/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated outskirts of Dawadi village, by Dawadi Road off Kalyan Shil Road. Dawadi, Dawadi Road, Kalyan- Shil Road are on North- West side of lake. Small hills with Social Forestry are seen on South- East side of lake. Well in damaged condition is seen in the lake area on South- East side.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 4 Acre

General biotic integrity: Impacted

General aesthetics: Some what pleasant

General assessment of lake: Pristine and Slightly appealing

Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer. Lake water is used for fishing, bathing of animals and drinking water for animals. Lake is good for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants, floating on water type are seen 25% of lake water. Red lotus present.

Lake is contaminated due to silt coming with monsoon water from adjoining area, bathing of animals, heavy clothe cleaning.

Ganesh idol immersions are done in this lake.



### Lake Status Report of Lake Sonarpada

Name of the Lake: Sonarpada lake  
Lake ID No.: 4807  
Location of Lake: Sonarpada, Dombivali Rural  
Map ID No.:8.0  
Date of visit :6/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated outskirts of Sonarpada village, by Sonarpada Village Road off Kalyan Shil Road. Sonarpada, Sonarpada Village Road, Kalyan- Shil Road are on North- East side of lake. Agricultural fields are on South- West and North- West side. Houses are seen on South- East and North- East side. Well in good condition is seen in the lake area on South- West side of lake.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 4 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and Slightly appealing

#### Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer. Lake water is used for fishing, growing of vegetables, bathing of animals and drinking water for animals. Lake is good for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants, floating on water type are seen 25% of lake water.

Lake is contaminated due to silt coming with monsoon water from adjoining area, bathing of animals, heavy clothe cleaning.

Ganesh idol immersions are done in this lake.

Lake Water area is reducing year by year.

### Lake Status Report of Lake Vasar

Name of the Lake: Vasar lake

Lake ID No.: 4808

Location of Lake: Vasar, Dombivali Rural

Map ID No.:8.0

Date of visit :5/1/1999

Team ID No.:1

#### Lake Identification:

Lake is situated at outskirts of Vasar village, by Vasar Village Road off Badlapur Pipeline Road. Vasar is seen on South-West side of lake. Badlapur Pipeline Road is on South- East side of lake. Haji Malang- Kalyan Road is on South- West side. Kalyan- Shil Road are on North- East side of lake. Vegetable growing fields are seen on North- West and North- East side. Damaged well is seen nearby on West side of lake.

Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 7 Acre

General biotic integrity: Impacted

General aesthetics: Some what pleasant

General assessment of lake: Slightly developed and slightly appealing

#### Note:

Lake is drainage type, outlet present.

Water is present in the lake for all seasons. Lake water is used for fishing, growing of vegetables, bathing of animals and drinking water for animals. Lake is good for swimming.

Water borne plants are grown along the bank in dry region. Water hyacinth are seen 25% of lake water.

Lake is contaminated due to silt coming with monsoon water from adjoining area, bathing of animals, cloth cleaning. Two years back Water Hyacinth planted to grow some water borne plant (Shingada Type commercial crop) and has damaged the lake water. Now, villagers have objected and discontinued growing this crop in the lake.

Ganesh idol immersions are done in this lake.

Lake is having good potential for fishing.

### Lake Status Report of Lake Bhal

Name of the Lake: Bhal lake  
Lake ID No.: 4809  
Location of Lake: Bhal, Dombivali Rural  
Map ID No.:8.0  
Date of visit :5/1/1999  
Team ID No.:1

#### Lake Identification:

Lake is situated near Bhal village, by Pathway passing through agriculture fields on Bhal Village Road, off Kalyan- Haji Malang Road. Bhal Village is near on South- East side of lake. Kalyan- Haji Malang Road is on East side. Barren beach is seen on North-East side of lake. Lake has protective wall on East side.  
Site plan of lake is enclosed herewith.

#### Physical status:

Area of lake: About 5 Acre  
General biotic integrity: Impacted  
General aesthetics: Some what pleasant  
General assessment of lake: Pristine and Slightly appealing  
Note:

Lake is seepage type, no outlet present.

Water is present in the lake. Lake dries up in summer. Lake water is used for fishing, growing of vegetables, bathing of animals and drinking water for animals. Lake is good for swimming.

Water borne plants are grown along the bank in dry region and is about 25% of the lake area. Plants, floating on water type are seen 25% of lake water.

Lake is contaminated due to silt coming with monsoon water from adjoining area, bathing of animals, heavy clothe cleaning.

Ganesh idol immersions are done in this lake.

## Conclusion

The Lake Status Reports of individual lakes reveals that of the total 29 No. of lakes, very few lakes are in better condition. The lakes can be classified as severely impacted, impacted and not impacted type depending upon their biotic conditions corresponding to various criteria as follows :

**1. Usage of Water :** Usage of water is corresponding to its quality.

- Drinking
- Bathing/Swimming
- Bathing / Drinking water for animals
- Fishing
- Growing of vegetables

**2. Presence of Water Borne Plants / Hyacinth :** Continuous supply of organic food due to contamination results in water borne plants or hyacinth growth in lake water

**3. Source of contamination :** Contamination of the lake water due to various sources as below makes the lake impacted.

- Domestic Sewage
- Nirmalaya, Garbage
- Ganapati Idol Immersion
- Bathing of animals
- Industrial Waste Water

**4. Existing Area / Depth of the lake :** If the existing area/ depth of the lake is found to be less than the original area/ depth of the lake, the lake is impacted .

**5. Chemical Analysis :** Various analytical parameters are indicators of quality as

- Dissolved oxygen
- Biological Oxygen Demand
- Turbidity
- Total Hardness
- Total Dissolved Solids
- Heavy Metals

**6. Microbiological Analysis :** E.Coli / Total Coliforms indicates contamination.

## Summary

Summary of the lakes as per their Condition is as following :

Total No. of Lakes : 29

**1. Severely Impacted Lakes : ( Total 14 No.)**

a. Due to Urbanization :

Dawaje, Kala Talao, Adavali-Dhokli, Chakki Naka, Titwala Ganapati Mandir, Nilaje-1.- 6 No.

b. Due to Industrialization :

Kanchangaon, Atali, Ambivli – 3 No.

c. Due to Negligance :

Umbroli, Ratale, Kopar, Vadavali, Patil Nagar – 5 No.

**2. Impacted Lake : (Total 12 No.)**

Gauri pada, Sapad, Umbarde, Nandivali, Balyani, Ganeshwadi, Nilaje-2, Dawadi,  
Usarghar, Vasar, Bhal, Sonarpada.

**3. Excellent Lakes : (Total 2 No.)**

Nandivali, Katai.

CHAPTER -4  
LAKE MANAGEMENT  
PLAN

## CHAPTER 4 LAKE MANAGEMENT PLAN

### Plan For Beautification of Lakes

As on today, if the condition of the lakes is improved, fishing can become a source of income & more vegetables etc. can be grown. The lake water can be used as a source of drinking water for animals, miscellaneous use for villagers & a alternative during the shortage of water. They can also become good entertainment spots. They will also help to maintain good environment and will become prestige point for the villagers. To make all this possible, it is essential to educate the local people, create awareness & to develop their mentality to maintain the lakes in good condition. They should be involved actively in all the process of the upgradation & maintenance of the lakes.

BET team investigated good lakes i.e. Katai and Nandivli and found common reason as ownership of the responsibility of lake by local people. In Nandivli case saffron thinking by local people as considering lake as water- goddess and taking care of the lake is their religious duty helped to maintain lake clean.

### Action Plan:

BET suggest action plan for improvement & preservation of lake in general to convert lake into alternative water reservoir source & as a part of Environment Protection :

i)To stop sources of contamination :

Garbage , Plastic Bags : To create awareness among the local people to avoid throwing of garbage, plastic bags etc. into the lake water.

Domestic sewage : To construct separate drainage / sewage line to avoid drainage / sewage water entering into the lake.

Cow Sheds, Latrines : Cow Sheds or Latrines should be beyond the Buffer zone around the lake water to avoid contamination.

Nirmalaya : Dumping of nirmalaya in lake water to be avoided by disposal by composting.

Industrial waste water: Industrial waste water and storm water contaminated with industrial waste should not be allowed to enter into the lake.

Ganesh Idols Immersion : Ganesh Idols Immersion to be conducted in a isolated area in the lake without dumping of the nirmalaya during the immersion, so that the particular area of the lake can be cleaned & the mud can be removed off after few days.

ii)To desilt lake wherever economical

iii)To construct protective wall around lake so that flood water with silt will not enter into lake.

iv) Plantation of Trees around lake, Beautification of lake : Trees should be planted around the lake to increase the beauty of the lake.

v) Kalyan Dombivli Municipal Corporation should prepare a Master Plan for conservation and improvement of lakes in Municipal area and involve local people and delegate responsibility to NGO or local committees.

As per the BET Survey, Analysis & Study of individual lakes, a lake management plan for individual lakes is prepared and is as follows:

**1. Name of the Lake: Dawaje**

Lake ID No.: 4101

Location of Lake: Bail Bazar, Kalyan City

**Recommendation:**

Lake should be cleaned, desilted. Drainage water should be diverted away from lake and latrines to be provided in slums.

**2. Name of the Lake: Shenale(Kala Talao)**

Lake ID No.: 4102

Location of Lake: Beturkarpada, Kalyan City

**Recommendation:**

Lake should be cleaned, desilted. Drainage water should be diverted away from lake. Slum to be shifted away. Separate arrangement for Nirmalya disposal and Ganesh idol immersion should be made.

**3. Name of the Lake: Ratale**

Lake ID No.: 4103

Location of Lake: Adharwadi, Kalyan City

**Recommendation :**

Lake should be cleaned,desilted .Natural protective walls should be constructed to preserve water by using removed silt and to protect from incoming monsoon water, which brings silt. Trees should be planted along bank.

**4. Name of the Lake: Gauripada lake**

Lake ID No.: 4301

Location of Lake: Gauripada, Kalyan Rural

**Recommendations:**

Lake should be cleaned, desilted. Natural protective walls should be constructed to preserve water by using removed silt and to protect from incoming mansoon water , which brings silt. Trees should be planted along bank .

**5. Name of the Lake: Sapad lake**

Lake ID No.: 4302

Location of Lake: Sapad, Kalyan Rural

**Recommendation:**

Lake should be cleaned, desilted. Protective walls should be constructed to preserve water and to protect from incoming mansoon water , which brings silt. Cleaning of clothes should be stopped. Immersion of Ganesh idols should be done elsewhere.



**6. Name of the Lake: Umbarde lake**

Lake ID No.: 4303

Location of Lake: Umbarde, Kalyan Rural

**Recommendation :**

Lake should be cleaned, desilted. Protective walls should be constructed to preserve water and to protect from incoming monsoon water, which brings silt. Cleaning of clothes should be stopped. Immersion of Ganesh idols should be done elsewhere. Trees should be planted along the banks.

**7. Name of the Lake: Adavali lake**

Lake ID No.: 4401

Location of Lake: Adavali- Dhokali, Kalyan- East Rural

**Recommendation :**

Lake should be cleaned, desilted. Protective walls should be constructed to preserve water and to protect from incoming monsoon water, which brings silt. Cleaning of clothes should be stopped. Immersion of Ganesh idols should be done elsewhere. Trees should be planted along the banks.

**8. Name of the Lake: Nadivali lake**

Lake ID No.: 4402

Location of Lake: Koli- Nadivali, Kalyan- East Rural

**Recommendation :**

Lake should be cleaned, desilted. Protective walls should be constructed to preserve water and to protect from incoming monsoon water, which brings silt. Cleaning of clothes should be stopped. Immersion of Ganesh idols should be done elsewhere. Trees should be planted along the banks.

**9. Name of the Lake: Chakki Naka lake**

Lake ID No.: 4403

Location of Lake: Chakki Naka- Tisgaon, Kalyan- East Rural

**Recommendation:**

Lake should be cleaned. Drainage water should be diverted away from the lake. Chemical factories should be shifted from the area. Cow sheds should be shifted away from the lake. Garbage should not be dumped into the lake.

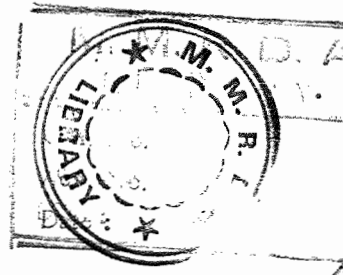
**10. Name of the Lake: Nandivali lake**

Lake ID No.: 4501

Location of Lake: Nandivali, Dombivali Surrounding

**Recommendation:**

Lake should be further excavated till natural springs are available. Trees should be planted along the banks.



**11. Name of the Lake: Bhopar lake**

Lake ID No.: 4502

Location of Lake: Bhopar, Dombivali Surrounding

**Recommendation :**

Lake should be cleaned ,exavated. Protective wall should be built to preserve lake water and silt coming with monsoon water, Trees should be planted along the banks.

**12. Name of the Lake: Kanchangaon lake**

Lake ID No.: 4503

Location of Lake: Kanchangaon, Dombivali Surrounding

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming industrial area . MIDC open drainage system should be modified into a closed pipe line. Trees should be planted along the banks.

**13. Name of the Lake: Balyani Lake**

Lake ID No.: 4601

Location of Lake: Balyani, Atali- Ambivali

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Bathing of animals and immersions of Ganesh idols should be stopped. Trees should be planted along the banks.

**14. Name of the Lake: Ambivali Lake**

Lake ID No.: 4602

Location of Lake: Ambivali, Atali- Ambivali

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Industrial waste water should be stopped coming into the lake. Trees should be planted along the banks.

**15. Name of the Lake: Vadavali Lake**

Lake ID No.: 4603

Location of Lake: Vadavali, Atali- Ambivali

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Trees should be planted along the banks.

**16. Name of the Lake: Atali Lake**

Lake ID No.: 4604

Location of Lake: Atali, Atali- Ambivali

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Trees should be planted along the banks.

**17. Name of the Lake: Patil Nagar Lake**

Lake ID No.: 4605

Location of Lake: Mohana, Atali- Ambivali

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Trees should be planted along the banks.

**18. Name of the Lake: Manda Lake**

Lake ID No.: 4701

Location of Lake: Manda, Manda- Titwala

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Garbage, flowers/ garlands should not be dumped into the lake. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**19. Name of the Lake: Titwala Ganapati Mandir Lake**

Lake ID No.: 4702

Location of Lake: Titwala, Manda- Titwala

**Recommendation:**

Lake should be cleaned , excavated. Protective wall should be built along the lake to preserve lake water and flood water coming into the lake area. Plastic bags, garbage, flowers/ garlands should not be dumped into the lake. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks

**20. Name of the Lake: Ganeshwadi lake**

Lake ID No.: 4703

Location of Lake: Ganeshwadi, Titwala- Manda

**Recommendation :**

Lake should be cleaned and excavated. Protection wall should be built to protect from monsoon water coming in to preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks. Good potential vegetable growing around lake.

**21. Name of the Lake: Katai lake**

Lake ID No.: 4801

Location of Lake: Katai, Dombivali Rural

**Recommendation:**

Lake should be maintained clean regularly. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks

**22. Name of the Lake: Nilaje-1 lake**

Lake ID No.: 4802

Location of Lake: Nilaje, Dombivali Rural

**Recommendation :**

Lake should be cleaned and excavated. Protection wall should be built to protect from monsoon water coming in to preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**23. Name of the Lake: Nilaje-2 lake**

Lake ID No.: 4803

Location of Lake: Nilaje, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Protection wall should be built to protect from monsoon water coming in to preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**24. Name of the Lake: Usarghar lake**

Lake ID No.: 4804

Location of Lake: Usarghar, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**25. Name of the Lake: Umroli lake**

Lake ID No.: 4805

Location of Lake: Umroli, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**26. Name of the Lake: Dawadi lake**

Lake ID No.: 4806

Location of Lake: Dawadi, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks. Damaged well in the lake area should be repaired.

**27. Name of the Lake: Sonarpada lake**

Lake ID No.: 4807

Location of Lake: Sonarpada, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**28. Name of the Lake: Vasar lake**

Lake ID No.: 4808

Location of Lake: Vasar, Dombivali Rural

**Recommendation:**

Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**29. Name of the Lake: Bhal lake**

Lake ID No.: 4809

Location of Lake: Bhal, Dombivali Rural

**Recommendation:**

Lake Water area is reducing year by year. Lake should be cleaned and excavated. Natural protection wall should be built to protect from monsoon water coming in and preserve lake water. Ganesh idols should be immersed elsewhere. Trees should be planted along the banks.

**Conclusion & BET General Recommendations**

The survey, study, analysis reveals that most of the lakes are not in good condition and are contaminated due to factors like- dumping of nirmalaya, garbage, increasing silt, mixing of domestic sewage, industrial waste water, Ganesh Idol Immersion etc.

Hence BET recommends immediately elimination of sources of contamination to lakes as first step to be followed by desilting and beautification.

Priority should be given to severely impacted lakes to include Kala Talao as being of historically important, Titwala Ganapati Mandir Lake being famous pilgrimage centre, Ratale being extinguished very fast. Impacted lakes like Vasar, Sapad, Usarghar do not require much efforts for improvement and hence can be considered simultaneously.

Analysis Reports of Individual lakes follows.

## 1. Analysis Report of Lake Dawaje

### A] Sampling Data:

1. Name of the lake : Dawaje
2. Lake ID No. : 4101
3. Sampling Date : 26/02/99
4. Sampling Time : 2.10 pm
5. Sampling Point : Middle of the water level
6. Lake Depth : 2 mt.
7. Team ID No. : 4

### B] Analytical Data:

1. Sample ID No. : 4038
2. Colour : Pale Yellow
3. pH : 8.5
4. Temperature °C : 31
5. D.O. mg/l : 8.3
6. TDS mg/l : 800
7. TSS mg/l : 8
8. COD mg/l : 30.82
9. Hardness mg/l : 475
10. Alk. as CaCO<sub>3</sub> mg/l : 448.56
11. Turbidity NTU : 7.2
12. Conductivity uMho : 1460
13. BOD mg/l : 41

## 2. Analysis Report of lake Shenale (Kala Talao)

### A] Sampling Data:

1. Name of the lake : Shenale (Kala Talao)
2. Lake ID No. : 4102
3. Sampling Date : 26/2/99
4. Sampling Time : 12.15 pm
5. Sampling Point : Middle of the water level
6. Lake Depth : 3 mt.
7. Team ID No. : 4

### B] Analytical Data:

1. Sample ID No. : 4036
2. Colour : Greenish yellowish
3. pH : 8.3
4. Temperature °C : 31
5. D.O. mg/l : 8.3
6. TDS mg/l : 400
7. TSS mg/l : 12
8. COD mg/l : 20.94
9. Hardness mg/l : 228
10. Alk. as CaCO<sub>3</sub> mg/l : 202.9
11. Turbidity NTU : 9.5
12. Conductivity uMho : 880

13.BOD mg/l	: 20
14.Chloride as NaCl mg/l	: 82
15.Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16.Kjeldhal's N mg/l	: 9.45
17.Total P mg/l	: 0.35
18.As mg/l	: NIL
19.Cd mg/l	: 0.005
20.Cr mg/l	: 0.017
21.Co mg/l	: NIL
22.Cu mg/l	: 0.091
23.Pb mg/l	: 0.11
24.Hg mg/l	: NIL
25.Ni mg/l	: NIL
26.Zn mg/l	: 0.029

### 3. Analysis Report of lake Ratale

#### A] Sampling Data:

1. Name of the lake	: Ratale lake
2. Lake ID No.	: 4103
3. Sampling Date	: 22/02/99
4. Sampling Time	: 10.05 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: -
7. Team ID No.	: 3

#### B] Analytical Data:

1. Sample ID No.	: 4035
2. Colour	: Colourless
3. pH	: 6.7
4. Temperature °C	: 29
5. D.O. mg/l	: 3.6
6. TDS mg/l	: 200
7. TSS mg/l	: NIL
8. COD mg/l	: 21.9
9. Hardness mg/l	: 107
10.Alk. as CaCO <sub>3</sub> mg/l	: 80.1
11.Turbidity NTU	: 3.8
12.Conductivity uMho	: 450
13.BOD mg/l	: 7.0

### 4. Analysis Report of lake Gauripada

#### A] Sampling Data:

1. Name of the lake	: Gauripada lake
2. Lake ID No.	: 4301
3. Sampling Date	: 26/02/99
4. Sampling Time	: 12.45 pm
5. Sampling Point	: Middle of the water level

6. Lake Depth	: 3 mt.
7. Team ID No.	: 4
<b>B] Analytical Data:</b>	
1. Sample ID No.	: 4037
2. Colour	: Colourless
3. pH	: 8.3
4. Temperature °C	: 31
5. D.O. mg/l	: 7.4
6. TDS mg/l	: 320
7. TSS mg/l	: NIL
8. COD mg/l	: 9
9. Hardness mg/l	: 232
10. Alk. as CaCO <sub>3</sub> mg/l	: 165.52
11. Turbidity NTU	: 6.6
12. Conductivity uMho	: 780
13. BOD mg/l	: 2.5

### 5. Analysis Report of lake Sapad

#### A] Sampling Data:

1. Name of the lake	: Sapad lake
2. Lake ID No.	: 4302
3. Sampling Date	: 22/02/99
4. Sampling Time	: 10.30 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 2 mt.
7. Team ID No.	: 3

#### B] Analytical Data:

1. Sample ID No.	: 4034
2. Colour	: Pale Yellow
3. pH	: 7.9
4. Temperature °C	: 29
5. D.O. mg/l	: 7.2
6. TDS mg/l	: 360
7. TSS mg/l	: 4
8. COD mg/l	: 21.9
9. Hardness mg/l	: 210
10. Alk. as CaCO <sub>3</sub> mg/l	: 202.9
11. Turbidity NTU	: 6.6
12. Conductivity uMho	: 750
13. BOD mg/l	: 7.5

### 6. Analysis Report of lake Umbarde

#### A] Sampling Data:

1. Name of the lake	: Umbarde lake
2. Lake ID No.	: 4303
3. Sampling Date	: 22/02/99



4. Sampling Time : 11.05 am  
 5. Sampling Point : Middle of the water level  
 6. Lake Depth : 1 mt.  
 7. Team ID No. : 3  
 B] Analytical Data:  
 1. Sample ID No. : 4033  
 2. Colour : Blackish  
 3. pH : 8.5  
 4. Temperature °C : 29  
 5. D.O. mg/l : 8.5  
 6. TDS mg/l : 460  
 7. TSS mg/l : 112  
 8. COD mg/l : 37.84  
 9. Hardness mg/l : 253  
 10. Alk. as CaCO<sub>3</sub> mg/l : 90.78  
 11. Turbidity NTU : 161.7  
 12. Conductivity uMho : 750  
 13. BOD mg/l : 19.5

**7. Analysis Report of lake Adavali**

A] Sampling Data:  
 1. Name of the lake : Adavali lake  
 2. Lake ID No. : 4401  
 3. Sampling Date : 10/02/99  
 4. Sampling Time : 11.05 am  
 5. Sampling Point : Middle of the water level  
 6. Lake Depth : 1 mt.  
 7. Team ID No. : 2  
 B] Analytical Data:  
 1. Sample ID No. : 4013  
 2. Colour : Pale Yellow  
 3. pH : 7.5  
 4. Temperature oC : 27  
 5. D.O. mg/l : 5.2  
 6. TDS mg/l : 340  
 7. TSS mg/l : 20  
 8. COD mg/l : 14  
 9. Hardness mg/l : 182  
 10. Alk. as CaCO<sub>3</sub> mg/l : 176.2  
 11. Turbidity NTU : 34.2  
 12. Conductivity uMho : 760  
 13. BOD mg/l : 4

### 8. Analysis Report of lake Nadivali

#### A] Sampling Data:

1. Name of the lake : Nadivali Lake
2. Lake ID No. : 4402
3. Sampling Date : 10/02/99
4. Sampling Time : 10.35 am
5. Sampling Point : Middle of the water level
6. Lake Depth : 2 mt.
7. Team ID No. : 2

#### B] Analytical Data:

1. Sample ID No. : 4012
2. Colour : Pale Yellow
3. pH : 8.7
4. Temperature °C : 27
5. D.O. mg/l : 8
6. TDS mg/l : 360
7. TSS mg/l : 20
8. COD mg/l : 14
9. Hardness mg/l : 114
10. Alk. as CaCO<sub>3</sub> mg/l : 80
11. Turbidity NTU : 19.8
12. Conductivity uMho : 630
13. BOD mg/l : 5

### 9. Analysis Report of lake Chakki Naka

#### A] Sampling Data:

1. Name of the lake : Chakki Naka lake
2. Lake ID No. : 4403
3. Sampling Date : 15/02/99
4. Sampling Time : 11.30 am
5. Sampling Point : Middle of the water level
6. Lake Depth : -
7. Team ID No. : 2

#### B] Analytical Data:

1. Sample ID No. : 4023
2. Colour : Colourless
3. pH : 6.9
4. Temperature °C : 31
5. D.O. mg/l : 1.4
6. TDS mg/l : 460
7. TSS mg/l : 12
8. COD mg/l : 42.2
9. Hardness mg/l : 250
10. Alk. as CaCO<sub>3</sub> mg/l : 245.6
11. Turbidity NTU : 55.5
12. Conductivity uMho : 1090

13.BOD mg/l	: 40
14.Chloride as NaCl mg/l	: 207
15.Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16.Kjeldhal's N mg/l	: 16.52
17.Total P mg/l	: 0.95

### 10. Analysis Report of lake Nandivali

#### A] Sampling Data:

1. Name of the lake	: Nandivali Lake
2. Lake ID No.	: 4501
3. Sampling Date	: 12/02/99
4. Sampling Time	: 10.00 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 2 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4014
2. Colour	: Pale Yellow
3. pH	: 7.7
4. Temperature °C	: 25
5. D.O. mg/l	: 5.9
6. TDS mg/l	: 200
7. TSS mg/l	NIL
8. COD mg/l	10
9. Hardness mg/l	: 182
10. Alk. as CaCO <sub>3</sub> mg/l	: 149.5
11. Turbidity NTU	: 11
12. Conductivity uMho	: 770
13. BOD mg/l	: 3.5

### 11. Analysis Report of lake Bhopar

#### A] Sampling Data:

1. Name of the lake	: Bhopar Lake
2. Lake ID No.	: 4502
3. Sampling Date	: 12/02/99
4. Sampling Time	: 10.10 am
5. Sampling Point	: middle of the water level
6. Lake Depth	: 1.5 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4015
2. Colour	: Blackish
3. pH	: 7.1
4. Temperature °C	: 25
5. D.O. mg/l	: 3.8
6. TDS mg/l	: 80

7. TSS mg/l	: 4
8. COD mg/l	: 12
9. Hardness mg/l	: 274
10. Alk. as CaCO <sub>3</sub> mg/l	: 203
11. Turbidity NTU	: 69
12. Conductivity uMho	: 830
13. BOD mg/l	: 1

## 12. Analysis Report of lake Kanchangaon

### A] Sampling Data:

1. Name of the lake	: Kanchangaon Lake
2. Lake ID No.	: 4503
3. Sampling Date	: 15/02/99
4. Sampling Time	: 11.10 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 2

### B] Analytical Data:

1. Sample ID No.	: 4022
2. Colour	: Pale Yellow
3. pH	: 7.7
4. Temperature °C	: 31
5. D.O. mg/l	: 5.1
6. TDS mg/l	: 1140
7. TSS mg/l	: 32
8. COD mg/l	: 80.4
9. Hardness mg/l	: 615
10. Alk. as CaCO <sub>3</sub> mg/l	: 112.1
11. Turbidity NTU	: 58.6
12. Conductivity uMho	: 5100
13. BOD mg/l	: 24.5
14. Chloride as NaCl mg/l	: 483
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's N mg/l	: 11.4
17. Total P mg/l	: 0.14
18. As mg/l	: 0.11
19. Cd mg/l	: 0.006
20. Cr mg/l	: 0.024
21. Co mg/l	: NIL
22. Cu mg/l	: 0.064
23. Pb mg/l	: NIL
24. Hg mg/l	: NIL
25. Ni mg/l	: 0.028
26. Zn mg/l	: 0.02

### 13. Analysis Report of lake Balyani

#### A] Sampling Data:

1. Name of the lake : Balyani Lake  
2. Lake ID No. : 4601  
3. Sampling Date : 17/02/99  
4. Sampling Time : 10.20 am  
5. Sampling Point : Middle of the water level  
6. Lake Depth : 1 mt  
7. Team ID No. : 3

#### B] Analytical Data:

1. Sample ID No. : 4024  
2. Colour : Pale Yellow  
3. pH : 7.7  
4. Temperature °C : 31  
5. D.O. mg/l : 3.8  
6. TDS mg/l : 360  
7. TSS mg/l : 25  
8. COD mg/l : 40.63  
9. Hardness mg/l : 220  
10. Alk. as CaCO<sub>3</sub> mg/l : 186.9  
11. Turbidity NTU : 33.3  
12. Conductivity uMho : 600  
13. BOD mg/l : 4

### 14. Analysis Report of lake Ambivali

#### A] Sampling Data:

1. Name of the lake : Ambivali Lake  
2. Lake ID No. : 4602  
3. Sampling Date : 19/02/99  
4. Sampling Time : 11.45 am  
5. Sampling Point : Middle of the water level  
6. Lake Depth : 2 mt.  
7. Team ID No. : 3

#### B] Analytical Data:

1. Sample ID No. : 4031  
2. Colour : Pale Yellow  
3. pH : 8.6  
4. Temperature °C : 28  
5. D.O. mg/l : 5.5  
6. TDS mg/l : 340  
7. TSS mg/l : 24  
8. COD mg/l : 39.04  
9. Hardness mg/l : 210  
10. Alk. as CaCO<sub>3</sub> mg/l : 181.5  
11. Turbidity NTU : 47.5

12. Conductivity uMho	: 840
13. BOD mg/l	: 8.2
14. Chloride as NaCl mg/l	: 138
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's N mg/l	: 7.49
17. Total P mg/l	: 0.26
18. As mg/l	: NIL
19. Cd mg/l	: 0.03
20. Cr mg/l	: NIL
21. Co mg/l	: NIL
22. Cu mg/l	: 0.011
23. Pb mg/l	: 0.019
24. Hg mg/l	: NIL
25. Ni mg/l	: NIL
26. Zn mg/l	: 0.022

### 15. Analysis Report of lake Vadavali

#### A] Sampling Data:

1. Name of the lake	: Vadavali Lake
2. Lake ID No.	: 4603
3. Sampling Date	: 19/02/99
4. Sampling Time	: 10.35 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 2 mt.
7. Team ID No.	: 3

#### B] Analytical Data:

1. Sample ID No.	: 4028
2. Colour	: Pale Yellow
3. pH	: 7.6
4. Temperature °C	: 28
5. D.O. mg/l	: 6.5
6. TDS mg/l	: 220
7. TSS mg/l	: NIL
8. COD mg/l	: 21.91
9. Hardness mg/l	: 271
10. Alk. as CaCO <sub>3</sub> mg/l	: 202
11. Turbidity NTU	: 6
12. Conductivity uMho	: 980
13. BOD mg/l	: 6.2

### 16. Analysis Report of lake Atali

#### A] Sampling Data:

1. Name of the lake	: Atali Lake
2. Lake ID No.	: 4604
3. Sampling Date	: 19/02/99
4. Sampling Time	: 11.10 am

5. Sampling Point	: Middle of the water level
6. Lake Depth	: 2 mt.
7. Team ID No.	: 3
<b>B] Analytical Data:</b>	
1. Sample ID No.	: 4030
2. Colour	: Pale Yellow
3. pH	: 7.6
4. Temperature °C	: 28
5. D.O. mg/l	: 5.3
6. TDS mg/l	: 120
7. TSS mg/l	: NIL
8. COD mg/l	: 21.91
9. Hardness mg/l	: 163
10. Alk. as CaCO <sub>3</sub> mg/l	: 138
11. Turbidity NTU	: 5.5
12. Conductivity uMho	: 690
13. BOD mg/l	: 9.2
14. Chloride as NaCl mg/l	: 289
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's N mg/l	: 13.48
17. Total P mg/l	: 0.021
18. As mg/l	: NIL
19. Cd mg/l	: 0.009
20. Cr mg/l	: NIL
21. Co mg/l	: NIL
22. Cu mg/l	: 0.0064
23. Pb mg/l	: 0.007
24. Hg mg/l	: NIL
25. Ni mg/l	: NIL
26. Zn mg/l	: 0.008

### 17. Analysis Report of lake Patil Nagar

#### A] Sampling Data:

1. Name of the lake	: Patil Nagar Lake
2. Lake ID No.	: 4605
3. Sampling Date	: 19/02/99
4. Sampling Time	: 10.50 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 0.5 Mt.
7. Team ID No.	: 3

#### B] Analytical Data:

1. Sample ID No.	: 4029
2. Colour	: Blackish
3. pH	: 7.0
4. Temperature °C	: 28
5. D.O. mg/l	: 5

6. TDS mg/l	: 580
7. TSS mg/l	: NIL
8. COD mg/l	: 53.78
9. Hardness mg/l	: 482
10. Alk. as CaCO <sub>3</sub> mg/l	: 320
11. Turbidity NTU	: 21.4
12. Conductivity uMho	: 1340
13. BOD mg/l	: 12

### 18. Analysis Report of lake Manda

#### A] Sampling Data:

1. Name of the lake	: Manda lake
2. Lake ID No.	: 4701
3. Sampling Date	: 17/02/99
4. Sampling Time	: 10.45 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 2 mt.
7. Team ID No.	: 3

#### B] Analytical Data:

1. Sample ID No.	: 4025
2. Colour	: Pale Yellow
3. pH	: 7.8
4. Temperature °C	: 31
5. D.O. mg/l	: 4.1
6. TDS mg/l	: 460
7. TSS mg/l	: NIL
8. COD mg/l	: 29.88
9. Hardness mg/l	: 216
10. Alk. as CaCO <sub>3</sub> mg/l	: 197.6
11. Turbidity NTU	: 8.8
12. Conductivity uMho	: 560
13. BOD mg/l	: 6.5
14. Chloride as NaCl mg/l	: 82.5
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's N mg/l	: 7.12
17. Total P mg/l	: 0.13

### 19. Analysis Report of Titwala Ganapati Mandir lake

#### A] Sampling Data:

1. Name of the lake	: Titwala Ganapati Mandir Lake
2. Lake ID No.	: 4702
3. Sampling Date	: 17/02/99
4. Sampling Time	: 11.00 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 3



**B] Analytical Data:**

1. Sample ID No.	: 4027
2. Colour	: Colourless
3. pH	: 7.0
4. Temperature °C	: 31
5. D.O. mg/l	: 6.1
6. TDS mg/l	: 460
7. TSS mg/l	: NIL
8. COD mg/l	: 25.9
9. Hardness mg/l	: 228
10. Alk. as CaCO <sub>3</sub> mg/l	: 248.8
11. Turbidity NTU	: 5.7
12. Conductivity uMho	: 670
13. BOD mg/l	: 10.8
14. Chloride as NaCl mg/l	: 110
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's N mg/l	: 8.55
17. Total P mg/l	: 0.31

**20. Analysis Report of lake Ganeshwadi**

**A] Sampling Data:**

1. Name of the lake	: Ganeshwadi Lake
2. Lake ID No.	: 4703
3. Sampling Date	: 17/02/99
4. Sampling Time	: 11.45 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 3

**B] Analytical Data:**

1. Sample ID No.	: 4026
2. Colour	: Pale Yellow
3. pH	: 7.2
4. Temperature °C	: 31
5. D.O. mg/l	: 2.9
6. TDS mg/l	: 300
7. TSS mg/l	: 26.8
8. COD mg/l	: 63
9. Hardness mg/l	: 240
10. Alk. as CaCO <sub>3</sub> mg/l	: 197.6
11. Turbidity NTU	: 158.7
12. Conductivity uMho	: 560
13. BOD mg/l	: 22

## 21. Analysis Report of lake Katai

### A] Sampling Data:

1. Name of the lake : Katai Lake
2. Lake ID No. : 4801
3. Sampling Date : 12/02/99
4. Sampling Time : 11.30 am
5. Sampling Point : Middle of the water level
6. Lake Depth : 2 mt.
7. Team ID No. : 2

### B] Analytical Data:

1. Sample ID No. : 4019
2. Colour : Colourless
3. pH : 8
4. Temperature °C : 25
5. D.O. mg/l : 6.2
6. TDS mg/l : 200
7. TSS mg/l : 44
8. COD mg/l : 19.92
9. Hardness mg/l : 228
10. Alk. as CaCO<sub>3</sub> mg/l : 170.88
11. Turbidity NTU : 4.6
12. Conductivity uMho : 830
13. BOD mg/l : 6.2

## 22. Analysis Report of lake Nilaje-1

### A] Sampling Data:

1. Name of the lake : Nilaje-1 lake
2. Lake ID No. : 4802
3. Sampling Date : 12/02/99
4. Sampling Time : 11.00 am
5. Sampling Point : Middle of the water level
6. Lake Depth : 1 mt.
7. Team ID No. : 2

### B] Analytical Data:

1. Sample ID No. : 4017
2. Colour : Blackish
3. pH : 7.4
4. Temperature °C : 25
5. D.O. mg/l : 4.3
6. TDS mg/l : 200
7. TSS mg/l : 4
8. COD mg/l : 13.94
9. Hardness mg/l : 164
10. Alk. as CaCO<sub>3</sub> mg/l : 138.84
11. Turbidity NTU : 16.5
12. Conductivity uMho : 680

13. BOD mg/l	: 3.3
14. Chloride as NaCl mg/l	: 69
15. Sulphate as Na <sub>2</sub> SO <sub>4</sub> mg/l	: <5
16. Kjeldhal's Nitrogen mg/l	: 5.7
17. Total P mg/l	: 0.03

### 23. Analysis Report of lake Nilaje-2

#### A] Sampling Data:

1. Name of the lake	: Nilaje-2 lake
2. Lake ID No.	: 4803
3. Sampling Date	: 12/02/99
4. Sampling Time	: 11.10 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4018
2. Colour	: Pale Yellow
3. pH	: 7.3
4. Temperature °C	: 25
5. D.O. mg/l	: 3.3
6. TDS mg/l	: 100
7. TSS mg/l	: NIL
8. COD mg/l	: 13.94
9. Hardness mg/l	: 146
10. Alk. as CaCO <sub>3</sub> mg/l	: 144.18
11. Turbidity NTU	: 3.6
12. Conductivity uMho	: 740
13. BOD mg/l	: 7

### 24. Analysis Report of lake Usarghar

#### A] Sampling Data:

1. Name of the lake	: Usarghar lake
2. Lake ID No.	: 4804
3. Sampling Date	: 12/02/99
4. Sampling Time	: 10.30 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 4 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4016
2. Colour	: Colourless
3. pH	: 7.8
4. Temperature °C	: 25
5. D.O. mg/l	: 6.9
6. TDS mg/l	: 60

7. TSS mg/l	: NIL
8. COD mg/l	: 10
9. Hardness mg/l	: 132
10. Alk. as CaCO <sub>3</sub> mg/l	: 112.14
11. Turbidity NTU	: 5.4
12. Conductivity uMho	: 660
13. BOD mg/l	: 3.2

## 25. Analysis Report of lake Umroli

### A] Sampling Data:

1. Name of the lake	: Umroli lake
2. Lake ID No.	: 4805
3. Sampling Date	: 22/02/99
4. Sampling Time	: 9.00 a.m.
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 3

### B] Analytical Data:

1. Sample ID No.	: 4032
2. Colour	: Pale Yellow
3. pH	: 7.6
4. Temperature °C	: 29
5. D.O. mg/l	: 5.4
6. TDS mg/l	: 320
7. TSS mg/l	: 8
8. COD mg/l	: 13.94
9. Hardness mg/l	: 210
10. Alk. as CaCO <sub>3</sub> mg/l	: 160
11. Turbidity NTU	: 15.3
12. Conductivity uMho	: 570
13. BOD mg/l	: 5

## 26. Analysis Report of lake Dawadi

### A] Sampling Data:

1. Name of the lake	: Dawadi lake
2. Lake ID No.	: 4806
3. Sampling Date	: 15/02/99
4. Sampling Time	: 10.20 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 2

### B] Analytical Data:

1. Sample ID No.	: 4021
2. Colour	: Pale Yellow
3. pH	: 7.8
4. Temperature °C	: 31

5. D.O. mg/l	: 3.6
6. TDS mg/l	: 280
7. TSS mg/l	: 8
8. COD mg/l	: 61.75
9. Hardness mg/l	: 160
10. Alk. as CaCO <sub>3</sub> mg/l	: 336.4
11. Turbidity NTU	: 10.9
12. Conductivity uMho	: 910
13. BOD mg/l	: 3.5

### 27. Analysis Report of lake Sonarpada

#### A] Sampling Data:

1. Name of the lake	: Sonarpada lake
2. Lake ID No.	: 4807
3. Sampling Date	: 15/02/99
4. Sampling Time	: 9.55 am
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 1 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4020
2. Colour	: Pale Yellow
3. pH	: 8.9
4. Temperature °C	: 31
5. D.O. mg/l	: 8
6. TDS mg/l	: 220
7. TSS mg/l	: 12
8. COD mg/l	: 75.5
9. Hardness mg/l	: 132
10. Alk. as CaCO <sub>3</sub> mg/l	: 108.9
11. Turbidity NTU	: 19.8
12. Conductivity uMho	: 720
13. BOD mg/l	: 5.5

### 28. Analysis Report of lake Vasar

#### A] Sampling Data:

1. Name of the lake	: Vasar
2. Lake ID No.	: 4808
3. Sampling Date	: 10/02/99
4. Sampling Time	: 12.45 pm
5. Sampling Point	: Middle of the water level
6. Lake Depth	: 4 mt.
7. Team ID No.	: 2

#### B] Analytical Data:

1. Sample ID No.	: 4010
2. Colour	: Colourless

CHAPTER -5  
PAPER CUTTING  
PHOTOGRAPHS  
ACKNOWLEDGEMENT

# कल्याण-डोंबिवलीतील २७ तलावांची प्रचंड दुरवस्था

**डोंबिवली, ता. २९ :** कल्याण-डोंबिवली परिसरातील २७ तलावांची मोठ्या प्रमाणात दुरवस्था झाल्याचे एका पाहणी पथकाने केलेल्या सर्वेक्षणातून निष्पन्न झाले आहे. कल्याण आणि डोंबिवली या शहरांत १७ व ग्रामीण भागात १२ असे एकूण २९ तलाव आहेत. मासेमारीचे उच्चोत्पन्न आणि नळपाणी दोन्हीद्वारे घरोघरी पाणीपुरवठा होत असतो यामुळे तलाव पूर्णपणे दुर्लक्षित झाल्याचे स्पष्ट झाले आहे.

डोंबिवलीतील भवानी एन्व्हायर्टमेंट ही पर्यावरणविषयक संशोधन करणारी संस्था आणि कल्याणच्या पर्यावरण संरक्षण मंत्र्यांनी संयुक्तरीत्या केलेल्या पाहणीतून तलावांची दुरवस्था उघड झाली आहे. भवानी एन्व्हायर्टमेंटचे अध्यक्ष दीपक देशपांडे आणि रोटी क्लब डोंबिवली मिडटाऊनचे उताळ रडगावकर यांच्या नेतृत्वाखाली हे सर्वेक्षण करण्यात आले. सर्वेक्षणाचा अहवाल मुंबई महानगर विकास प्राधिकरणच्या पाहणी विभागाकडे पाठविण्यात आला आहे.

**पालिका हद्दीतील तलाव**  
सर्वेक्षण करताना कल्याण पालिकेचे भौगोलिकदृष्ट्या १२ विभाग पाडण्यात आले आहेत; परंतु नुकतीच कल्याण पालिकेतून २७ गावे वाटण्यात आली आहेत. यामुळे शहरातील तलाव पालिका क्षेत्रात तर ग्रामीण भागातील तलाव ग्रामपंचायत हद्दीत आणले आहेत. विभागवार असलेले तलाव पुढीलप्रमाणे : १) कल्याण - डावजे तलाव, काळा तलाव, रटाळे तलाव, २) कल्याण उत्तर (ग्रामीण) - गौरीपाडा तलाव, सापाड, उंबई तलाव, ३) कल्याण दक्षिण (ग्रामीण) - आडवली, डोकळी, कांडो, नारिवली व चक्कीनाका तलाव. ४) डोंबिवली ग्रामीण - नांदिवली, भोपर, ५) डोंबिवली परिसर - कांचनगाव तलाव. ६) अटाळी-आंबिवली - वडवली तलाव, पाटीलनगर-मोहने, अटाळी, आंबिवली व कल्याणी. ७) टिटवाळा-मांडा - मांडा, टिटवाळा गणपती मंदिर, टिटवाळा गणेशवाडी तलाव, ८) डोंबिवली ग्रामीण भाग - उंबावली, वसार, भाल, दावडी, सोनारपाडा, उसरघर, काटई व निळजे(अ) व निळजे(ब) तलाव. ९) कल्याण चिकणघर, १०) कल्याण पूर्व, ११) डोंबिवली शहर, १२)

डोंबिवलीतील कोपर आणि आपरे गाव या पाच विभागांत तलाव नाहीत. यापूर्वी या परिसरात तलाव होते परंतु ते दुर्लक्षित झाले, असे पाहणी पथकाच्या निदर्शनास आले आहे.

**तलावांची स्थिती**  
सर्वसाधारणपणे तलावांचा वापर भाजीपाला लागवडीसाठी, गायी-गुमंसाठी, वॉटभट्ट्या व काही प्रमाणात मासेमारी करण्यासाठी केला जातो.

डावजे तलाव, काळा तलाव, आडवली, डोकळी, चक्कीनाका, मांडा, निळजे (अ)



निळजे गावातील पाणयनस्पतींनी भरलेला तलाव. (छायाचित्र : प्रदीप गोसावी)

आणि टिटवाळा गणपती मंदिर हे तलाव नागरी वस्तीत आहेत. त्यामुळे या तलावांचा वापर गणपती विसर्जन, कपडे धुणे, गायी-गुरांना पाणी पाजण्यासाठी व त्यांना धुण्यासाठी तसेच टाकाऊ पदार्थ टाकण्यासाठी केला जातो. त्यामुळे या तलावांतील पाणी प्रदूषित झाले आहे. कांचनगाव, अटाळी व आंबिवली येथील तलाव औद्योगिक परिसरात आहेत. रसायनमिश्रित पाणी या तलावांत मिसळत असते. त्यामुळे या तलावांतील पाणी प्रदूषित झाले आहे, असे निदर्शनास आले आहे.

उंबई, रटाळे, भोपर, वडवली, पाटीलनगर-मोहने या तलावांत पावसाळ्यात परिसरातील माती मोठ्या प्रमाणात वाहून येते. हे तलाव गाळाने भरले आहेत. वाहून येणारे सांडपाणीमिश्रित गाळ रोखण्यासाठी प्रयत्न करण्यात येत नसल्याने भविष्यात या तलावांच्या अस्तित्वावटल प्रश्न निर्माण होणार आहे, असे पाहणी पथकाने म्हटले आहे.

गौरीपाडा, सापाड, उंबई, कांडो-नांदिवली, कल्याणी, टिटवाळा गणेशवाडी, वसार, भाल, दावडी, सोनारपाडा, उसरघर, निळजे (ब) हे तलाव ग्रामीण भागात आहेत. या तलावांतही पानयनस्पती व गाळ असल्याचे पाहणी पथकाच्या निदर्शनास आले

आहे. या तलावांतील गाळ काढून टाकल्यास या तलावांत आहे त्यापेक्षा अधिक पाणी साठवून शहर परिसरातील पाणीटंचाईवर मात करण्यासाठी त्याचा वापर होऊ शकेल. सापाड तलाव, उसरघर येथील तलावांचे सुशोभीकरण केल्यास पर्यटनासाठी या परिसराचा उपयोग होऊ शकतो. वसार तलावात बारमाही मासेमारीचा व्यवसाय मोठ्या प्रमाणात होऊ शकतो, असे सर्वेक्षण अहवालात म्हंटले आहे.

**चांगल्या स्थितीतील तलाव**

ग्रामस्थांनी स्वतः लक्ष दिल्यामुळे नांदिवली व काटई येथील तलाव चांगल्या स्थितीत आहेत. काटई तलाव परिसर निर्माणरम्य असून पालिका क्षेत्रातील सर्वात चांगला तलाव आहे. भौगोलिकदृष्ट्या कल्याण उत्तर (ग्रामीण) आणि डोंबिवली ग्रामीण भागातील तलावांची स्थिती चांगली आहे तर कल्याण शहर, मांडा-टिटवाळा, अटाळी आणि आंबिवली या औद्योगिक भागातील तलाव प्रदूषित झाले असल्याचे पाहणी पथकाच्या निदर्शनास आले आहे.

**तलावांकडे दुर्लक्ष**  
स्थानिक नागरिकांनी पाहणी पथकास दिलेल्या माहितीनुसार, पूर्वी सर्व तलावांतील पाणी पिण्यासाठी वापरले जात होते. ग्रामस्थ वेळोवेळी तलावांची डगडुजी करीत असल्याने तलाव सुस्थितीत होते. प्राचीन परंपरेनुसार होळीच्या वेळी ग्रामस्थ तलावांत एकत्रितरीत्या मासेमारी करीत होते. तलावांतील गाळ काढून ग्रामस्थ तो गाळ आपल्या शेतात टाकीत होते. या पद्धतीमुळे वेळोवेळी तलावांतील गाळ उपसला जात असे व पाण्याचा वापर ग्रामस्थांना योग्यरीतीने करता येत होता.

दरम्यानच्या काळात वाढते औद्योगिकीकरण व नागरीकरण यामुळे अनेक लोक नोकरीधंद्याकडे वळले. ग्रामीण भागातील लोकांचा ओढा शहराकडे वाढू लागल्याने व औद्योगिकीकरणामुळे लहान-मोठ्या खाड्या प्रदूषित होत गेल्याने, मासेमारी व्यवसाय दुर्लक्षित झाला. वाढत्या नागरीकरणांमुळे व फ्लॅट संस्कृतीमुळे नळ-पाणीपुरवठा योजनेद्वारे घराघरांत पाणीपुरवठा

होऊ लागला. त्यामुळे विहिरी व तलाव दुर्लक्षित होत गेले, असे पाहणी पथकाचे प्रमुख अनिल रेडगावकर आणि दीपक देशपांडे यांच्या निदर्शनास आले.

**तलाव उत्पन्नाचे साधन**  
तलावांतील गाळ काढला, पाणयनस्पती नष्ट केल्या तर तलावातील पाण्याचा पाणीटंचाईच्या काळात पर्यायी व्यवस्था म्हणून उपयोग होऊ शकेल. तलावांचे सुशोभीकरण केले तर ही ठिकाण पर्यटनासाठी प्रसिद्ध होऊ शकतील. भाजीपाला लागवड याद्वारे पानयनस्पती वृद्धी होईल. ज्या परिसरात तलाव आहेत, त्या भागातील नागरिकांनी स्वतः तलाव स्वच्छ ठेवण्याबाबत आपले मन तयार केले तर काटईसारखे स्वच्छ सुंदर तलावांचे स्वरूप इतर तलावांनाही येऊ शकते, असे श्री. रेडगावकर व श्री. देशपांडे यांनी सर्वेक्षण अहवालात नमूद केले आहे. तलाव स्वच्छतेबाबत ग्रामस्थांची मानसिकता अंमल नसून सरकारी योजनांची गरजच काय? असा प्रश्न पाहणी पथकाने केला आहे.

## ठाण्यातील पासपोर्ट संगणक यंत्रणेने सुरु

**सुरीशलकुमार शिंदेची माहिती**  
ठाणे, ता. २९ : मुंबईप्रमाणे ठाणे येथील पासपोर्ट कार्यालयही लवकरच संगणक यंत्रणेने सुसज्ज करण्यात येईल, असा ठराव सरकारच्या परराष्ट्र व्यवहार विभागाच्या स्थानीय समितीचे अध्यक्ष खासदार सुरीशलकुमार शिंदे यांनी येथे सांगितले.

या समितीने वागळे इस्टेट येथील पासपोर्ट कार्यालय भेट दिली. या वेळी समितीच्या सदस्या छान्दास प्रभा राव, महेंद्रचंद्र शर्मा, विक्रम केकरे देव, दिनेशचंद्र यादव, सरला महेशवरी, दिलीप संधानो, नाबेन रिवेलो आदी उपस्थित होते.

सुमारे नौन वर्षापूर्वी ठाणे जिल्हाधिकारी प्रांगणात सुरु करण्यात आलेले पासपोर्ट कार्यालय वागळे इस्टेट येथील एमआयईसोच्या वरदान या इमारतीमधील मोठ्या जागेत हलविण्यात आले; परंतु तेथे फक्त अर्ध स्वीकारण्यापलीकडे काहीही कार्यवाही होत नसल्याची खंत खासदार प्रकाश परजपे यांनी व्यक्त केली. सुमारे ४५ दिवसांत संपूर्ण छाननी होऊन पात्र व्यक्तीस पासपोर्ट मिळण्यास अडचण येऊ नये, असे सरकारचे धोरण असूनही सध्या अडीच-तीन महिने पामपोर्ट मिळत नाही, असे त्यांनी

जलवाः  
नागरिकः  
होती.  
करीतः  
आऊन  
पावसाः  
वाढलेः  
त्यात  
जलवाः  
सुमारे  
होती.  
मीनाताः  
किलोमिः  
जाणारे  
वापर व  
धि  
माजित  
मानुषः  
परिसरा  
राहतः  
असल्या  
अशी व  
श्रेणे, र  
उच्च  
वर्णनः

समितीचे  
येथे  
कल्याण  
अशा  
अभ्यंत्य  
या वेळी  
अधिक  
मंत्रालय  
उपायुक्त  
उपस्थित  
सो  
चौ  
उर  
गळ्यात  
पडून  
पोलिसां  
ठाण्यात  
आला  
पो  
वेलागि  
रेचेस्थ  
चार ज  
लागल्या  
यांच्या  
मोठ्या

**रिचर्डसन अँड क्रुडास (१९७२) लिमिटेड,**  
(भारत सरकारचा उपक्रम)  
(भारत येथे निगम लिमिटेडचा उपविभाग)  
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कॅन्टीन कॉन्व्हेंटरकरिता  
अंदाजे ३५० फर्माचो असलेल्या कंपनीकरिता औद्योगिक कॅन्टीन कॉन्व्हेंटरकडून वार्षिक  
दरम्यानच्या काळात वाढते

*CATEGORY OF LAKE : EXCELLENT*



*LAKE : NANDIVALI*



*LAKE : KATAI*



*CATEGORY OF LAKE : IMPACTED*



*LAKE : SONARPADA*



*LAKE : BHAL*

*CATEGORY OF LAKE : SEVERELY IMPACTED*



*LAKE : TITWALA GANAPATI MANDIR*



*LAKE : CHAKKI NAKA*

## ACKNOWLEDGEMENTS

- MMR-Environment Improvemnt Society, Mumbai.
- Kalyan Dombivli Municipal Corporation, Kalyan
- Parvayaran Sanrakshan Manch, kalyan
- Loksatta (Newspaper)
- Mumbai Sakal (News Paper)
- Local Persons