

# Environmental Status Report

## 2022-2023



Vasai Virar City Municipal Corporation

*Submitted by*



**Indian Institute of Technology Bombay**

**Powai, Mumbai- 400076**



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## Foreword



The status of the environment in the city is the key document that is required to prepare policies that will help to protect and conserve the environment. I am glad and feel gratified to offer Vasai-Virar City Municipal Corporation's Environmental Status Report for the years 2022-2023. The ESR showcases the efforts of the members of VVCMC, striving for improvements and driving the city to make it sustainable with respect to the environmental factors. The Report is developed by analyzing quantitative data, vast level of monitoring across all the environmental matrices, publicly available information, suggestions, and policy documents as noted to be applicable.

VVCMC takes every effort to periodically monitor environmental matrices, dispose the generated waste, maintain roads, drainage, and sewerage systems, and enhance the all-necessary green cover by planting more trees to make the system more environmentally friendly and making the city inhabitable by the ever-growing population.

In the VVCMC region there are numerous industries that strive to maintain environmental balance while manufacturing their products. Environmental protection and conservation have always been a collective as well as individual responsibility therefore; VVCMC makes all the efforts to make the city cleaner and safer not only through collective efforts but also educating individuals to make all important impacts.

The ESR is the result of a thorough investigation conducted by the Professors and Associates of Indian Institute of Technology, Bombay. Hence, I am confident that the Environmental Status Report would assist VVCMC in making the city clean, beautiful, livable and healthy.

**Shri. Anilkumar Pawar**  
Hon'ble Municipal Commissioner  
Vasai Virar City Municipal Corporation

## Foreword



“Environment Protection”, “Global warming” are the buzzwords in the current world scenario. To prevent adverse impacts of Global warming protection and conservation of environment is the most important task before any government. And preparing Environment Status Report of city would definitely work as mirror to show the lacunas & would also help to suggest measures to improve the state of environment. VVCMC in Co-ordination with IIT, Bombay has prepared the Environmental Status Report for the year of 2022-2023 and I am happy to present the same.

The Vasai-Virar City Municipal Corporation takes every effort to periodically monitor environmental matrices with or without the assistance of an external expert, dispose the generated waste in a systematic and compliant manner, maintain roads, manage and maintain the drainage and sewerage systems, enhance the all-necessary green cover by planting trees to make the system more environmentally friendly and making the city inhabitable by the ever-growing population.

Numerous businesses in the Vasai-Virar City Municipal Corporation area make an effort to produce their goods while preserving the environment. Both community duty and individual responsibility have been a part of environmental protection and conservation. The Indian Institute of Technology, Bombay, conducted a comprehensive examination that led to the creation of the Vasai-Virar Environmental Status Report.

The Environmental Status Report will undoubtedly help the Vasai-Virar City Municipal Corporation make their city a cleaner, more attractive, environment friendly and healthier place to live in. Simultaneously, it will strive to fulfill its responsibilities towards reducing the ill effects of Global warming.

**Shri. Ramesh Manale**  
Additional Municipal Commissioner  
Vasai Virar City Municipal Corporation



## Foreword



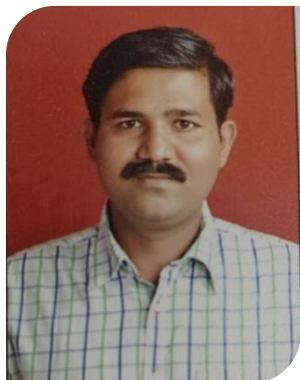
The Environmental Status Report (ESR) is not just about the fulfillment of the need for a report; rather, it is a continuous process of measurement of environmental indicators and assessment of the environmental parameters. The results are not just compiled but are analyzed with deep study and discussion, on the basis of which the Vasai-Virar City Municipal Corporation will take steps for the mitigation of identified environmental issues and strive towards better environmental management.

We consider this as one of our most important duties, and for these reasons, we conduct a very detailed and comprehensive exercise to develop this report annually. It is a matter of immense pride to be part of a team trying to develop the city in an eco-friendly manner. Through our combined efforts, we are striving to constantly improve the status of Vasai-Virar City at all levels social, environmental, or economic.

Finally, I would also like to express my appreciation and thanks to all individuals and departments for their valuable inputs to this report.

**Shri. Ajinkya Bagade**  
Additional Municipal Commissioner  
Vasai Virar City Municipal Corporation

## Foreword



I'm pleased to present the Vasai-Virar City Municipal Corporation's Environmental Status Report for the years 2022-2023. The Environmental Status Report is the result of fantastic reforms that make the city more environmentally friendly and sustainable. It is constructed utilizing facts, information, useful advice, and suggested laws.

The Vasai-Virar City Municipal Corporation works arduously to maintain the city's roadways, collect and dispose of solid waste, manage the drainage and sewerage systems, encourage tree cover through annual plantings, maintain the chowk's aesthetic appeal, and plan the city to accommodate a growing population.

The Majhi Vasundhara and Mission Life programme are being carried out by the government in our city with the message of environmental preservation and protection. Participating citizens should adopt the 75 environment friendly habits.

The first environmental status report which is prepared by a reputed institute IIT will definitely be beneficial to our city in a number of ways. This report will provide valuable guidance to provide clean air, clean water, beautiful and green city to the citizens.

**Dr. Sagar Sunil Gholap**  
Deputy Municipal Commissioner  
Vasai Virar City Municipal Corporation



## Acknowledgement

The development of the "Environmental Status Report for "Vasai-Virar City Municipal Corporation" was a wonderful experience, which the Indian Institute of Technology, Bombay (IIT Bombay) credits to Vasai-Virar City Municipal Corporation (VVCMC) officials' for their cooperation and support.

To begin, IIT Bombay wishes to express gratitude to Shree. Anilkumar Pawar, Shree. Ajinkya Bagade, Shree. Ramesh Manale and Dr. Sagar Sunil Gholap, all Municipal Administrator officers of Vasai-Virar City Municipal Corporation, for their continuous support and encouragement.

While formulating the Environmental Stats Report, IIT Bombay would like to express its gratitude to the City Engineer and all the officials of VVCMC, who assisted us during site visits and personal interactions to collate primary as well as secondary information.

The team would also like to thank all of the Executive Engineers of the respective departments and their team members for their assistance, as well as the Hon'ble Committee Members of the VVCMC for their continued cooperation.

IIT Bombay by heart acknowledges the efforts put forward by all the additional officials from various government ministries, their secretarial staff, and participants in stakeholder meetings, and persons who supplied data, timely assistance, and great cooperation.

Finally, the authors express their gratitude to everyone who helped them compile this study.

**March, 2023**



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## Abbreviation

<b>AAQ</b>	<b>Ambient Air Quality</b>
AAQMS	Ambient Air Quality Monitoring System
VVCMC	Vasai Virar City Municipal Corporation
AQI	Air Quality Index
BDL	Below Detectable Limit
BOD	Biological Oxygen Demand
BPMC	Bombay Provisional Municipal Corporation
CAAQM	Continuous Ambient Air Monitoring Station
CETP	Common Effluent Treatment Plant
CGWB	Central Ground Water Board
CO	Carbon Monoxide
COD	Chemical Oxygen Demand
COPD	Chronic Obstructive Pulmonary Disease
CPCB	Central Pollution Control Board
CSR	Corporate Social Responsibility
dBA	Weighted Decibels
DL	Detectable Limit
DMP	Disaster Management Plan
DO	Dissolved Oxygen
DPR	Detailed Project Report
DPSIR	Driving Force Pressure State Impact Response
EC	Electrical Conductivity
ENE	East- northeast
EPIP	Export Promotion Industries Park
ESR	Environmental Status Report
GBD	Global Burden of Disease
GC- FIS	Gas Chromatography- Flame Ionization Detection



GC-FID	Gas Chromatography- Flame Ionization Detector
GIS	Geographical Information System
GOM	Government of Maharashtra
IMD	India Meteorology Department
KLD	Kilo- liters per Day
LPCD	Liters per Capita per Day
LRI	Lower Respiratory Tract Infection
LULC	Land Use Land Cover
MCM	Million Cubic Meters
MIDC	Maharashtra Industrial Development Corporation
MJP	Maharashtra Jeevan Pradhikaran
MLD	Million Liters Per Day
MMC	Maharashtra Municipal Corporation
MMR	Mumbai Metropolitan Region
MMRDA	Mumbai Metropolitan Region Development Authority
MoEF&CC	Ministry of Environment, Forest and Climate Change
MoHFW	Ministry of Health and Family Welfare
MPCB	Maharashtra Pollution Control Board
MPN	Most Probable Ground
MSEB	Maharashtra State Electricity Board
MSL	Mean Sea Level
MSRDC	Maharashtra State Road Development Corporation
MSRTC	Maharashtra State Road Transport Corporation
MSW	Municipal Solid Waste
MT	Metric Tons
NAAQS	National Ambient Air Quality Standards
NABL	National Accreditation Board for Test & Calibration Laboratories
NAMP	National Air Quality Monitoring Programme
NDMA	National Disaster Management Authority



NE	Northeast
NGO	Non- Government Organization
NNE	North- northeast
NOx	Oxides of Nitrogen
NRW	Non- Revenue Water
NWMP	National Water Monitoring Programme
ODF	Open Defecation Free
OECD	Organization of Economic Co-corporation and Development
PM <sub>10</sub>	Particulate Matter Below 10 micrometers Diameter
PM <sub>2.5</sub>	Particulate Matter Below 2.5 micrometers Diameter
PPP	Public Private Partnership
PWD	Public Works Department
RDS	Respirable Dust Sampler
RSPM	Respirable Suspended Particulate Matter
RTO	Regional Transport Office
SAR	Sodium Absorption Rate
SHG	Self- Help Group
SMB	Swachh Bharat Mission
SO	Sulphur Monoxide
SoE	State of Environment Report
SPM	Suspended Particulate Matter
SSW	South- southwest
STP	Sewage Treatment Plant
SW	Southwest
SWD	Social Welfare Department
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
ULB	Urban Local Bodies
UNCED	United Nation Conference on Environment and Development



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



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WHO	World Health Organization
WIMCO	Western Indian Match Company
WQI	Water Quality Index
WQMS	Water Quality Monitoring Station
WSW	West- southwest
WTP	Water Treatment Plant



## Executive Summary

As per the Maharashtra Municipal Corporation (MMC) Act 1949, section 67(A), it is mandatory for all Urban Local Bodies (ULBs) of the state of Maharashtra to submit an annual Environmental Status Report (ESR) to General body on or before 31st July.

The 74<sup>th</sup> Amendment to the constitution has enlarged the roles and responsibilities of municipalities, specifically citing protection of the environment and promotion of ecological aspects. Preparation of Annual ESR is mandated in the state level legislation (the BPMC Act) following the 74<sup>th</sup> Constitutional Amendment Act and the 12<sup>th</sup> Schedule.

Environmental Reporting finds its roots in the Local Agenda 21 mandate passed at Earth Summit of 1990 in Rio. Under this mandate, Urban Local Bodies (ULBs) are required to prepare and publish an annual State of Environment Report (SoE) or equivalent.

The ESR indicates the city's environmental concerns, growth factors and its impacts and provides information on the environmental infrastructure including water supply, sewage management, traffic & transportation, solid waste management, biodiversity, overall environmental pollution and degradation and possible mitigation measures required, information for investment and management decisions for the ULB (Urban Local Body), assessment of various natural resources, level of pollution & its direct or indirect impact on human beings and other life forms and annual budgeting and planning exercises etc.

As per the guidelines published in June 2009 by the Department of Environment, Government of Maharashtra, the ESR has to be developed based on the DPSIR (Driving Force Pressure State Impact Response) framework. This frame-work focuses on dynamic relationship between human activities and their impact on physical and biological processes of the ecosystem.

The Environmental Status Report (ESR) 2022-23 aims to fulfill the objectives stated through the guidelines given by GOM regarding ESR study & the purpose of this study is;

- To highlight the condition of the biophysical environment of VVCMC





- To analyse trends or changes in the environment as well as identify the causes of these changes of VVCMC.
- To assess and interpret the implications and impacts of these trends
- To check adequacy of existing environmental infrastructure of VVCMC
- To set process for public participation
- To redevelop action plans of VVCMC
- To set targets, allocate responsibilities & institute monitoring and tracking mechanisms for making Vasai-Virar city environment friendly sustainable city.

To analyze the environmental health of Vasai Virar area, the secondary data from VVCMC, MJP, MPCB, CPCB, MIDC, MoHFW, MoEF&CC, NDMA, MSEB, Vasai Tehsil etc. and on field environmental survey was used. The purpose of on field survey was to know the environmental issues and efforts of VVCMC in mitigating the issues and also to understand the reasonable expectations of households in developing the city as sustainable and environmentally friendly.

The Vasai Virar city is divided into 115 wards for which elections are held every 5 years. As per provisional reports of Census India, population of Vasai Virar in 2011 was 12,34,690 of out of which approximately 6,54,635 were males while 5,80,055 were females. The sex ratio of Vasai Virar city was 886 per 1000 males. The child sex ratio of girls is 911 per 1000 boys. The average literacy rate of Vasai Virar city is 88.57 percent of which male and female literacy was 91.53 and 85.22 percent. *(Source: Election Dept., VVCMC)*

Vasai Virar City Municipal Corporation has total administration over the entire jurisdiction to which it supplies basic amenities like water and sewerage. It is also authorized to build roads within Municipal Council limits and impose taxes on properties coming under its jurisdiction.

The increasing population due to high growth of mitigation, affordable housing, well-organized railway connectivity, and enlargement of industrial activities are the main drives for pressure on environment. The ESR brings out the depletion of natural resources like



water & biodiversity due to urbanization & industrialization. Also changes in land use & land cover suggest rapid urbanization in the city. A large number of slums emerged in recent years that are preliminary unplanned & has contributed to the issue like decrease in tree cover, high density population, spread of diseases etc.

On the other hand, ESR analyses the status of Air quality, water quality & noise level was found within a healthy limit as provided by MPCB online monitoring data. The scientific analysis based on GIS & satellite images discover the land use & land cover in the city & also enabled us to understand classification of land cover & percentage distribution of land use. Further, the study of biodiversity helps us understand the impact of urbanization on the environment. The increase in tree cover could lead to better oxygen level, heat stress and less pollution in the city. The report also highlights the attempts made by VVCMC to increase tree cover through tree plantation programs and plantation awareness programs, reuse and recycling of treated water, segregation at source, processing solid waste to generate unconventional source of fuel & energy, banning the usage of Single Use Plastic (SUP), to form an environment regulation body at VVCMC, installing environment monitoring station at VVCMC & to enhance the participation of NGOs including SHGs in conserving environment in the city, advance medical facilities for COVID- 19 like emergencies etc.



## 1 Background of ESR

ESR is one of the forms of State of Environment Reporting (SoE). This data is often analyzed to show trends of environmental pollution, impacts of growth and possible environmental action planning in the city. According to the municipal legislations, the Urban Local Bodies (ULBs) in Class I cities are required to publish an annual Environmental Status Report (ESR) which will indicate the status of environment management in the city and identify the areas where mitigation measures are required to be considered.

Environmental Reporting finds its roots in the Local Agenda 21 mandate that was passed at the Earth Summit of 1990 in Rio. Under this mandate, Urban Local Bodies (ULBs) are required to prepare and publish an annual State of Environment Report (SoE) or equivalent.

The 74<sup>th</sup> amendment to the Indian constitution has enlarged the roles and responsibilities of municipalities, specifically citing protection of the environment and promotion of ecological aspects. Preparation of Annual ESR is mandated in the state level legislation (the BPMC Act) following the 74<sup>th</sup> Constitutional Amendment Act and the 12<sup>th</sup> Schedule. As per the guidelines published in June 2009 by the Department of Environment, Government of Maharashtra, the ESR has to be developed as per the DPSIR (Driving Force Pressure State Impact Response) framework. This frame-work focuses on dynamic relationship between the human activities and their impact on physical and biological processes of the ecosystem.

DPSIR framework assumes a chain of causal links starting with 'driving forces' (economic sectors, human activities) through 'pressures' (emissions, waste) to 'states' (physical, chemical and biological) and 'impacts' on ecosystems, human health and functions, eventually leading to political 'responses' (prioritization, target setting, indicators).

ESR studies also include analysis of trends or changes in the environment, analysis of the causes of these changes, assessment and interpretation of the implications and impacts of these trends and assessment of the actual and potential societal response to environmental

problems. Today, ESR study have emerged from being solely environment oriented to being all encompassing, interfacing with economic and social elements. Hence, the ESR report has come to identify the key driving forces that influence environmental change and policies.

The study of ESR of VVCMC, 2022-23 aims to fulfil the objectives stated through the guidelines given by GOM regarding ESR study & the purpose of this study is;

- To highlight the condition of the biophysical environment of VVCMC,
- To analyze trends or changes in the environment as well as identify the causes of these changes of VVCMC,
- To assess and interpret the implications and impacts of these trends,
- To check the adequacy of the existing environmental infrastructure of VVCMC.
- To set process for public participation,
- To redevelop action plans of VVCMC,
- To set targets, allocate responsibilities & institute monitoring and tracking mechanisms for making Vasai-Virar city environment friendly, sustainable city.



**Figure 1.1: Process Guidance Framework for Public Participation**



## 2 Vasai Virar – City Profile

### 2.1 Background

Vasai Virar City, a twin city, is a historical place known for its beaches and a major tourist attraction – Vasai Fort which was originally built in 1184. The city has seen different cultural diversions due to various rulers ruling the area. Much of the Vasai area was under Portuguese rule, the fort in fact was built by Portuguese to defend their colony and participate in the lucrative spice trade and the silk route that converged in the area. Part of Portuguese Bombay and Vasai were then seized by Marathas during the period of Peshwa rule, after the Battle of Vasai in 1739. The British East India Company then took over the territory from the Maratha Empire in 1780 during the First Anglo-Maratha War. Municipal Corporation is the governing body of the city of Vasai Virar in Palghar district.

Vasai-Virar City is the only Metropolitan City (having a population of more than ten lakhs in Palghar district which is also a Municipal Corporation. It is located at North Mumbai. Vasai Virar Municipal Corporation was formed on 3rd July, 2009, comprising 4 Municipal Councils and 53 villages. It is a Class C Municipal Corporation with a geographical area of 311.0 sq.km. It is also declared as Special Planning Authority for 21 Vasai Virar Sub Region villages.

Vasai town, Virar and a number of other nearby communities were officially combined to establish the Vasai-Virar twin city in 2009, and it quickly rose to the position of one of the state's most populous urban districts. The city has historically been a major hub for commercial fishing and the wholesale export of agricultural goods. Traditional industries include salt production and handloom weaving of silk and cotton. Construction and technology-related activity have also increased in the city.

Vaitarna and Vasai Creeks are the most important creeks passing through the northern and southern edges of the sub-region. Along the coast there are many small creek-lets. The



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coastal belt of the Sub-region is full of plantations with traditional villages maintaining peculiar Konkan-type character and offering beauty to the Sub-Region. The area of Vasai-Virar City is 311 sq. km. And total green cover is about 43.93%. The basic corporational information has been tabulated in Table 2.1.

**Table 2.1: Brief Information of Vasai Virar City**

Sr. No	Index	Information
1	City	Vasai Virar
2	Municipal Ground Coverage	311 Sq. Km.
3	Population (as per 2011 census)	12,34,690
4	Current Population	21,50,000
5	VVCMC Establishment	3 <sup>rd</sup> July 2009
6	Municipal Class	C
7	Election Ward	115
8	River	Ulhas River, Vasai Creek
9	Nearby Dam	Pelhar dam
10	MSL	36 ft
11	Location	19.3919° N, 72.8397° E
12	Road Network	<ul style="list-style-type: none"><li>• Mumbai-Delhi Highway NH 8</li><li>• Mumbai- Ahmedabad National Highway</li></ul>
13	Rail Network	<ul style="list-style-type: none"><li>• Central line from Diva / Panvel</li><li>• Western line from Church gate</li><li>• Konkan railway line from Panvel</li></ul>
14	Heritage	Vasai Fort

Source: VVCMC Official Website

## 2.2 Location

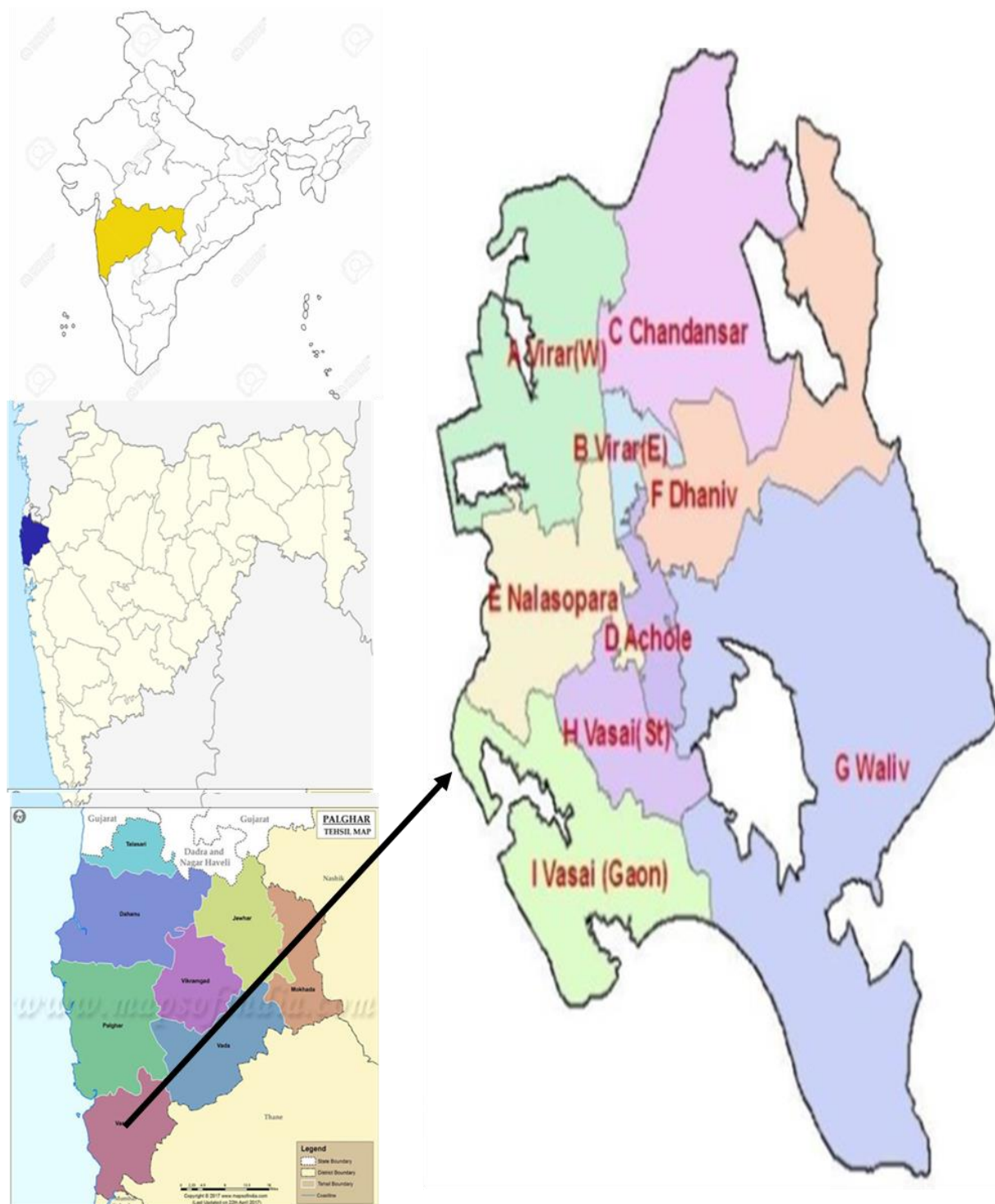
Vasai Virar with a jurisdiction of about 311 sq. km. is geographically located at 19.3919° N, Latitude and 72.8397° E Longitude at about 36 feet above mean sea level. It is located in Maharashtra, India's Konkan region. Vasai-Virar is one of the twin cities that make up the Mumbai Metropolitan Region (MMR). Vasai-Virar city has been separated from Greater Mumbai and Mira-Bhayandar City by Vasai Creek. Vasai Virar is well connected with all the nearest cities like Mumbai & Thane. Vasai Virar falls in the Palghar district, which approximately lies 53 km from Mumbai by road.

Vasai Virar city is situated in the north-west of the Mumbai Metropolitan Region. Location of Vasai Virar city is shown in Figure 2.1 & 2.2. The sanction plan of Vasai Virar city as given on the VVCMC website is shown in Figure 2.3.



Figure 2.1: Location of Vasai Virar City on Google





**Figure 2.2: Location of Vasai Virar City**



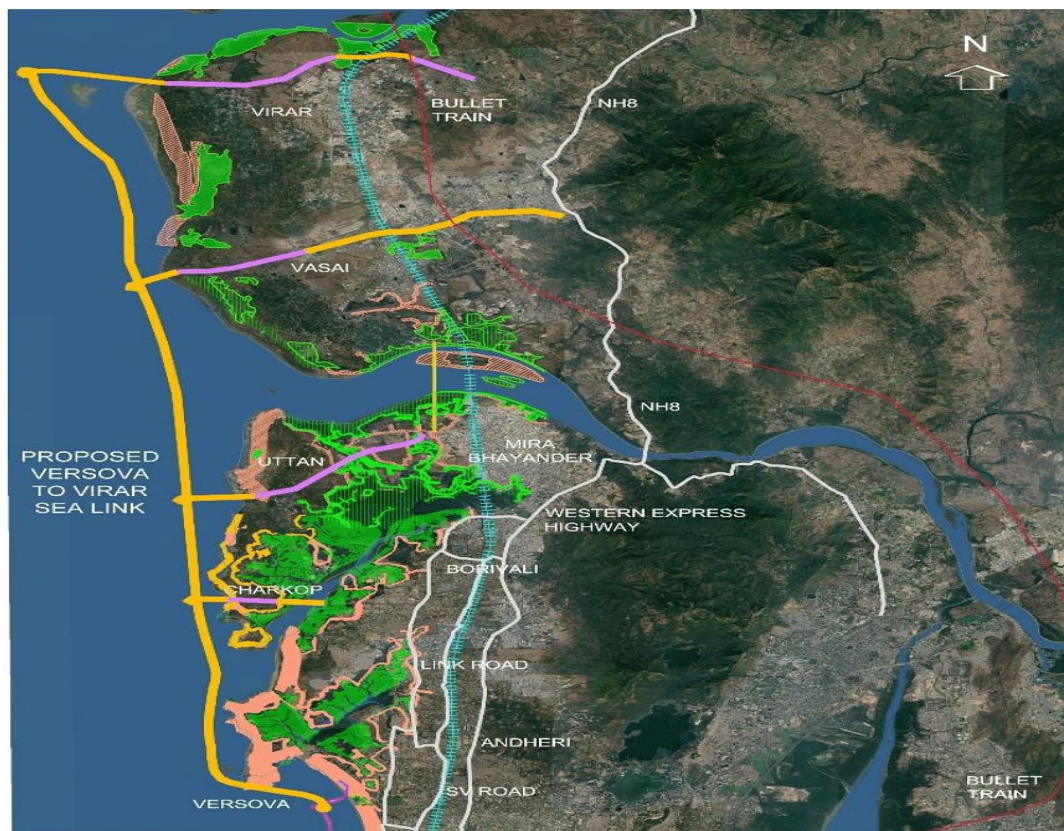


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## 2.3 Connectivity Network

Vasai Virar has emerged to be one of the fastest developing cities not only in Maharashtra but in the whole of India as well. The fact that it is a neighboring city to Mumbai has led to an influx of people constantly migrating to it. These people see Vasai Virar as the best option to not only beat the overcrowded, congested ways of Mumbai but also to tackle the paucity of land and skyrocketing rent that Mumbai is commonly infamous for. This is also one of the driving reasons the real estate market in Vasai Virar has expanded. Figure 2.4 shows the connectivity of Vasai Virar City with Mumbai and MMR Region.



**Figure 2.4: Vasai Virar City Connectivity**

Source: [www.mapsofindia.com](http://www.mapsofindia.com)

The city is well connected to Mumbai by Western Railway and through Mumbai-Ahmedabad National Highway. The Vasai-Diva Railway line connects the city to Navi



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Mumbai, Thane, Bhiwandi, Kalyan, and Panvel Node of Navi Mumbai City. It serves as a connecting point for the trains coming from Vadodara to Konkan Railway, Pune junction railway station and further towards cities of Bengaluru and Hyderabad.

Vasai-Virar's potential for expansion is substantial, given its proximity to Mumbai's core. On October 3, 2012, the Vasai-Virar City Municipal Corporation launched its own transportation service in collaboration with VVMT, also known as Bhagirathi Transport Corporation Pvt Ltd. It runs numerous bus lines in the city. Additionally, it operates in Mumbai, Thane, and the nearby cities of Mira-Bhayandar. Vasai to Thane and Vasai to Mulund are served by the VVMT bus. Refer Figure 2.5 for the road connectivity of Vasai Virar City.



**Figure 2.5: Road Connectivity to Vasai Virar**

Vasai Virar is one of the most important railway stations on the western railway route. While it comes under the Mumbai Division of Western Railway from Church gate to Dahanu, central line from Panvel/ Diva all meet at Vasai Road railway station. Figure 2.6 shows the rail connectivity of Vasai Virar City.



Figure 2.6: Vasai Virar Railway Connectivity Map



## 2.4 Climatic Conditions

The general climatic regime is fairly equitable since seasonal fluctuations of temperature are not significantly large. The moderating effects of the nearby sea and the fairly high amount of relative humidity in the atmosphere have restricted the variability. According to the Department of Agriculture, Government of Maharashtra, the state is divided into 9 Agro-climatic zones. The climate of the Vasai Virar Sub-region can be described as hot-humid with moderate seasonal temperature fluctuations. Due to a long coast-line and high relative humidity, the variations are not significant. The Vasai Virar Region is a narrow coastal belt fringed with dense thickets of coconut groves with a near pastoral ambience, and thus the relative humidity in Vasai-Virar is high.

### Average Temperature and Precipitation:

The average daily temperature varies from 13°C to 39°C. Major part of Vasai Virar city is in its developing stages. Most of the area either falls under agricultural land followed by open fallow land (Refer Figure 2.9-Land Use Pattern). Vasai Virar experiences fluctuations in temperatures across the year. Refer Figure 2.7 captures the average monthly temperature in Vasai Virar.

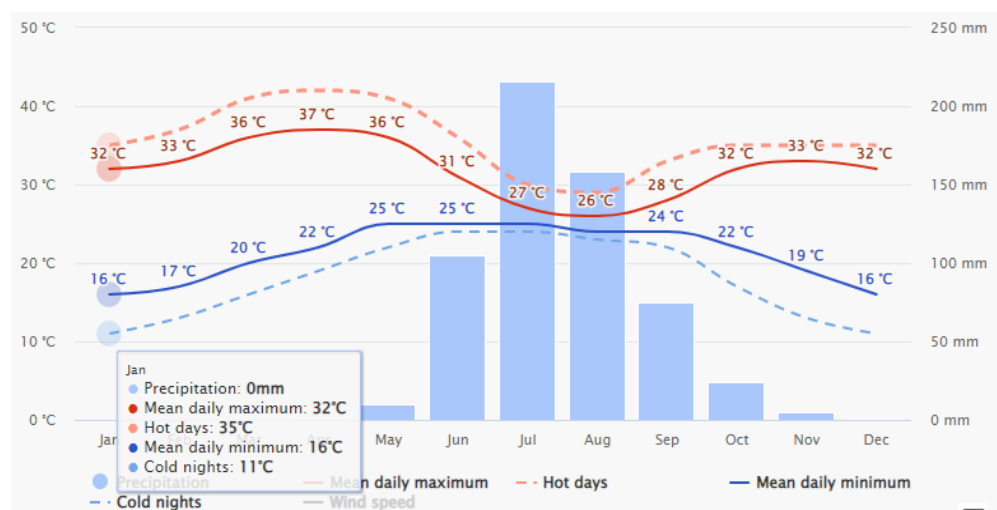
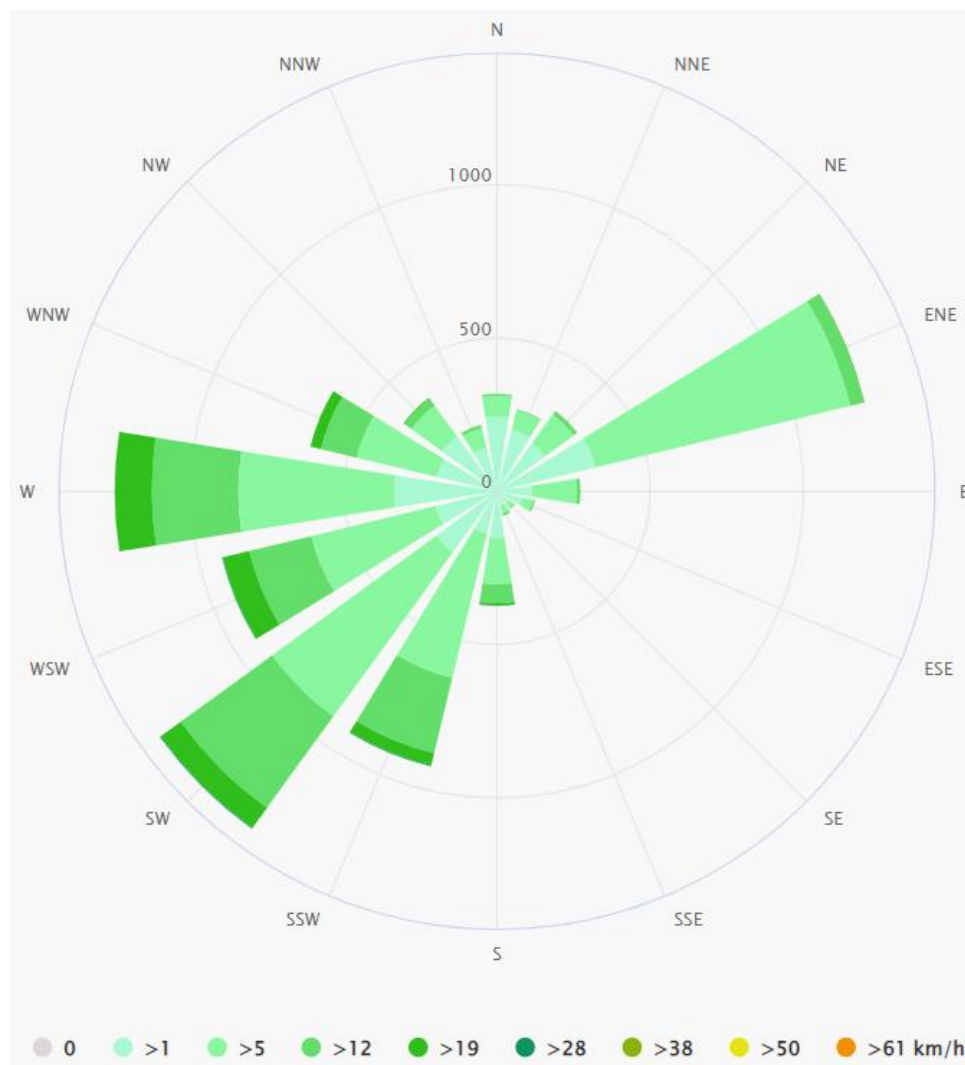


Figure 2.7: Vasai Virar City Temperature and Rainfall Chart

([https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/vir%c4%81r\\_india\\_1253133](https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/vir%c4%81r_india_1253133))

### Rainfall:

Majority of the rainfall in the region is from the South–West monsoon between June and September. The annual rainfall averages between 2000 mm to 2500 mm. Maximum rainfall is received in the month of July.



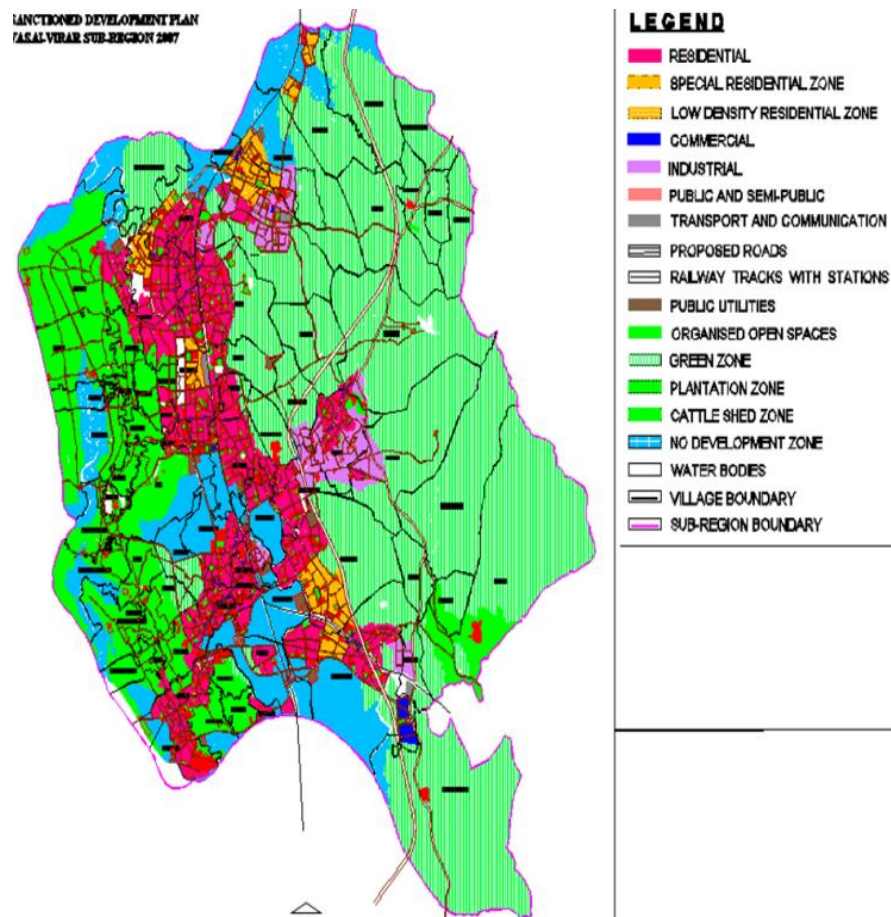
**Figure 2.8: Annual Wind Rose for Vasai Virar Municipal Corporation**

(Source:[https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/vir%c4%81r\\_india\\_1253133](https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/vir%c4%81r_india_1253133))

Figure 2.8 shows the annual wind rose for Vasai Virar. The wind rose shows the wind flow in hours per year from different directions. For example, the wind blows with the speed of  $> 1$  km/ hour for around 237 hours a year from SW to NE direction. Similarly, wind blows from W to E for about 324 hours a year at the speed of  $> 1$  km/ hour. Also, wind blows from SSW to NNE for about 139 hours in a year at the speed of  $> 1$  km/ hour.

## 2.5 Land Use and Land Cover

Vasai Virar Municipal Corporation is in the Palghar district. The total geographical area of the VVCMC is 311 sq.km. Figure 2.9 gives the land use pattern of Vasai Virar City.



**Figure 2.9: Palghar District Map and Vasai Virar Municipal Corporation**

Source: <https://vvcmc.in/town-planning>



The Vasai-Virar City is bounded on the north by the Vaitarna River, on the south by the Vasai creek and on the west by the Arabian Sea. The eastern boundary is the hill ranges of Tungar full of forest extending from village Sasunavghar up to village Chandip. A number of hillocks and isolated peaks dot the region in the east.

The region on the whole, is low-lying, mainly in the southern part along both sides of Western Railway line. The old village settlements in the coastal belt are slightly on a higher level and moderately plain. The average elevation of the area above sea level is 36 ft. Many local variations are caused by small hillocks scattered in the eastern and north-eastern part of the region. The area to the east of the National Highway is hilly and mostly covered by thick forests. The hill ranges of the Tungar and the above two creeks create a natural barrier separating the sub-region from the rest of the Mumbai Metropolitan Region. The Chinchoti fall, Tungareshwar Temple and thick forest offer good tourism potential to this eastern part. The low-lying lands along the coast and along two creeks are marshy, khazan lands, mainly to the south of Nalla Sopara Railway Station, are still used for salt cultivation.

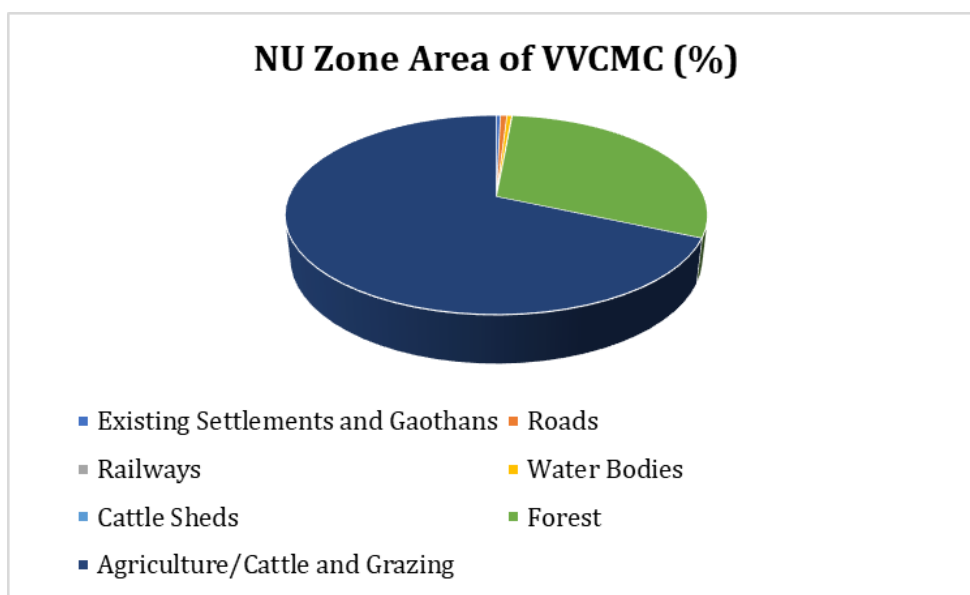
Vaitarna and Vasai Creeks are the most important creeks passing through the northern and southern edges of the sub-region. Along the coast, there are many small creek-lets. The coastal belt of the Sub-region is full of plantations with traditional villages maintaining peculiar Konkan-type character and offering beauty to the Sub-Region. Vasai Virar City Development Plan under the scheme of UID in Satellite Towns Tandon & Associates Page 26 Geologically, the sub-region falls in the Deccan Lava plateau. Traces of Bauxite have been found in the Tungar Hill ranges over an area of 80 sq.km. and have a mineral content of 30-35%. The sand is also extracted through the Vaitarna Creek as building material by dredging, which helps the creek remain desilted yearly.

Major area in non-urbanized part of the city has been used for agricultural purposes. The city is in its developmental stage, and hence the percentage of the developed sectors is lower than that of the undeveloped sectors. The percentage of existing developed and undeveloped areas are tabulated in Table 2.2 & Table 2.3.



**Table 2.2: Existing Land Use for Non-Urbanisable Area (NU Zone) of VVCMC**

Sr. No.	Developed Area	Area (Hectare)	NU Zone area (%)
1	Existing Settlements and Gaothans	105.65	0.3688
2	Roads	171.48	0.5961
3	Railways	2.10	0.0053
4	Water Bodies	123.15	0.4279
5	Cattle Sheds	14.60	0.0576
6	Forest	8626.26	30.1124
7	Agriculture/Cattle and Grazing	19603.55	68.4319
	<b>Total Area of N-U Zone</b>	<b>28,646.79</b>	<b>100</b>

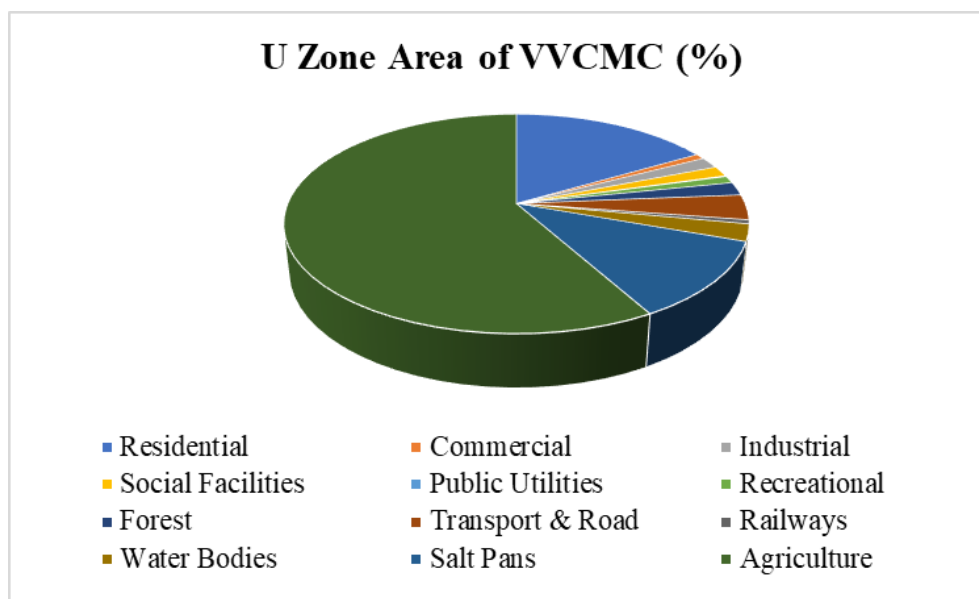


**Figure 2.10: Bifurcation of NU-Area**

*Source: Vasai Virar City Development Plan under scheme of UID in Satellite Towns*

**Table 2.3: Existing Land Use for Urbanisable Area (U-Zone) of VVCMC**

Sr. No.	Developed Area	Area (Hectare)	U Zone area (%)
1	Residential	1550.25	16.574
2	Commercial	73.50	0.785
3	Industrial	155.40	1.661
4	Social Facilities	144.10	1.541
5	Public Utilities	11.80	0.126
6	Recreational	97.77	1.045
7	Forest	183.61	1.963
8	Transport & Road	346.50	3.705
9	Railways	55.00	0.588
10	Water Bodies	233.22	2.493
11	Salt Pans	1065.00	11.386
12	Agriculture	5437.06	58.133
	<b>Total Area of U Zone</b>	<b>9353.21</b>	<b>100</b>



**Figure 2.11: Bifurcation of U-Area**

Source: Vasai Virar City Development Plan under scheme of UID in Satellite Towns



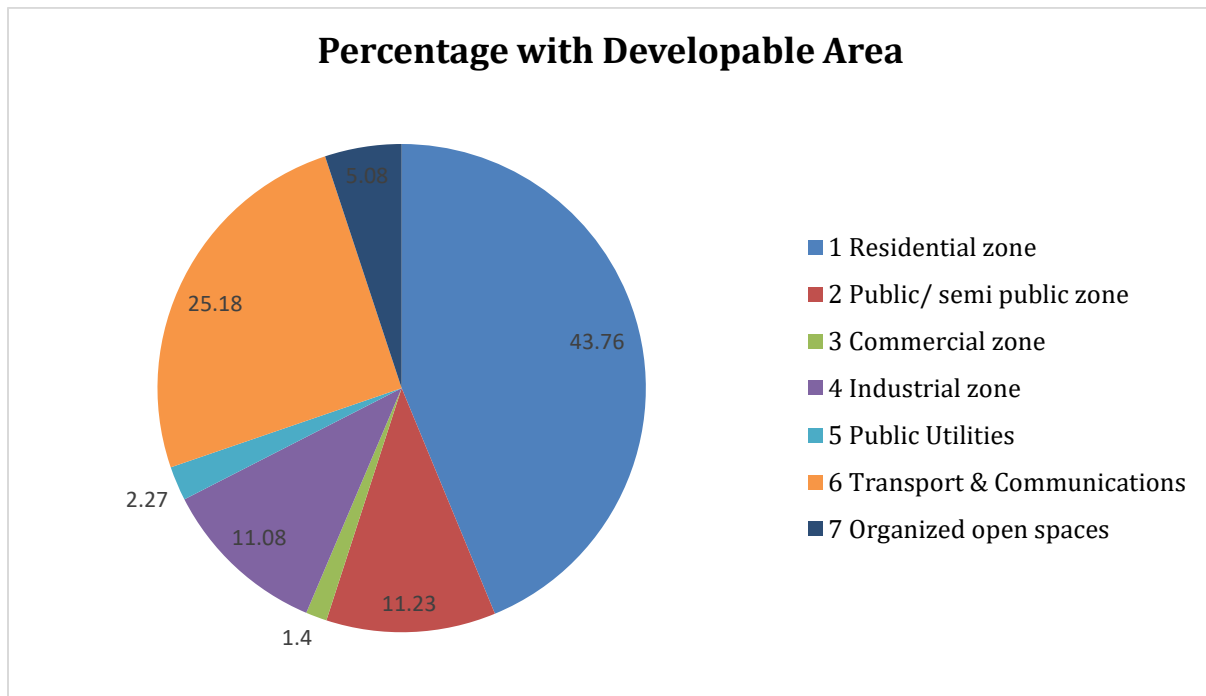
### Land Use as per final Development Plan (2007)

VVCMC has modified the revised D.P. and submitted by CIDCO to the State Government within the framework, policies and decisions. The proposed land-use analysis of the modified D.P. is as under. Graphical representation has been given in Fig. 2.12 & 2.13.

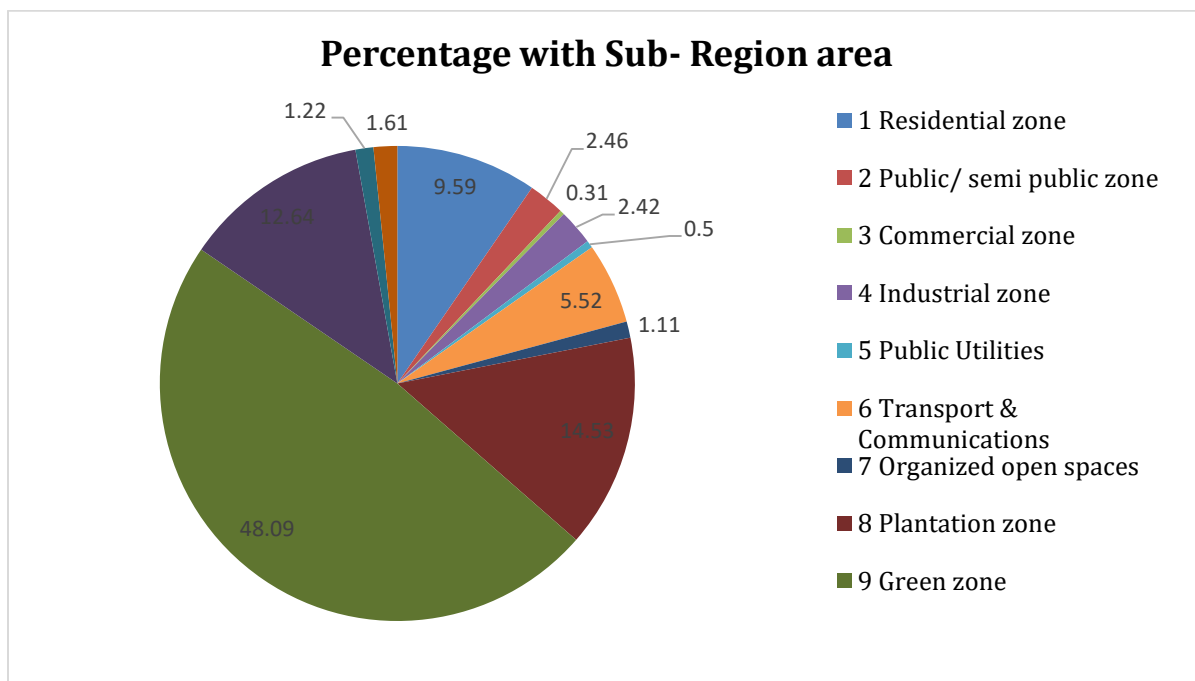
**Table 2.4: Proposed Land-Use Analysis of modified DP**

Sr. No.	Land-Use	Area (Hectare)	% with developable Area	% with Sub-Region Area
1	Residential Zone	3642.50	43.76	9.59
	General Residential Zone	2993.24	35.96	
	Special Residential Zone	486.96	5.85	
	Low-Density Residential Zone	762.30	1.95	
2	Public/Semi-Public Zone (Govt. offices, educational, medical, religious, community activities)	935.0	11.23	2.46
3	Commercial Zone (sites or complexes and APMC)	116.50	1.40	0.31
4	Industrial Zone	922.00	11.08	2.42
	a) Service Industrial Zone (I1)	99.20	1.19	
	b) General Industrial Zone (I2)	822.80	9.89	
5	Public Utilities (solid waste or sewage disposal, water supply, electricity, etc.)	189.0	2.27	0.50
6	Transport & Communications	2096.00	25.18	5.52
	a) Sites	74.00	0.89	
	b) Roads	1780.00	21.38	
	c) Railways/Carshed	242.00	2.91	
7	Organized Open Spaces (playgrounds, parks, gardens, fairgrounds, etc.)	423.0	5.08	1.11
	<b>Total area considered for development</b>	<b>8324.0</b>	<b>100</b>	<b>21.91</b>
8	Plantation Zone	5520.50		14.53
9	Green Zone	18277.0		48.09
10	No Development Zone	4802.0		12.64
11	Cattle Shed Zone	465.0		1.22
12	Water Bodies	611.50		1.61
	<b>Total area of restricted and No Development Zones</b>	<b>29676.0</b>		<b>78.09</b>
	<b>Total Area of Sub-Region</b>	<b>38000.0</b>		<b>100</b>

Source: VVCMC



**Figure 2.12: Percentage with Developable Area**



**Figure 2.13: Percentage with Sub-Region Area**



## 2.6 VVCMC Urban Infrastructure

VVCMC is a historical town and comparatively less developed than the neighboring corporations. Though a slowly developing corporation, it is still a metropolitan city with all the facilities and infrastructure evolving at speed.

**Table 2.5: Urban Infrastructure Facilities by VVCMC**

Sr. No.	Urbanization	Planning & Design Authority	Developed by	O/M
1	<b>Planning &amp; Development</b>	MMRDA, Local Planning Authority		
2.	<b>Infrastructure &amp; Services</b>			
	<ul style="list-style-type: none"> <li>Water Supply service</li> <li>Sewerage service</li> <li>Sanitation service</li> </ul>	VVCMC	VVCMC	VVCMC
	Stormwater drainage system	VVCMC	VVCMC	VVCMC
	<ul style="list-style-type: none"> <li>Municipal Solid Waste Management</li> <li>(Collection, Disposal &amp; Treatment)</li> </ul>	VVCMC	VVCMC	VVCMC
	<ul style="list-style-type: none"> <li>Municipal roads &amp; flyovers</li> </ul>	VVCMC & Town Planning	VVCMC & PWD	VVCMC
	<ul style="list-style-type: none"> <li>Street lights facility</li> <li>Fire Brigade</li> <li>Municipal Gardens</li> <li>Municipal Hospital</li> <li>Disaster management</li> </ul>	VVCMC	VVCMC	VVCMC
3	<b>Transportation &amp; Traffic</b>			
	<ul style="list-style-type: none"> <li>Urban transport facilities</li> </ul>	MSRTC & VVMT	MSRTC & VVMT	MSRTC & VVMT
	<ul style="list-style-type: none"> <li>Registration &amp; regulations</li> </ul>			RTO
	<ul style="list-style-type: none"> <li>Traffic Management</li> </ul>			Traffic Police
	<ul style="list-style-type: none"> <li>Indian Railways</li> <li>Mumbai Suburban Railway – Central Line</li> </ul>	Indian Railways		
4	Metro Service	MMRDA		



VVCMC : Vasai Virar City Municipal Corporation  
PWD : Public Works Department  
MMRDA : Mumbai Metropolitan Region Development Authority  
MSRTC : Maharashtra State Road Transport Corporation  
VVMT : Vasai Virar Municipal Transport  
RTO : Road Traffic Police

Source: VVCMC DPR

Apart from the basic service delivery facilities like water supply, solid waste management, electricity, and transportation, VVCMC also strives to improve financial management and upgradation of the city, skill development and capacity building, improving urban environment, implementation of public – private partnership projects for mobilizing investments and efficiency gains.

**Table 2.6: Reform Commitments envisaged**

Desired Outcome	ULB Responsibilities
Financially self-sustainable cities	Adoption of accrual based double entry accounting system  Property Tax reforms  E Governance  Levy user charges to achieve full cost recovery  Provision of basic services to urban poor
Well-functioning, efficient and equitable urban land market	Professionalize property mgmt.  Simplify rezoning, construction  Computerize land titles  Earmark 20-25% land for EWS and LIG



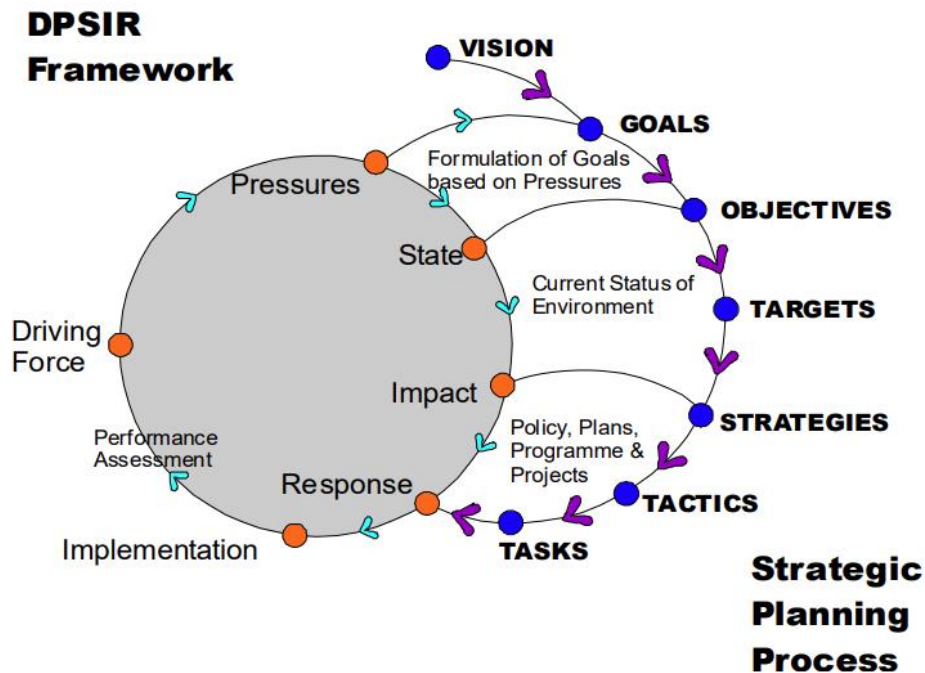
Transparent accountable governance and service delivery	Introduce Area Sabhas and Ward Committees Publish Performance Reports Introduce service scorecards Structural reforms
---	--

## 3 Driving Forces of Vasai Virar City

### 3.1 DPSIR Framework

This framework was initially developed by the Organization for Economic Co-operation and Development (OECD), in 1994 and has been used extensively by various national/international environmental agencies to relate the effects of human activities on the state of environment. The DPSIR (Driving Forces, Pressure, State, Impact, Responses) model can be used as an analytical framework for assessing the environmental issues by examining inter-linkages between each of these elements.

It is the most effective form of conveying environmental status to the citizens and government authorities. This framework helps policy/decision makers to get ground level/real time feedback about the impacts of various pressures on the states, thereby helping prepare a forward action plan necessary for implementation of any future changes in policies useful for mitigating environmental issues.



**Figure 3.1: Relationship between Strategic Action Planning and the DPSIR framework**

**Driving Forces:** Socio-economic and socio-cultural forces driving human activities which increase or mitigate pressures on the environment

**Pressures:** Stresses that human activities place on the environment (e.g. Wastewater)

**State of the Environment (SoE):** The condition of the environment (e.g. Air or water quality assessment)

**Impacts:** Effects of environmental degradation (e.g. biodiversity loss, economic damage)

**Responses:** Responses by society to the environmental situation (e.g. Cleaner production, regulations)

The state of the environment is represented by the qualitative and quantitative indicators of environmental resources as well as the quality of services it offers. Environmental monitoring data for air and water quality and the extent of land contamination are some typical quantitative indicators.

The environment is being degraded due to human intervention like shifting cultivation, over exploitation of forest resources, cattle grazing, and changes in land use by converting forests to agricultural lands and dwelling sites. These activities have continued ever since





man started cultivating and exploiting natural resources for livelihood. The local urban bodies suffer from large human intervention in managing increasing demand for resources that generates pressure on environment and also attempt to conserve and protect the environment with its efforts in creating more environmental resources. The human intervention creates pressure on land and land cover in urban spaces. And hence it becomes necessary to understand the status of land use and resource extraction and evaluate its impact on environment.

## **3.2 Driving Forces of Vasai Virar City**

Urbanization refers to growth in towns and cities. The process of urbanization is one of the most important dimensions of economic, social and physical change. Although it provides opportunities for job, better housing, education, knowledge, and technology and so on, it also exerts enormous stress on natural resources. The growth of the industries results in the expansion of the business sector and economic growth of the city, which in turn attracts the inflow of population from other towns and villages, thus setting a continuous and ever-expanding cycle. Thus, population, industrial, economic, and spatial growths act as primary driving forces in the growth of any city. Similarly, availability of resources like Air, Water, and Land act as key factors in the growth of cities and have been analyzed in separate sections for their status, the —Pressures being exerted on them, the —Impact of various urban activities on these resources, and the —Response taken by the corporation to reduce the impacts.

### **3.2.1 Population Growth**

The size of the population is one of the main factors that impact the environment by generating pressure on environmental resources available in a region. Natural resources like land and water are scarce and they are to be used efficiently and sustainably. These resources get exhausted as a large population makes use of them unsustainably. Hence there is some threshold level of population that can sustain the use of environmental resources. Thomas Malthus cited it as the Carrying Capacity of a region. An area's carrying



capacity can be defined as the maximum number of people that the environment of that area can support through optimum utilization of the available resources (ILPWRM, 2012). Perhaps this carrying capacity is crossed in many regions globally, increasing the pressure on the environment and caused environmental degradation. Crutzen (2016) introduced the concept of the Anthropocene Epoch which describes human influence on the environment. Hence one has to contextualize the population and its impact on the environment.

The current estimated population of Vasai Virar city in 2023 is 21,50,000. The last census was conducted in 2011 and the scheduled census for Vasai Virar city in 2021 was postponed due to Covid. The current estimates of Vasai Virar city are based on past growth rate. As per provisional reports of Census India, population of Vasai Virar in 2011 is 12,34,690. The details are given in Table 3.1. Vasai-Virar city had a sex ratio of 886 for total population in 2011. The VVCMC is administratively divided into 115 wards.

**Table 3.1: Population in Vasai Virar City**

Description	As per 2011 Census		
	Total	Male	Female
City Population	12,34,690	6,54,635	5,80,055
Literates	9,52,411	5,22,814	4,29,597
Children (0-6)	147102	76993	70109
SC Population	51,468	26,901	24,567
ST Population	58,608	29,341	29,267
Average Literacy (%)	88.57%	91.53%	85.22%
Sex Ratio (F:M)	886		
Child Sex Ratio (F:M)	911		

*Source: Election Department, VVCMC*

**Population Projections:** Projections as tabulated in Table No. 3.2 provide a base for determining future needs. Based on past trends and internal and external factors, assumptions are framed and thus population projections are worked out. It is very crucial to determine the growth trends as it gives base data to estimate the physical and social infrastructure. Therefore, it is essential to project the population for 20-25 years to set out the overall infrastructure.



The Vasai Virar region is fast developing, considering its nearness to the megacity of Mumbai and improvement in its connectivity to Mumbai through many projects proposed for this region. The low-cost housing project is also proposed for the urban poor in this area. The VVCMC proposes to develop the Heritage installations and create Recreational hubs in the area for Tourism development.

**Table 3.2: Population Projections as per Approved City Development Plan**

Year	Population
2011	12,34,690
2019	15,00,000
2021	19,80,000
2031	26,30,000
2041	41,80,000

*Source: Approved City Development plan of VVCMC*

**Decadal Growth Rate:** The concentration of economic activities and population in Mumbai has put tremendous strain on the delivery of services. At the same time, there has been a growing need for the decentralization of activities so as to reduce the burden on the cities. Looking into the imperative need to plan to develop new township/satellite towns around million plus /large cities, it is proposed to develop Vasai Virar Municipal Corporation into a Satellite Town/counter magnets spatially separated from the mother city of Mumbai. With improvement in the transport corridors and low cost housing projects for urban poor, extra built-up space, which would be generated on account by redevelopment of old properties with higher FSI there, will be an increase in the population of the Region.

**Table 3.3: Population Projection Indicating Decadal Growth (2001-2041)**

Year	Population (Lakhs)	Decadal Growth Rate
2011	12.34	-
2019	19.50	20%
2021	20.76	70%
2031	31.14	50%
2041	39.93	25%

Source: Approved City Development Plan of VVCMC, VVCMC DPR

### 3.2.2 Industrial Growth

The rapid growth of Vasai Virar has made the city a prime region for commercial growth. The upcoming projects in this city are the potential destination for new and innovative startups and many industries interested in initializing a new trade in this area. Vasai Virar City Municipal Corporation has also developed its own small -scale industrial estate. The MMRDA had prepared a plan for Waliv - Gokhivare - Sativali Industrial Complex. The industrial activities at Waliv - Gokhivare are coming up for many small and medium scale industries, providing employment in the sub-region. Refer Figure 3.2 for Industrial area earmarked in VVCMC.

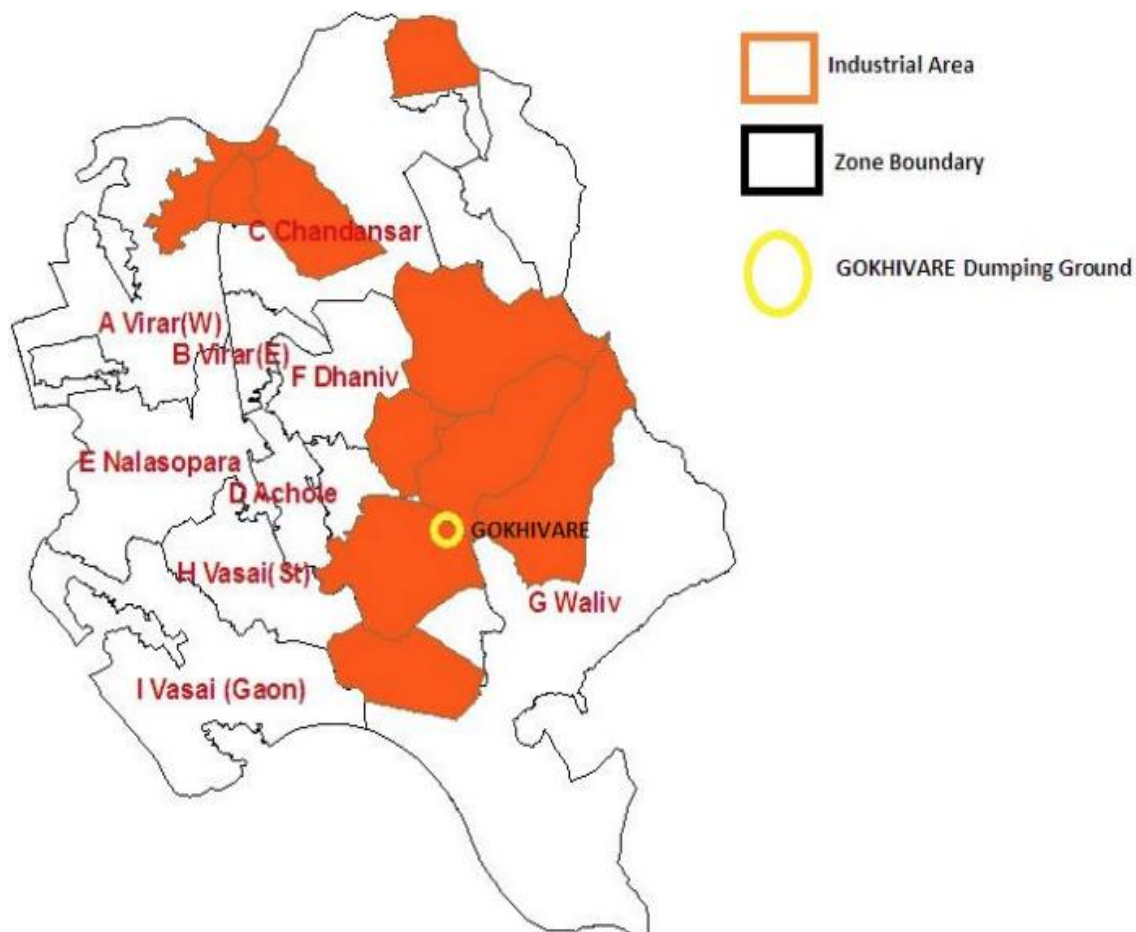


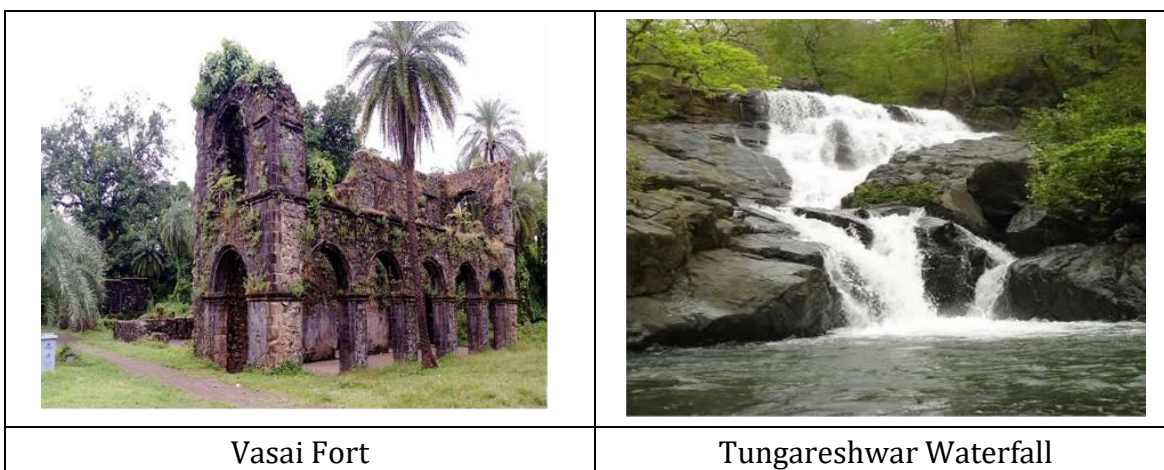
Figure 3.2: Industrial Zone - VVCMC

*Source: Vasai Virar City Development Plan under scheme of UID in Satellite Towns, VVCMC DPR*

### 3.2.3 Tourism

Vasai Virar is an important tourist destination because of its pleasant weather, which keeps visitors cool and comfortable. It is the most crowded locality in the Palghar district of Maharashtra. The place has developed into a good tourist destination while maintaining its natural rawness. So, you can get all kinds of facilities in this place and can also appreciate & enjoy the beautiful creation of nature.

The city is situated on the banks of Vasai Creek. It is known for the fort in Vasai. Vasai Fort, Tungareshwar waterfall, Chandika Devi temple, Tungareshwar wildlife sanctuary, Jivdani temple and Bhuigaon Beach are the important and frequently visited tourist places in Vasai Virar area (Fig. 3.3). Vasai fort is a historical place which is a more popular tourist destination.





 <p><b>CHANDIKA DEVI TEMPLE, JUCHANDRA</b></p>	
<p>Chandika Devi Mandir</p>	<p>Tungreshwar Wildlife Sanctuary</p>
	
<p>Jivdani Mata Mandir</p>	<p>Bhuigaon Beach</p>

**Figure 3.3: Tourist destinations in Vasai Virar**

### 3.2.4 Economic Development

Population and economic growth tend to affect natural environment adversely if not managed properly. While economic growth may positively impact in measures such as nutrition, health, and life expectancy, coupled with population growth, it also can adversely affect eco- systems. Unsustainable natural resource extraction, defunct waste management systems, and unregulated habitat settlements can significantly impact the mid-term sustainability of natural resources. Hence it is vital to assess the effects of economic activities on environment.

Broadly, the informal sector provides income-earning opportunities for many workers. The Government has to play the role of facilitator and promoter so that the workers employed



in the informal sector are able to get a requisite level of skills enabling them to upgrade their capabilities necessary for enhancing the competitiveness of their outputs and thereby raising their income and socio-economic status.



## 4 Air Environment

Earth's atmosphere is a layer of gases surrounding the planet. This mixture of gases that envelopes the earth is commonly known as air. Pure air consists of 78% nitrogen & 21% oxygen, while other gases like argon, carbon dioxide, methane, and so on are present in trace amounts. Change in natural composition of air occurs due to addition of undesirable elements arising from anthropogenic activities like the combustion of fossil fuels. Emissions from power plants, industries, automobiles, construction activities and so on emit tones of air pollutants (any solid, liquid, or gaseous substance, including noise) into the atmosphere, which deteriorates the air quality and exposes citizens to great health risks.

Higher concentrations of air pollutants may be or tend to be harmful to human beings, other living creatures, plants, property, or environment. The Global Burden of Disease (GBD) stated about 4.2 million deaths due to exposure to PM<sub>2.5</sub> (Particulate Matter <2.5 microns) have occurred, thus ranking fifth for total deaths worldwide. In 2015, about 17.1% of deaths occurred from ischemic heart disease, 14.2% from stroke, 16.5% from lung cancer, 24.7% from LRIs (Lower Respiratory tract Infections), and 27.1% from COPD (Chronic Obstructive Pulmonary Disease) were recorded due to exposure for Particulate Matter. As per the WHO (World Health Organization), almost 80% of the urban population is exposed to air quality that fails to meet the WHO guidelines, thus resulting in respiratory disease and other health problems.

In order to monitor the ambient air quality, CPCB (Central Pollution Control Board) at national level compares the status of ambient air quality parameters, which indicate the comparative status of various cities. In addition to this, at state level MPCB and at city level VVCMC also monitors the air quality parameters. This section discusses the status of the ambient air quality monitoring network and the ambient air quality recorded for various air pollutants and the processing comparisons.





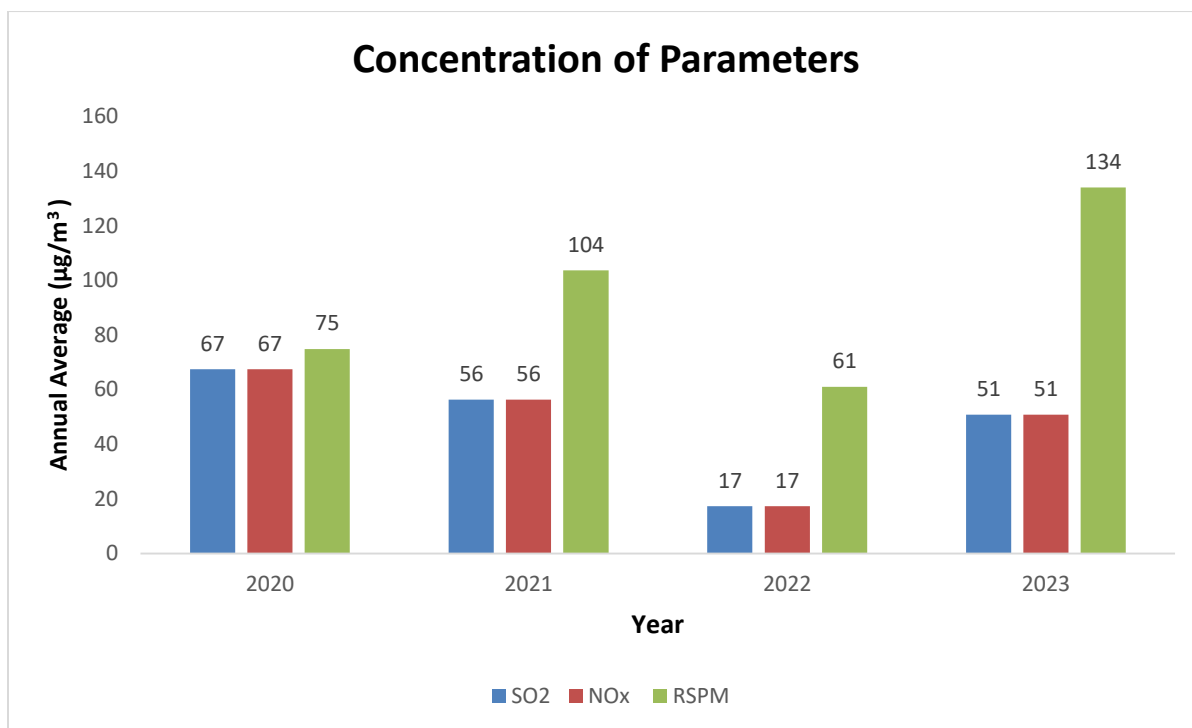
## 4.1 Ambient Air Quality Monitoring Station (MPCB Stations)

MPCB has established one Ambient Air Quality Monitoring Station (AAQMS) in VVCMC. The monitoring station is continuous and it is under NAMP (National Air Quality Monitoring Program). The monitoring station is at Diwanman Fire Bridgade premises, 100 Feet Raod, Vasai-West , Palghar-401201. The details of the monitoring station are given in Table 4.1.

**Table 4.1: Details of AAQMS at Vasai-Virar**

<b>City</b>	<b>Vasai-Virar</b>
<b>Program</b>	CAAQMS
<b>Implementing Agency</b>	MPCB
<b>Location</b>	Diwanman Fire Bridgade premises, 100 Feet Raod, Vasai-West , Palghar-401201.
<b>MPCB Region</b>	Vasai-Virar
<b>Frequency</b>	Continuous Monitoring
<b>Parameters Monitored</b>	SO <sub>2</sub> , NO <sub>x</sub> , RSPM

#### 4.1.1 Annual Trend in the Concentration of Parameters



Parameters	SO2	NOx	RSPM
NAAQS	80	80	100

**Figure 4.1: Annual Trend in the Concentration of Parameters**

SO<sub>2</sub> and NO<sub>x</sub> emissions are mostly caused by the combustion of fuel in automobiles and mobile sources (50%), electric power plants (20%), and other home uses (30%) (EPA 456/F-99-006R, November 1999). As shown in Figure 4.1, SO<sub>2</sub> and NO<sub>x</sub> concentration levels dropped from 2020 to 2021. It could be because of restrictions on use of private & public vehicles as well as industrial operations except for biomedical production. The projected emissions observed due to operations & vehicles were used as emergency services. The average annual SO<sub>2</sub> and NO<sub>x</sub> concentration is lower than the CPCB prescribed annual standard of 80 µg/m<sup>3</sup> for all the years. The highest average concentration of SO<sub>2</sub> and NO<sub>x</sub> was reported in 2020, which is 67 µg/m<sup>3</sup> for both parameters and the lowest was reported in 2022 (17 µg/m<sup>3</sup>).



Particulate matter is a complex mixture of extremely small particles and liquid droplets composed of a variety of constituents such as acids (such as nitrates and sulphates), organic compounds, metals, and soil or dust particles. They are emitted by combustion processes, vehicles, and industrial processes. Particles with a diameter of 10 micrometres or less can pass through the throat and nose and enter the lungs, and are commonly referred to as RSPM. These particles, when inhaled, can harm the heart and lungs and create major health problems. In 2021 and this year, the average annual RSPM concentration is higher than the CPCB standard. To solve such concerns, it is advised that VVCMC improve or strengthen its real-time monitoring network. It is also necessary to increase the amount of vegetation in cities in order to significantly reduce PM10 levels.

## Air Quality Index

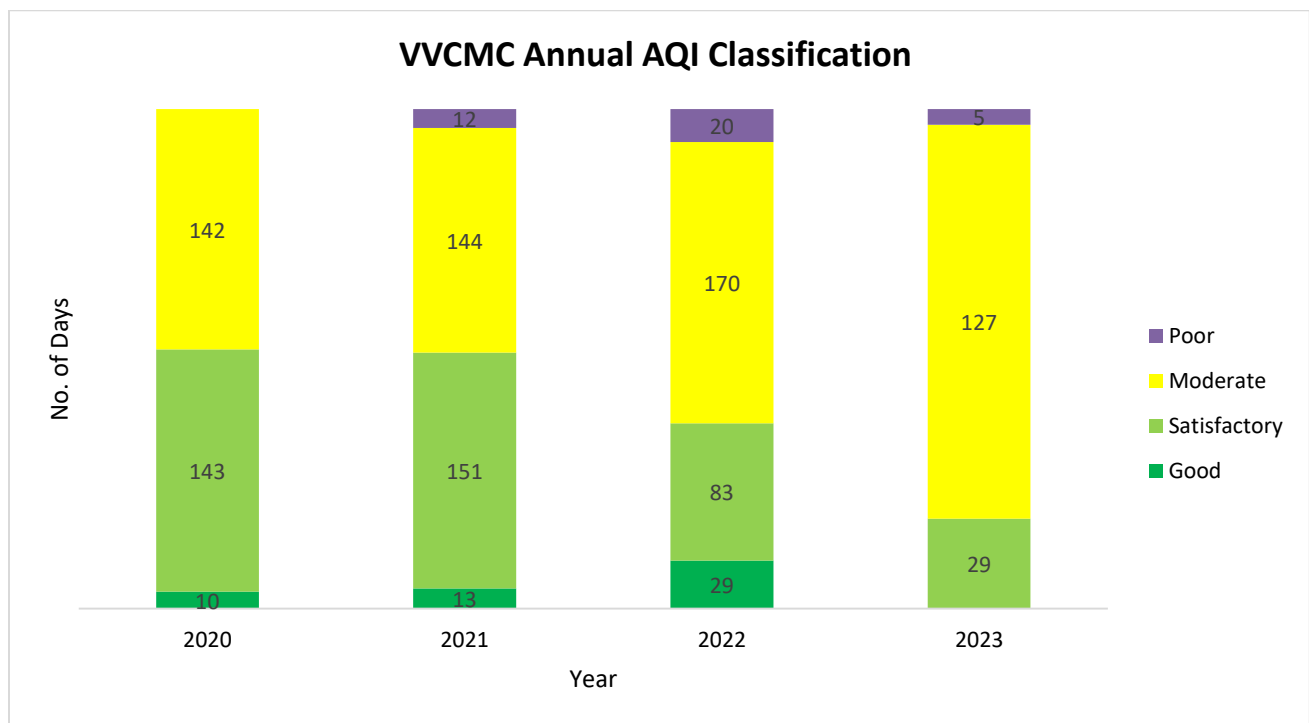
Air Quality Index (AQI) is the most convenient way to convey the information on outdoor air quality which could be easily understood by general public. AQI transforms complex air quality data of various pollutants into a single index value. AQI is calculated using the AQ sub index and the health breakpoints, which are evolved for eight pollutants ( $PM_{10}$ ,  $PM_{2.5}$ ,  $NO_2$ ,  $SO_2$ ,  $CO$ ,  $O_3$ ,  $NH_3$ , and  $Pb$ ) for which short-term (up to 24-hours) are prescribed by NAAQS. Based on the measured ambient concentrations of a pollutant, sub-index is calculated, which is a linear function of concentration. The worst sub-index determines the overall AQI. The sub-indices for individual pollutants at a monitoring location are calculated using its 24-hourly average concentration value (8-hourly in case of  $CO$  and  $O_3$ ) and health breakpoint concentration range.<sup>1</sup> AQI are within a range of 0 to 500 and is categorized into 'Good', 'Satisfactory', 'Moderate', 'Poor', 'Very Poor' or 'Severe' based on the concentration of various pollutants and their health impacts at various concentrations. Higher value of AQI indicates high level of pollution. Figure 4.9 shows the AQI classification.



**Table 4.2: AQI Classification**

AQI	Quality Classification	Remarks	Colour Code
0-50	Minimal Impact	Good	Green
51-100	Minor breathing discomfort to sensitive people	Satisfactory	Light Green
101-200	Breathing discomfort to the people with lung, heart disease, children and older adults	Moderate	Yellow
201-300	Breathing discomfort to people on prolonged exposure	Poor	Orange
301-400	Respiratory illness to the people on prolonged exposure	Very Poor	Red
> 401	Respiratory effects even on healthy people	Severe	Dark Red

Source: MPCB



Source: MPCB

**Figure 4.2: VVCMC Annual AQI Classification**



Data for the VVCMC Annual AQI Classification for the years 2020–2023 was gathered from the MPCB website. For each year, data on good and poor days was calculated. As shown in Figure 4.2, the air quality index for the year 2020 was good or satisfactory for 153 days out of the year and moderate for the remaining 142 days. A similar pattern was seen in 2021. Due to the COVID-19-induced lockdown, there were restrictions on the use of vehicles and operations in industries. The lockdown significantly impacts social and economic activities, but it has temporarily improved the air quality in most of the polluted cities. AQI was expected to cause minor respiratory discomfort in sensitive people in the years 2020–2021. After the lockdown was released in 2022, the air quality started to deteriorate. For the entire year of 2022, the air quality index was good or satisfactory for 112 days and moderate for the other 127 days. Due to increased urban mobility, post-COVID restrictions have significantly increased the concentration of air pollutants. In order to help minimize automobile pollution, VVCMC should launch its own low-cost, heavily subsidized municipal transportation system. This system should primarily consist of electric buses, and it should also incorporate renewable energy sources to cut down on CO<sub>2</sub> emissions.



## 5 Noise Environment

Noise pollution is caused by an unwanted sound that is produced by various natural or man-made sources such as oceans, construction, industries, transportation etc. Noise pollution is one of the major environmental pollutants that are encountered in daily life and has a direct effect on human performance. Noise pollution is regarded as a public nuisance under Sections 268, 290 & 291 of the Indian Penal Code. There are several other legislations relating to noise pollution such as - The Factories Act, 1948 (under which 'noise induced hearing loss' is notified as a disease); Motor Vehicles Act, 1988 (which specifies rules for horns and silencers); Law of Torts (civil suits can be filed for claiming damages); The Air (Prevention and Control of Pollution) Act, 1981 (ambient noise standards have been given), The Environment (Protection) Act, 1986; Noise Pollution (Regulation and Control) Rules, 2000 and regulations in respect of Loudspeakers/Public Address System.

There are standards and guidelines for ambient noise quality, automobiles, domestic appliances and construction equipment, generator sets and firecrackers as notified under the Environment (Protection) Act, 1986. According to the World Health Organization, sound levels less than 70 dBA are not damaging to living organisms, regardless of how long or consistent the exposure is. Exposure for more than 8 hours to constant noise beyond 85 dBA may be hazardous. If you work for 8 hours daily in close proximity to a busy road or highway, you are very likely exposed to traffic noise pollution of around 85dBA. CPCB Limits for Ambient Noise are given in the Table 5.1.

**Table 5.1: CPCB Limits for Ambient Noise**

Area Code	Category of Area	Limit in dB (A), $L_{eq}$	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silent Zone	50	40





- Daytime shall mean from 6:00 a.m. to 10:00 p.m.
- Night time shall mean from 10:00 p.m. to 6:00 a.m.
- A silence Zone is an area comprising not less than 100 m around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A, which is relatable to human hearing.
- A “decibel” is a unit in which noise is measured.
- “A”, in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- Leq is the energy mean of the noise level over a specified period.

This type of pollution is so omnipresent in today’s society that we often fail to even notice it anymore:

- Street traffic sounds from cars, buses, pedestrians, ambulances etc.
- Construction sounds like drilling or other heavy machinery in operation.
- Airports, with constant, elevated sounds from air traffic, i.e. planes taking off or landing.
- Workplace sounds often common in open-space offices.
- Constant loud music in or near commercial venues.
- Industrial sounds like fans, generators, compressors, mills etc.
- Train station traffic.
- Household sounds, from the television set to music playing on the stereo or computer, vacuum cleaners, fans and coolers, washing machines, dishwashers, lawnmowers etc.
- Events involving fireworks, firecrackers, loudspeakers etc.



- Conflicts generate noise pollution through explosions, gunfire etc. The dysfunctions, in this case, are likely caused by the conflict and insecurity and less by the noise pollution in itself, although that compounds stress levels too.

### **Consequences of Noise Pollution:**

Whether we realize we are subjected to it or not, noise pollution can be hazardous to our health in various ways.

- Hypertension is, in this case, a direct result of noise pollution caused elevated blood levels for a longer period of time.
- Hearing loss can be directly caused by noise pollution, whether listening to loud music in your headphones or being exposed to loud drilling noises at work, heavy air or land traffic or separate incidents in which noise levels reach dangerous intervals, such as around 140 dB for adult or 120 dB for children.
- Sleep disturbances are usually caused by constant air or land traffic at night, and they are a serious condition in that they can affect everyday performance and lead to serious diseases.
- Child development. Children appear to be more sensitive to noise pollution and a number of noise-pollution-related diseases and dysfunctions are known to affect children, from hearing impairment to psychological and physical effects. Also, children who regularly use music players at high volumes are at risk of developing hearing dysfunctions. Various cardiovascular dysfunctions, Elevated blood pressure caused by noise pollution, especially during the night, can lead to various cardiovascular diseases.
- Dementia isn't necessarily caused by noise pollution, but its onset can be favored or compounded by noise pollution.
- Psychological dysfunctions and noise annoyance. Noise annoyance is, in fact, a recognized name for an emotional reaction that can have an immediate impact. Studies have shown that loud noise can cause caterpillars' hearts to beat faster and bluebirds to have fewer chicks.



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- Noise pollution makes it difficult for animals to use sound for navigation, finding food, mating, and avoiding predators, affecting many animals' ability to survive.



## 6 Water Environment

Earth is termed as 'Blue Planet' because 71% of the earth's surface is covered with water. The earth has an abundance of water yet majority of water (97.5%) is saline water. Out of the remaining 2.5% of fresh water, around two thirds of it is in frozen form in ice caps and glaciers. Only about 0.3% of freshwater is available for human use majority of which comes from rivers. Water is one of the vital renewable resources on earth. Lakes, rivers, streams groundwater are important fresh water sources. The majority of freshwater is actually found underground as soil moisture and in aquifers.

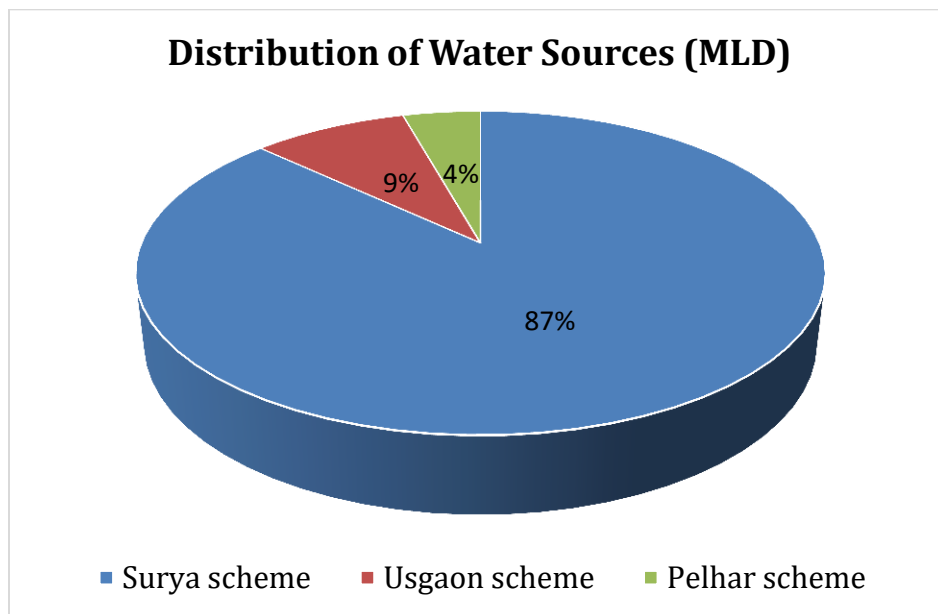
### 6.1 Surface Water

Surface water is any body of water that exists on the earth's surface like streams, creeks, rivers, wetlands, and reservoirs. The major water supply sources in Vasai-Virar city are Surya River, Usgaon dam and Pelhar dam which is on Pelhar Lake. Figure 6.1 gives the distribution of water supply in Vasai-Virar city and Table 6.1 gives the VVCMC water profile.

**Table 6.1: VVCMC Water Profile**

<b>Water Availability</b>	Allocated Drawn Quantity (MLD)	230 MLD
<b>Source of Water Supply</b>	Surya Scheme (River)	200 MLD
	Usgaon Scheme (Dam)	20 MLD
	Pelhar Scheme (Dam)	10 MLD
<b>Water received after treatment</b>	223 MLD	
<b>Actual distribution of water</b>	190 MLD	
<b>Total water reaching residences</b>	190 MLD	
<b>Overall water loss</b>	26%	
<b>Net Supply Per Person</b>	90 LPCD	

Source: Water Supply Department, VVCMC



**Figure 6.1: Distribution of Water Sources**

Municipal Corporations Residential Connections are 57,971 & Industrial connections are 1,407 and govt. offices/schools are 295.

**Table 6.2: Tap Connections in VVCMC**

Sr. No.	Household	Numbers	Percentage (%)
1	Total Households with sourced water	427922	-
2	Tap	57971	13.54
3	Handpump	1346	0.31
4	Tube Well	0	-
5	Well	441	0.1
6	Other		

**Table 6.3: Water Supply shifts in VVCMC**

Sr. No.	Details	Period	Mode of Supply	Total Water Supply	Per Capita Supply
1	Existing Water Supply	3 hrs	Piped	190	190
2	Min. Water Req. (as per norms)	8 hrs	Piped		135



As tabulated in Table No. 6.4, the existing scenario of water supply and a comparative for yearly target to be achieved has been given. The data has been submitted to Performance Assessment System (PAS) that assesses the service level progress of the corporations.

**Table 6.4: Service Level Benchmark and Target Setting for Water Supply**

Water Supply: KPIs	2019-20	2020-21	2021-22	Target for 2021-22	Target for 2022-23
Coverage of water supply connections (%)	74.3	71.1	66.3	80.0	78.0
Per capita supply of water at consumer end (LPCD)	79.5	71.1	72.4	100.0	90.0
Extent of metering of water connections (%)	NA	NA	NA	0.0	0.0
Extent of non-revenue water (%)	30.2	28.0	26.7	28.0	26.7
Continuity of water supply (hrs per day)	2.3	2.5	2.5	4.0	4.0
Efficiency in redressal of customer complaints (%)	87.4	85.3	95.1	90.0	95.1
Quality of water supplied (%)	97.7	100.0	99.9	100.0	100.0
Cost recovery in water supply services (%)	77.4	96.4	83.5	97.0	90.0
Efficiency in collection of water supply related charges (%)	68.3	74.3	76.8	80.0	77.0
Coverage of water supply connections in slums (%)	31.8	NA	NA	35.0	35.0

### 6.1.1 Pelhar Dam, Pelhar Lake

Pelhar Lake has a rock earth dam – Pelhar Dam situated in Vasai -Virar region which is a part of water supply unit in the city of VVCMC. It is located at Latitude 19°26'45.32"N and Longitude 72°53'40.58"E in District Palghar of Maharashtra state. The Vasai -Virar city gets 10 MLD of water from Pelhar Dam. This dam was established in 1975. The dimensions are appx. 500m x 700m x 700m. The water level goes down during summer but during rains the iron gates are removed and kept which releases water and on the opposite waterfall is formed. The water gushes down the rocks with rapid force. Dam is deep and rich in flora



and fauna. During heavy rainfall water level can increase abruptly. The dam gets its water through rivers from Tungareshwar Hills.



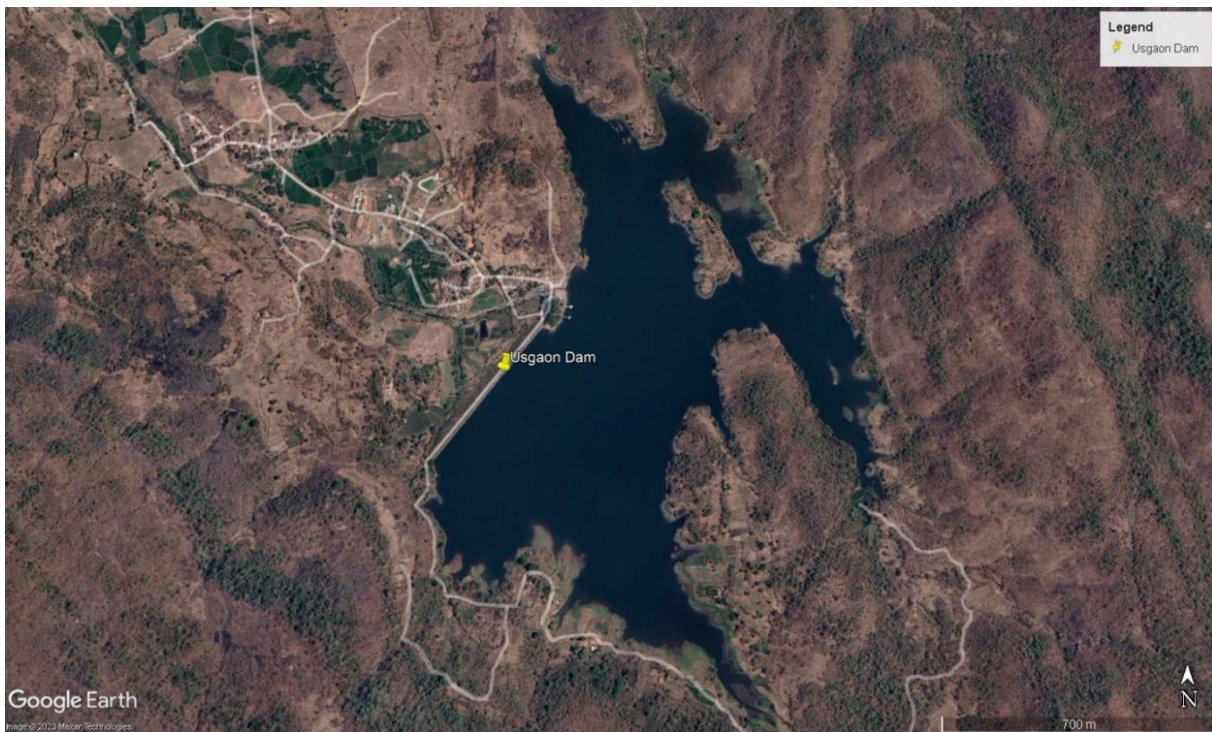
**Figure 6.2: Pelhar Dam (Location:19°26'45.32"N, 72°53'40.58")**



**Figure 6.3: Pelhar Lake**

### 6.1.2 Usgaon Dam

Usgaon dam is a small man-made reservoir has been built near Tansa River. It is located at Latitude 19°28'3.43"N and Longitude 73°0'41.76"E in District Palghar of Maharashtra state. The water in the reservoir is used for irrigation, dinking and domestic purpose. The Vasai -Virar city gets 20 MLD of water from this dam for dinking purpose.



**Figure 6.4: Usgaon Dam**





**Figure 6.5: Usgaon Lake**

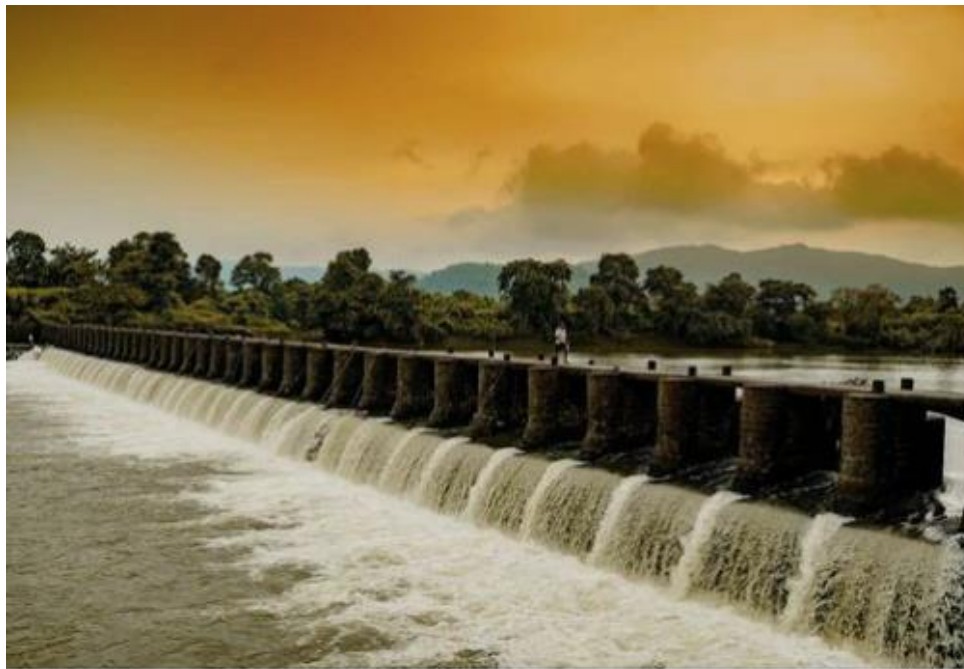
### **6.1.3 Surya River**

The Surya River is located in the Palghar district of Maharashtra. It is located 95.8 kilometers north of Mumbai the capital of the state. The Surya (Dhamni) dam, is an earthfill dam on Surya River near Dhamni. The height of the dam above lowest foundation is 59 m (194 ft) while the length is 1,563 m. The volume content is 300 m<sup>3</sup> and gross storage capacity is 68,449.51 m<sup>3</sup>. The Surya Regional Water Supply Project is being implemented in Mumbai, which will provide 403 MLD water supplies to Mira-Bhayander Municipal Corporation & Vasai-Virar City Municipal Corporation at the western sub-region of Mumbai. Approx. 185 MLD water shall be supplied to VVCMC under this scheme. Mumbai Metropolitan Regional Development Authority (MMRDA) has achieved the first tunnel breakthrough of the project. The project is expected to be completed in phases till 2023.

The installation of water supply lines has been started in VVCMC. It is a 10 km line project from Kashid Kopar MBR to Vasai Phata, of which 3.8 km supply line has been installed.



**Figure 6.6: Surya (Dhamni) dam**



**Figure 6.7: Surya (Dhamni) Dam Onsite Location**



#### 6.1.4 Surface Water Quality

Currently, surface water sources are facing a lot of pressure due to anthropogenic activities. Surface water sources are the major receivers of solid waste, industrial effluent and domestic sewage. This causes water pollution and degrades the quality of surface water. It is very detrimental to the aquatic ecosystem and overall components of the ecosystem. The industrial residues are likely to get bio accumulated in the aquatic organisms which are in turn consumed by the humans. This will have a very harmful effect on the humans as well. It is very important to continuously track the level of pollutants in water bodies. Therefore, MPCB has installed water quality monitoring stations (WQMS) across the Maharashtra state to monitor the overall water quality of a particular surface water resource. Water quality is monitored per month across all the stations.

MPCB, under NWMP - National Water Quality Monitoring Programme has set up Water Monitoring Stations around Vasai Virar City at –

1. Bassein Creek at Vasai Fort
2. Pelhar Dam on Pelhar River
3. Surya River U/s of Surya Dam
4. Surya River at MIDC Pumping Station
5. Surya River at Intake of Vasai-Virar Water Scheme



**Table 6.5: Details of the Monitoring Station – Vasai Virar**

Water Quality Monitored at: Bassein Creek at Vasai fort			
Name of the Program	NWMP	Type of Sample	Surface
Station Code	1316	Frequency	Monthly (Trend)
Regional Office	Thane	Regional Lab	Thane

**Table 6.6: Annual Average Water Quality Monitoring Data of Bassein Creek at Vasai fort**

Year		pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Fecal Coliform
2018	Min.	6.9	3.2	7	84	1.2	7.8
	Max.	8.1	5.3	18	248	5.6	920.0
	Avg.	7.4	4.32	11.67	174.33	3.07	166.73
2019	Min.	6.9	3.7	6	20	0.9	21
	Max.	8.2	5.6	14	220	4.7	79
	Avg.	7.47	4.64	9.83	116.33	2.15	46
2020	Min.	6.6	3.6	3.4	20	0.1	11
	Max.	7.9	6.9	12	208	6.4	350
	Avg.	7.43	5.06	8.37	120.67	2.16	91.92
2021	Min.	7.2	3.4	8	72	0.3 (BDL)	27
	Max.	7.9	5.2	15	256	3.6	350
	Avg.	7.59	4.11	11.38	155	1.81	144.67
2022	Min.	7.4	3.7	3	12	0.3 (BDL)	49
	Max.	7.9	6.8	14	288	15.75	140
	Avg.	7.62	4.76	10.5	184	3.38	111

Source: MPCB





**Table 6.7: Details of the Monitoring Station – Pelhar Dam on Pelhar River**

Water Quality Monitored at: Bassein Creek at Vasai fort			
<b>Name of the Program</b>	NWMP	<b>Type of Sample</b>	Surface
<b>Station Code</b>	2696	<b>Frequency</b>	Monthly (Trend)
<b>Regional Office</b>	Thane	<b>Regional Lab</b>	Thane

**Table 6.8 Annual Average Water Quality Monitoring Data of Pelhar River at Pelhar Dam.**

Year		pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Fecal Coliform (MPN/ 100ml)
2018	Min.	7.4	6.2	3	12	0.2	1.8
	Max.	8.7	7.4	4	24	0.9	21
	Avg.	7.94	7.02	3.17	17.67	0.48	12.61
2019	Min.	6.8	6.1	3	12	0.2	1.8
	Max.	8.5	7.4	4	20	0.9	170
	Avg.	7.48	6.94	3.43	14.33	0.46	42.12
2020	Min.	7	6.4	2.8	12	0.1	1.8
	Max.	8.2	7.4	4	216	0.5	21
	Avg.	7.72	6.97	3.33	32.67	0.23	8.98
2021	Min.	7.1	6.5	3	12	0.3 (BDL)	2
	Max.	8.1	7.5	4	28	1.12	22
	Avg.	7.53	7.06	3.47	16.67	0.47	8.45
2022	Min.	7.2	6.2	2.8	8	0.3 (BDL)	1.8 (BDL)
	Max.	7.8	7.3	5	52	1.42	26
	Avg.	7.53	6.9	3.62	17.33	0.48	10.89

Source: MPCB





**Table 6.9: Details of the Monitoring Station – Surya River U/s of Surya Dam**

Water Quality Monitored at: Surya River U/s of Surya Dam			
Name of the Program	NWMP	Type of Sample	Surface
Station Code	2706	Frequency	Monthly (Trend)
Regional Office	Thane	Regional Lab	Thane

**Table 6.10 Annual Average Water Quality Monitoring Data of Surya River U/s of Surya Dam**

Year		pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Fecal Coliform (MPN/ 100ml)
2018	Min.	6.9	6	3	16	0.1	1.8
	Max.	8.6	7.2	4	24	1.1	17
	Avg.	7.87	6.83	3.38	19	0.5	10
2019	Min.	6.8	6.5	3	12	0.1	1.8
	Max.	8.5	7.6	4	16	0.4	1.8
	Avg.	7.48	7.08	3.32	13.33	0.21	55.35
2020	Min.	6.9	6.2	2.8	12	0.1	1.8
	Max.	8.1	7.7	4	20	0.9	<1.8
	Avg.	7.59	6.96	3.35	16	0.32	6.16
2021	Min.	7	6.8	3	12	0.3	1.8
	Max.	8.2	7.6	3.6	20	12.6	17
	Avg.	7.73	7.33	3.33	14.33	1.37	6.86
2022	Min.	6.8	6.2	2.4	12	0.3(BDL)	1.8 (BDL)
	Max.	8.5	7.6	7	128	0.56	22
	Avg.	7.7	7.18	3.52	2.5	0.35	7.98

Source: MPCB



**Table 6.11: Details of the Monitoring Station – Surya River at MIDC Pumping Station**

Water Quality Monitored at: Surya River at MIDC Pumping Station			
Name of the Program	NWMP	Type of Sample	Surface
Station Code	2707	Frequency	Monthly (Baseline)
Regional Office	Thane	Regional Lab	Thane

**Table 6.12 Annual Average Water Quality Monitoring Data of Surya River at MIDC pumping station**

Year		pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Fecal Coliform (MPN/ 100ml)
2018	Min.	6.9	6.5	3	16	0.1	4
	Max.	8.6	7.3	4	24	1.3	40
	Avg.	7.8	7.03	3.23	18	0.46	13.7
2019	Min.	6.7	6	3	12	0.1	1.8
	Max.	8.5	7.5	4	20	2	1.8
	Avg.	7.57	6.98	3.58	15.67	0.5	25.05
2020	Min.	7.2	6.5	2.8	12	0.1	12
	Max.	8.17	7.6	4	20	1.7	<1.8
	Avg.	7.67	7.08	3.22	15.64	0.51	10.02
2021	Min.	7.4	6.9	3	12	0.3 (BDL)	2
	Max.	8.3	7.6	4	28	1.2	22
	Avg.	7.91	7.32	3.37	15.67	0.46	10.74
2022	Min.	6.8	6.8	2.4	12	0.3 (BDL)	1.8 (BDL)
	Max.	8.8	7.6	4	16	1.4	23
	Avg.	7.73	7.28	3.1	13.33	0.56	7.56

Source: MPCB



**Table 6.13: Details of the Monitoring Station – Surya River at Intake of Vasai-Virar Water Scheme**

Water Quality Monitored at: Surya River at Intake of Vasai-Virar Water Scheme			
Name of the Program	NWMP	Type of Sample	Surface
Station Code	2708	Frequency	Monthly (Baseline)
Regional Office	Thane	Regional Lab	Thane

**Table 6.14 Annual Average Water Quality Monitoring Data of Surya River at Intake of Vasai-Virar water scheme**

Year		pH	DO (mg/l)	BOD (mg/l)	COD (mg/l)	Nitrate (mg/l)	Fecal Coliform (MPN/ 100ml)
2018	Min.	7.3	6.2	3	16	0.1	1.8
	Max.	81	7.5	4	32	4.6	170
	Avg.	13.96	6.98	3.28	19.67	0.96	29.23
2019	Min.	6.9	6.6	3	12	0.2	1.8
	Max.	8.4	7.6	4	20	1.2	1.8
	Avg.	7.6	7.1	3.52	15.33	0.42	46.52
2020	Min.	7.2	6.1	2.8	12	0.1	7.8
	Max.	8.2	7.5	4.2	28	1.7	<1.8
	Avg.	7.7	7.02	3.33	17.45	0.5	8.75
2021	Min.	7.5	6.9	3	12	0.3(BDL)	1.8
	Max.	8.5	7.5	3.8	20	1.2	17
	Avg.	7.96	7.16	3.47	15.67	0.42	8.52
2022	Min.	6.6	6.3	1.6	8	0.3 (BDL)	1.8 (BDL)
	Max.	8.6	7.5	5	16	1.04	22
	Avg.	7.63	7.11	3.1	13.08	0.37	14.88

Source: MPCB



### Water Quality Index

Water Quality Index (WQI) provides a single number that expresses the overall water quality, at a certain location and time, based on several water quality parameters. The objective of WQI is to turn complex water quality data into information that is understandable and usable by the public. Table 6.15 gives the visual representation of WQI of all locations.

**Table 6.15: Trend of the WQI for all monitoring location (2018-2022)**

Station Code	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1316	2018												
2696													
2706													
2707													
2708													
1316	2019												
2696													
2706													
2707													
2708													
1316	2020												
2696													
2706													
2707					NA								
2708					NA								
1316	2021												
2696													
2706													
2707													
2708													
1316	2022												
2696													
2706													
2707													
2708													

\* NA: Not Available

Data Source: MPCB



**Table 6.16: Water Quality Index**

WQI	Quality Classification	Remarks	Colour Code
63-100	Good to Excellent	Non-Polluted	Green
50-63	Medium to Good	Non-Polluted	Yellow
38-50	Bad	Polluted	Orange
38 and less	Bad to very Bad	Heavily Polluted	Red

As shown, all the samples monitored are of good to excellent quality except for the water sample of the station code – 1316, which was found to be of medium to good quality i.e., non-polluted throughout the except for the month of May and June. This can be due to less flow of water in summer season resulting in less dilution of the creek water.

## 6.2 Water Resource Management

Vasai-Virar City Municipal Corporation has water supply from three sources namely; Surya Scheme, Usgaon Dam and Pelhar Dam. Around 195 MLD water is distributed around the city excluding 26% water loss. The sourced water is treated in corporation's water treatment plants and distribute through water distribution system.

**Table 6.17: List of Water Treatment Plants in VVCMC**

Sr. No.	Scheme	WTP	Location	Capacity (MLD)
1	Surya Phase 1&2	1	Dovolipada, Dhuktan	100
2	Surya Phase 3	1	Dovolipada, Dhuktan	100
3	Parole WTP	1	Tungareshwar Phata	20
4	Pelhar WTP	1	Pelhar	10



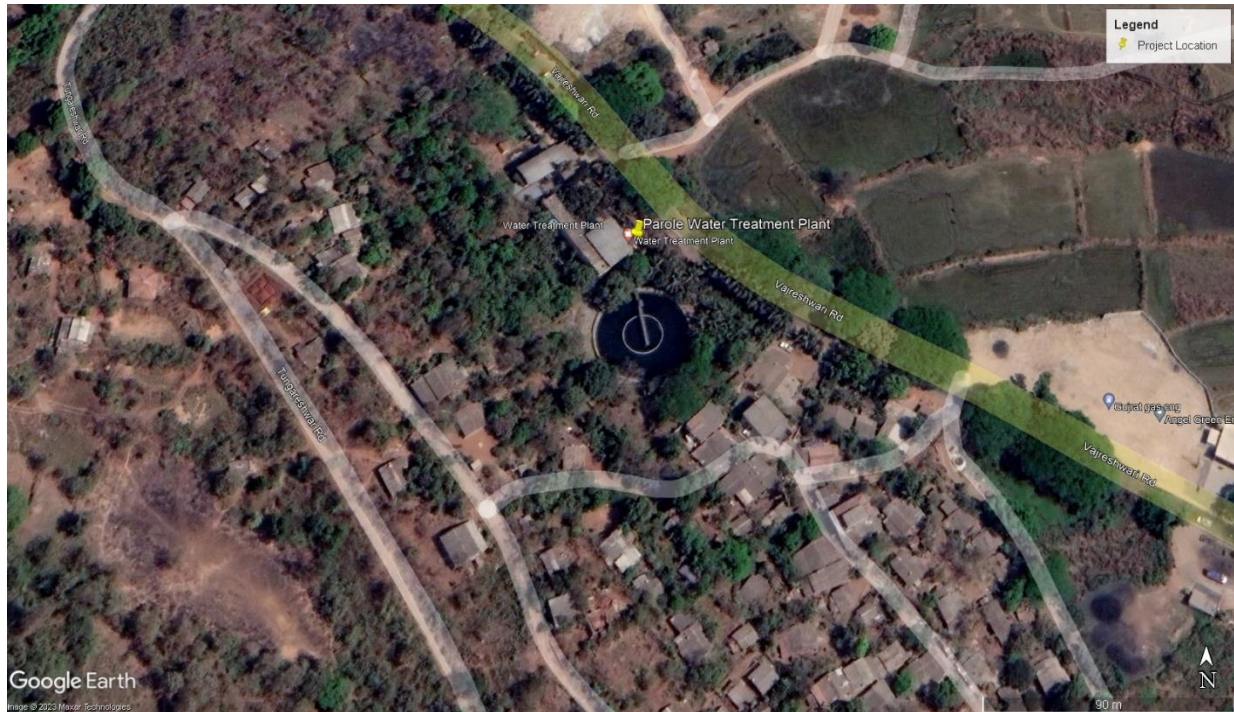


**Figure 6.8: WTP under Surya Phase 1&2 (19°40'51.05"N, 72°52'24.69"E)**



**Figure 6.9: WTP under Surya Phase 1&2 (19°40'51.6"N, 72°52'27.1"E)**





**Figure 6.10: Parole WTP (19°27'48.16"N, 72°56'17.01"E)**



**Figure 6.11: Pelhar WTP (19°26'35.46"N, 72°53'22.41"E)**





## 6.3 Ground Water

Due to well-planned and established chain of water supply, the dependence of the VVCMC region on ground water table for its daily activities is low compared to other regions. According to the block wise ground water assessment conducted by Central Ground Water Board (CGWB), the major sources of ground water sources in VVCMC are borewell and wells. **The overall usage of groundwater in VVCMC had been calculated to be 0.95 MLD.** Details of total borewells and dug wells have been tabulated in Table 6.18 and Table 6.19 respectively.

**Table 6.18: Details of Ground Water Resource - Dug wells**

Sr. No.	Wards	Quantity	Percolation Lake
1	A	42	-
2	B	0	-
3	C	16	-
4	D	0	2
5	E	39	-
6	F	44	-
7	G	119	1
8	H	49	-
9	I	132	-
	<b>Total</b>	<b>441</b>	<b>3</b>

**Table 6.19: Details of Ground Water Resource - Borewells**

Sr. No.	Wards	Quantity	Un-Operational	Without Handpump	Dry
1	A	34	-	-	-
2	B	57	-	-	-
3	C	97	-	-	-
4	D	145	-	-	-
5	E	56	-	-	-
6	F	193	-	-	-
7	G	370	18	5	20
8	H	83	3	-	-
9	I	357	-	-	-
	<b>Total</b>	<b>1392</b>	<b>21</b>	<b>5</b>	<b>30</b>

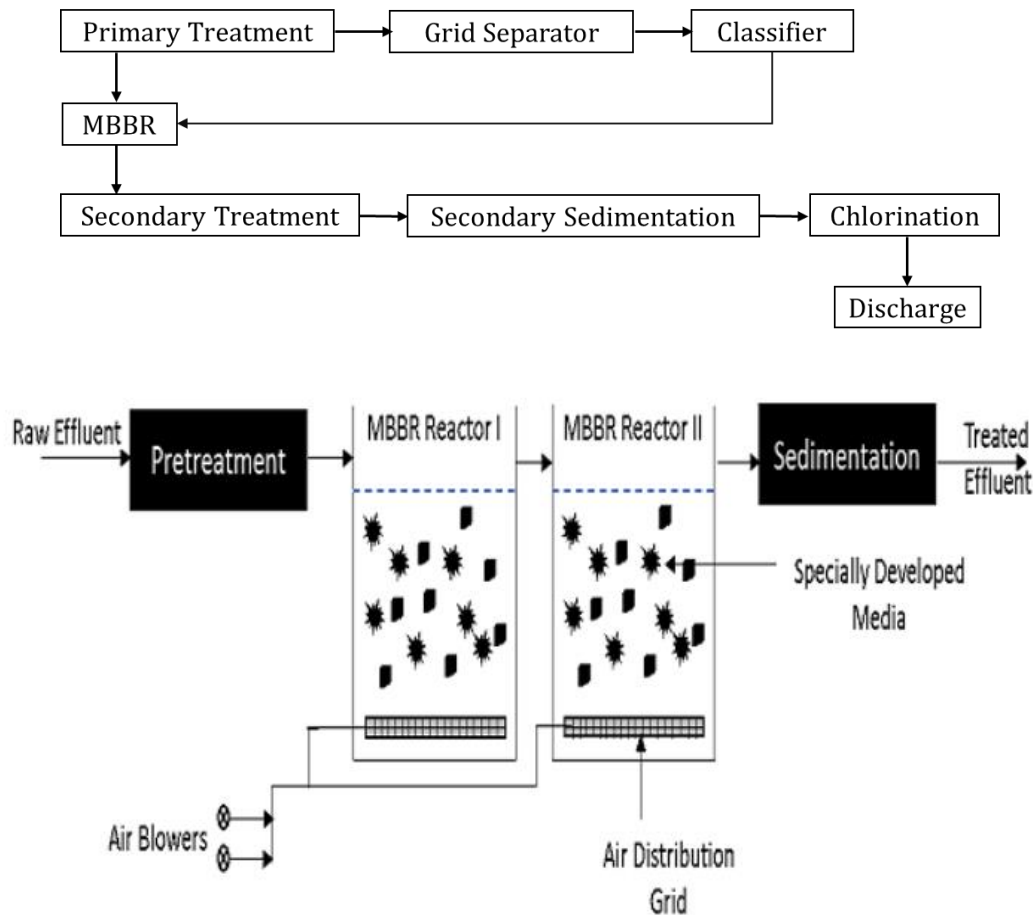


## 6.4 Sewage Treatment

Sewage generation of VVCMC is about 147.20 MLD (*Source: Drainage Dept., VVCMC*). As the city is in its developmental stage, not all the properties are connected to the sewerage network. City has a partially developed sewerage network and others have septic tanks in place for the disposal of sewage and fecal sludge. No waste is disposed in an open area. All the sewage generated goes to the Sewage Treatment Plant for Treatment.

VVCMC has its sewage treatment plant (STP) at Bolinj, Virar (W) with a capacity of 30 MLD which is owned and operated by corporation. Apart from this, corporation also have private STP's for the treatment of sewage water. All these STPs are hydraulically tested and commissioned. The storm water is also collected in these STPs and treated as well. The outlets of treated water are the nallahs which run through the city. VVCMC is certified as ODF++ (Open Defecation Free). A city / ward / work circle<sup>1</sup> can be notified/ declared as SBM ODF++ city/ SBM ODF++ ward/ SBM ODF++ work circle if, at any point of the day, not a single person is found defecating and/ or urinating in the open, all community and public toilets are functional and well maintained, and fecal sludge/seepage and sewage is safely managed and treated, with no discharging and/or dumping of untreated fecal sludge/seepage and sewage in drains, water bodies or open areas (*Ref: Swachh Bharat Abhiyaan, Swachh Survekshan Toolkit for Urban Local Bodies*).

The technology used at STP is MBBR (Moving Bed Biofilm Reactor). The MBBR process utilizes floating plastic carriers (media) within the aeration tank to increase the number of microorganisms available to treat the wastewater. The microorganisms consume organic material. The media provides increased surface area for the biological microorganisms to attach to and grow in the aeration tanks. The media is continuously agitated by bubbles from the aeration system that adds oxygen at the bottom of the first compartment of the aeration tank. The microorganisms consume organic material. When compared to conventional secondary treatment it provides superior efficiency and value.



**Figure 6.12: STP with MBBR Technology**

**Components used in MBBR wastewater treatment process: –**

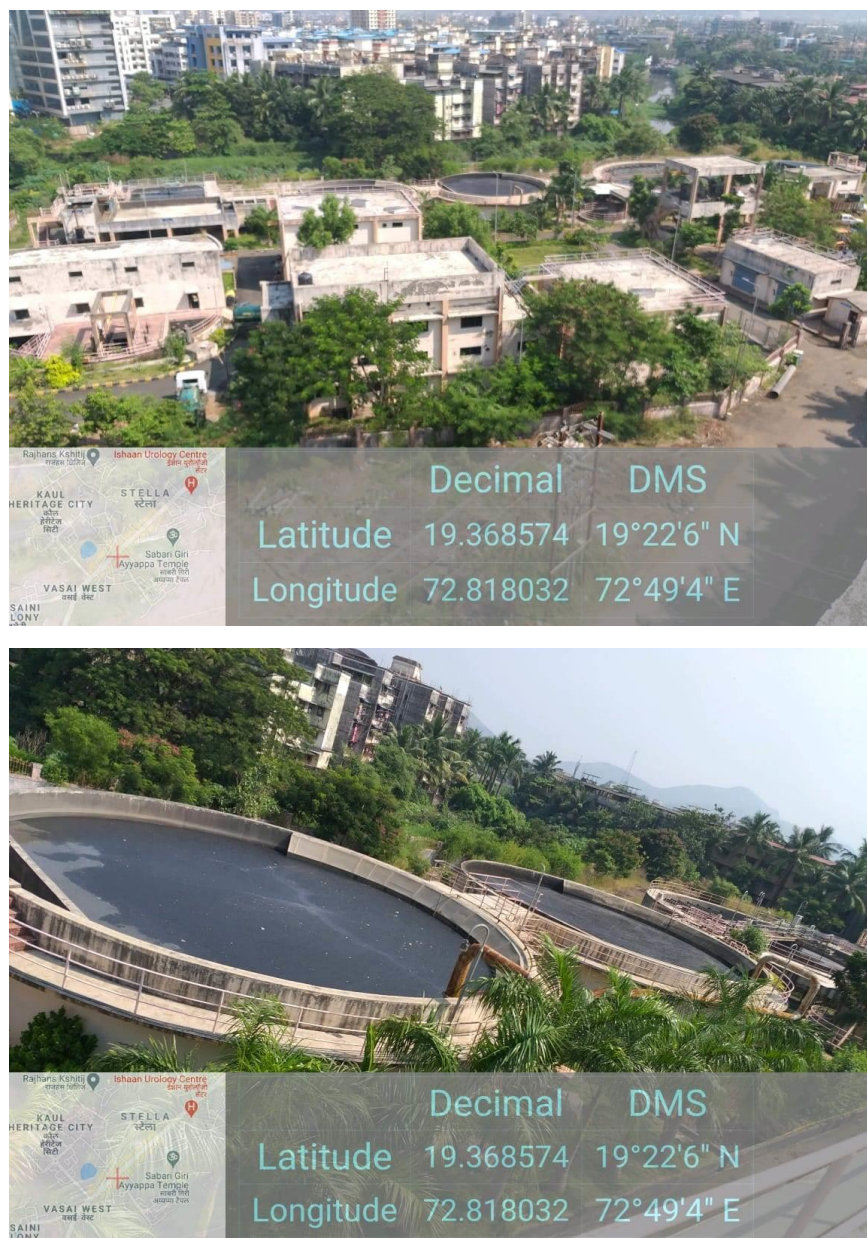
- **Basin** – In aeration tank, thousands of media made up of polyethylene are put to provide surface for microorganism's development. The size of the tank & quantity of plant depends upon quantity of water filtered per day. Mostly there are two tanks presents for complete aeration process. MBBR media are round, or wheel shaped. Their density matches the density of water which enables them to neither to sink nor to float on surface.
- **Media** – MBBR tanks is filled up with thousands of small circular shape plastic polyethylene chips. They occupy about 60-70 % space in tanks and provide surface area for biofilm



- Aeration Grid – It helps in movement of media effectively through the complete tank & provides air inside water forming water bubble enable proper mixing of water. With the help of blower's air is passed through pipeline and then to diffusers.
- Sieve- It stops the MBBR media to pass through exit of the tank.

**Table 6.20: List of STP's in VVCMC**

Sr. No.	Village	Owner	Capacity (KLD)	Treatment Technology
STP under Corporation				MBBR
1	Bolinj	Corporation	30	
Private STP's				
1	Bolinj	Deepak H. Thakur	400	
2	More	M/s. Maner Land Development Co.	500	
		Deepak Shah	400	
3	Achole	Anil Gupta	2567	
4	Juchandra	Rakeshkumar Wadhwan	1310	
5	Chandansar	M/s. Evershine Developers	700	
6	Dongre		12900	
7	Virar		1000	
8	Bolinj		800	
9	Bolinj		535	
10	Bolinj		974	
11	Bolinj		641	
12	Dongre		650	
13	Diwanman/Chulne		Under Construction	
14	Bolinj	MHADA Phase 1	3500	
		MHADA Phase 2	1500	
Total			28407.0	



**Figure 6.13: STP's with VVCMC**

Performance Assessment Framework was developed for the cities in India to assess the service delivery by ULB to the citizen. Performance Assessment System (PAS) measures performance of each sector (water, sanitation, solid waste and storm water drainage) across five themes and 32 key performance indicators. These indicators are monitored by



state and local governments. It is mandatory for all the ULB's to set the Service Level Benchmark, existing scenario of services and targets to be achieved so as to assess the service level progress of the corporations.

As tabulated in Table No. 6.21, the existing scenario of Sanitation services and a comparative for yearly target to be achieved has been given for VVCMC.

**Table 6.21: Service Level Benchmark and Target Setting for Sanitation Services**

Proposed Indicator	2019-20	2020-21	2021-22	Target for 2021-22	Target for 2022-23
<b>Sanitation: KPIs</b>					
Coverage of Toilets (%)	100.0	100.0	100.0	100.0	100.0
Coverage of sewage network services (%)	4.0	3.8	3.6	13.0	13.0
Collection efficiency of sewage network (%)	12.9	22.2	21.8	25.0	25.0
Adequacy of sewage treatment capacity (%)	22.2	22.2	21.8	25.2	25.0
Quality of sewage treatment	100.0	100.0	100.0	100.0	100.0
Extent of reuse and recycling of sewage (%)	0.0	0.0	0.0	2.0	2.0
Extent of cost recovery in sewage management (%)	NA	NA	NA	NA	NA
Efficiency in re-dressal of customer complaints (%)	98.0	100.0	100.0	100.0	100.0
Efficiency in collection of sewage charges (%)	NA	NA	NA	NA	NA
Coverage of Toilets in Slums (%)	77.1	77.1	78.1	80.0	80.0
Coverage of sewage connections in Slums (%)	0.0	0.0	0.0	0.0	0.0
<b>SWD: KPIs</b>					
Coverage of Storm Water Drainage network (%)	4.0	3.8	3.6	13.0	13.0
Incidents of Water Logging/Flooding (No.)	12.9	22.2	21.8	25.0	25.0





## 7 Soil Environment

Soil may be defined as a thin layer of earth's crust which serves as a natural medium for the growth of plants. It is the unconsolidated mineral matter that has been subjected to, and influenced by genetic and environmental factors – parent material, climate, organisms and topography all acting over a period of time. They serve in varying degree as a reservoir of nutrients and water for crops, provide mechanical anchorage and favorable tilt. The components of soil are mineral material, organic matter, water and air, the proportion of which vary and which together form a system for plants growth; hence the need to study the soils in perspective.

A study of the soil profile is important from crop husbandry point of view, since it reveals the surface and the sub- surface characteristic and qualities namely, depth, texture, structure, drainage conditions and soil moisture relationship which directly affect the plant growth. A study of soil profile supplemented by physical, chemical and biological properties of the soil will give full picture of soil fertility and productivity. Physical properties of the soil include water holding capacity, aeration, plasticity, texture, structure, density and colour etc. Chemical properties refer to the mineralogical composition and the content of the type of mineral such as Kaolinite, illite and montmorillonite, base saturation, humus and organic matter content. The biological property refers to a content of extent and types of microbes in the soil which include bacteria, fungi, worms and insects.

Some dominant groups of Indian soil, classified according to soil taxonomy and chemical property:

- 1) Res Soil: They are wide in their spread. The red color is due to diffusion of iron in the soil.
- 2) Lateritic Soil: Are composed of mixture of hydrated oxides of aluminium and iron with small amounts of fertility.
- 3) Black Soil: Contains a high proportion of Calcium and Magnesium Carbonates and have a high degree of fertility.





- 4) Alluvial Soil: This is the largest and agriculturally most important group of soils.
- 5) Desert Soil: Occurs mostly in dry areas and important content is quartz.
- 6) Forest and Hill Soils high in organic matter.

The predominant soil cover in Mumbai city is sandy, whereas in the suburban district, the soil cover is alluvial and loamy. Geologically, the sub-region falls in the Deccan Lava plateau. Traces of Bauxite have been found in the Tungar Hill ranges over an area of 80 sq.kms and have a mineral content of 30- 35%. There are few stone quarries in Rajawali area. The sand is also extracted through the Vaitarna Creek as building material by dredging which helps the creek to remain desilted every year.

The three main types of soils are the black-colored soils, occurring on plains, the lighter-colored coarse soils occupying hill-slopes (also known as varkas) and black colored soils along the coast in the district. The coastal soils are further divided into sweet lands supporting the garden crops and the khar or saline lands which grow coarse varieties of paddy after partial reclamation. The soil of the district in general is almost neutral in reaction, free from calcium carbonate and is sandy in texture. The soil is fairly well supplied with nitrogen but is low in phosphate and potash contents.

The soil all along the coast and particularly in parts of Dahanu, Palghar and Vasai talukas, is blackish and contains sand. It is very suitable for garden crops. Towards the east the soil is red and brown. It is not very deep but is suitable for rice. Further east on the hill-slopes, the soil is poor and is used only for growing grass and coarse grains, viz., nagliand vari. In the valleys there are patches of black soil in Bhiwandi, Kalyan, Mokhada and Shahapur talukas where rice is grown in ample quantity.

As far as agriculture is concerned the soils in the district are mainly classified into three main classes, viz., coastal soils, mid-plane soils and varkas type soils. Coastal soils are further sub-divided into bagayat, sandy loam and salt paddy soils near creeks. Mid-plane soils are mainly derived from the trap rock and are sub-divided into late soils and mid-late soils. Varkas soils are mostly found in the far eastern part of the district.



## 8 Biodiversity

Biodiversity is the variety of life on Earth, it includes all organisms, species, and populations; the genetic variation among these; and their complex assemblages of communities and ecosystems (What is biodiversity? United Nations Environment Program, World Conservation Monitoring Centre). Biodiversity is a variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species, and of ecosystem. Biodiversity forms the foundation of the vast array of ecosystem services that critically contributed to human well-being. Biodiversity is important in human managed as well as natural ecosystem.

Our planet's essential goods and services depend on the variety and variability of genes, species, populations and ecosystems. Biological resources feed and clothe us and provide housing, medicines and spiritual nourishment. The natural ecosystems of forests, savannah, pastures and rangelands, deserts, tundra's, rivers, lakes and seas contain most of the Earth's biodiversity. The decline in biodiversity is largely the result of human activities and represents a serious threat to human development. The loss of biological diversity may reduce the resilience of ecosystems to climatic variations and air pollution damage. Atmospheric change can have important impact on forests, biodiversity, and freshwater and marine ecosystem, as well as on economic activities, such as agriculture (UNCED, 1992).

All of the Earth's species work together survive and maintain their ecosystems. Much of the Earth's biodiversity, however, is in jeopardy due to human consumption and other activities that disturb and even destroy ecosystems. Pollution, climate change, and population growth are all threats to biodiversity. These threats have caused an unprecedented rise in the rate of species extinction. Some scientists estimate that half of all species on Earth will be wiped out within the next century. Conservation efforts are necessary to preserve biodiversity and protect endangered species and their habitats



("What is biodiversity?". United Nations Environment Program, World Conservation Monitoring Centre).

Urbanization is often cited as a major reason for loss of native biodiversity and its replacement with non-native vegetation across the world (McKinney, 2002; Sanderson et al., 2002). While urbanization does have an intense effect on native biodiversity and dramatic transformation of biophysical processes, there is also a growing recognition that urban areas are heterogeneous with variations and transitions in the synthesis of social, political, economic, biophysical processes at different scales (Cadenasso, Pickett, & Schwarz, 2007). Urban ecosystems are serving as key sites where scholars across disciplines are finding a common ground to explicitly integrate the dynamics of social-ecological and political processes (Francis, Lorimer, & Raco, 2011).

### **Measures of Biodiversity**

In spite of many tools and data sources, biodiversity remains difficult to quantify precisely. But precise answers are seldom needed to devise an effective understanding of where biodiversity is, how it is changing over space and time, the drivers responsible for such change, the consequences of such change for ecosystem services and well-being, and the response options available. Ideally, to assess the conditions and trends of biodiversity either globally or sub-globally, it is necessary to measure the abundance of all organisms over space and time, using taxonomy (such as the number of species), functional traits (for example, the ecological type such as nitrogen-fixing plants like legumes versus non-nitrogen fixing plants), and the interaction among species that affect their dynamic and function (predation, parasitism, competition, and facilitation such as pollination, for instance and how strongly such interactions affect ecosystems). even more important would be to estimate turnover of biodiversity, not just point estimates in space or time.

Currently, it is not possible to do this with much accuracy because the data are lacking. Even for the taxonomic component of biodiversity, where information is the best, considerable uncertainty remains about the true extent and changes in taxonomic diversity (Hassan, Scholes and Ash, 2005). there are many measures of biodiversity; species



richness(the number of species in a given area) represents a single but important metric that is valuable as the common currency of the diversity of life but it must be integrated with other metrics to fully capture biodiversity (Hassan, Scholes and Ash, 2005).

### **Suggestion**







Environmental protection is an integral component of sustainable development. The environment is threatened in all its biotic and abiotic components: animals, plants, microbes and ecosystems comprising biological diversity; water, soil and air, which from the physical components of habitats and ecosystems; and all the interactions between the components of biodiversity and their sustaining habitats and ecosystem. With the continue increase in use of chemicals, energy and non- renewable resources by an expanding global population, associated environmental damage caused by over consumption, the quantities of waste generated and the degree of unsustainable land use appear likely to continue growing (UNCED, 1992).

The need for a diverse genetic pool of plant, animal and microbial germ plasma for sustainable development is well established. Biotechnology is one of many tools that can play an important role in supporting the rehabilitation of degraded ecosystems and landscapes (UNCED, 1992). Vasai-Virar city is located at a crossroads of two major bio geographical zones. This includes the Western Ghats and Malabar Coastal zones and comprise of forest, open grass and scrub, agriculture and plantations, freshwater wetlands, urban parks/gardens/avenues and diversity of human dominated spaces ranging from rural agro pastoral landscapes to core urban built-up zones. Thus, Vasai-Virar city comprises of a spectrum of habitats from intensely human-dominated spaces at one end and tracts of native ecosystem at other, linked together in a dynamic matrix of heterogenic complexity.





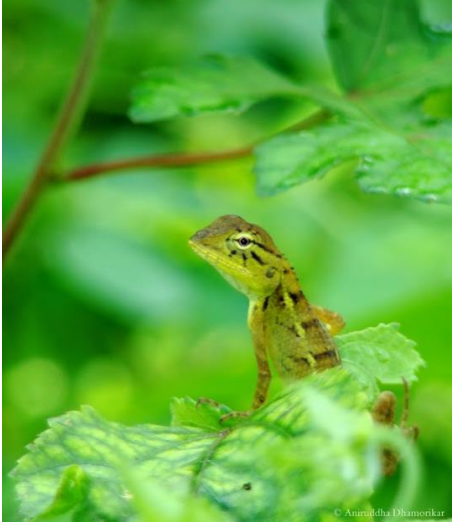

A survey for Tree Census was carries out during year 2013-2016 6 in 9 Prabhag's of city, where thousands of different varieties of trees found along with animals and birds which are common in Vasai-Virar City and Palghar District.

## Animals and Birds







Animals found in Vasai-Virar City constitute to a wide range of amphibians, reptiles, mammals, butterflies and birds. Perhaps with increasing urbanization their survival is in danger. Figure 8-1 shows the common species of fauna found in Vasai-Virar.

	
<p>Booted Eagle</p>	<p>Indian Scimitar Babbler</p>
	
<p>Grey-fronted Green Pigeon</p>	<p>White-eyed Buzzard</p>
	
<p>Heart-spotted Woodpecker</p>	<p>Barred Jungle Owlet</p>



	
<p>Wandering Midget</p>	<p>Asian Weaver Ant</p>
	
<p>Caterpillar</p>	<p>Black-bodied swallowtails</p>
	
<p>Chameleon</p>	<p>Stripped Bronze back Tree Snake</p>



	
<p>Karuvel</p>	<p>Babul</p>
	
<p>Betelnut palm</p>	<p>Baobab tree</p>
	
<p>Papra</p>	<p>Cucumber tree</p>

**Figure 8.1: Common Species of Fauna Found in Vasai-Virar City**





## **Tree Cover**

Urban tree ecosystem provides a range of social and ecological services, but due to the heterogeneity of these canopies their spatial extent is difficult to quantify and monitor. Traditional pre-pixel classification methods have been used to map urban canopies; however, such techniques are not generally appropriate for assessing these highly variable landscapes. Landsat imagery has historically been used for pre-pixel driven land use/land cover (LULC) classifications, but the spatial resolution limits our ability to map small urban features. In such cases, hyper spatial resolution imagery such as aerial or satellite imagery with a resolution of one meter or below is preferred. Analysis and classification of remote sensing imagery, along with geographic information system (GIS) analysis and modeling provide the most efficient method for assessment. The detailed survey of biodiversity reveals that there has been decrease in tree cover and trees are cut due to construction activities by private builders in the city.

The state of biodiversity is very well rich in Vasai-Virar city. As the temperature of the city is moderate and facilitates better living environment for animals, birds and plants along with human beings. There might be changed is the biodiversity count in the past few years due to changing climatic conditions and natural calamities. Up to 2500 mm precipitation was observed in July 2022. This did not affect the water supply system and the residence in Vasai-Virar city could get enough water across the year. As there are varied variety of plants and trees various species of birds and butterflies are observed. Also, various reptile species can be seen in the city.

## **Impact of Biodiversity**

India is one of the recognized mega-diverse countries of the world, harboring nearly 7-8% of the recorded species of the world, and representing 4 of the 34 globally identified biodiversity hotspots (Himalaya, Indo-Burma, Western Ghats and Sri Lanka, Sunda land). India is also a vast repository of traditional knowledge associated with biological resources. So far, over 91,200 species of animals and 45,500 species of



plants have been documented in the ten biogeographic regions of the country. Inventories of floral and faunal diversities are being progressively updated with several new discoveries through the conduct of continuous surveys and exploration. Along with species richness, India also possesses high rates of endemism. In terms of endemic vertebrate groups, India's global ranking is tenth in birds, with 69 species; fifth in reptiles with 156 species; and seventh in amphibians with 110 species. Endemic-rich Indian fauna is manifested most prominently in Amphibian (61.2%) and Reptile (47%). India is also recognized as one of the eight Vavilovian centers of origin and diversity of crop plants, having more than 300 wild ancestors and close relatives of cultivated plants, which are still evolving under natural conditions.

The main threats to biodiversity include: habitat fragmentation, degradation and loss; over-exploitation of resources; shrinking genetic diversity; invasive alien species; declining forest resource base; climate change and desertification; impact of development projects; impact of pollution. In the backdrop of the varying socio-cultural milieu and often conflicting demands of various stakeholders, there is an urgent need for augmenting and accelerating the efforts for conservation and sustainable use of biodiversity, and for the fair and equitable sharing of benefits arising from the utilization of genetic resources.

Human activities are disturbing both structure and functions of ecosystem and altering biodiversity. Such disturbances reduce the abundance of some organisms, causing an increase in population of other organisms, modify the interaction among organisms, and alter the interactions between the organisms and their physical and chemical environments. Pattern of infectious diseases are sensitive to these disturbances.



## **Initiatives by VVCMC for Biodiversity Conservation**

### **1. Bird Census**

VVCMC has started the bird census initiative and the first stage and second stage monitoring is been completed. Dr. Sagar Gholap, Additional Commissioner, VVCMC along with BNHS, NEST and local volunteers have contributed in this bird census. Total 22 sites were selected including salt pans, open spaces and mangroves belt for studying the birds. According to that data, including migratory as well as native species, a total number of 172 bird species have been recorded in the study area. As a result of this, VVCMC is planning to design new strategies for conservation of their habitats.

### **2. Habitat conservation for biodiversity**

Grassland ecosystem in Vasai, Nalla Sopara, Virar and Naigaon serves as an important link in biodiversity conservation. VVCMC has taken initiative to conserve these natural habitats and ecosystems. Strict action is being taken against those who cause any harm to these ecosystems. VVCMC is strictly monitoring the grassland ecosystems, salt pans, open spaces and mangrove belts.



## 9 Solid Waste Management

Municipal solid waste (MSW) is defined as waste collected by the municipality or disposed of at the municipal waste disposal site and includes residential, institutional, commercial, municipal, and construction and demolition waste. MSW management includes the collection, transportation, and responsible disposal of waste generated in the city.

Solid waste generation is a continuously growing problem at all levels including local levels. Solid wastes are those organic and inorganic waste materials produced by various activities of the society, which have lost their value to the first user. Improper disposal of solid wastes pollutes all the vital components of the living environment (i.e., air, land and water) at local and global levels. Urban society rejects and generates solid material regularly due to rapid increase in production and consumption. The problem in India is more acute as its economic growth and urbanization have been very rapid in recent times. This necessitates management of solid waste at generation, storage, collection, transfer and transport, processing and disposal stages in an environmentally sound manner in accordance with the best principles of public health, economics, engineering, conservation, aesthetics and environmental considerations. Thus, solid waste management includes all administrative, financial, legal, planning, and engineering functions.

### 9.1 Existing Situation of MSW in VVCMC

Present system of waste collection, storage and transportation in the VVCMC is a mixture of improved storage and transportation along with old collection and transportation system. SWM functions were Solid Waste Management Rules 2016, compliant till recently. Administration has been made conscious efforts to improve through internal revenue and grants from various government scheme. Service level contracts have been given ward wise to improve collection and transportation efficiency. The daily MSW generation in VVCMC is about 975 TPD considering 500 gms/day as the per capita waste generation for a population of about 19 Lakhs (2019) and the average daily collection and conveyance of



the MSW which is actually dumped at the dumpsite at Gokhiware is about 525 to 565 tons. At present there is no Segregation taking place at source.

**Table 9.1: Per Capita Waste Generation Calculation**

Sr. No.	Population (Year)	Per Capita Waste Generation	Total
1	19,50,000 - 2019	0.50 ( kg/day)	975 (Tons/day)
2	21,50,000 - 2023	0.55 ( kg/day)	1155 (Tons/day)

*Note: As per the CPHEEO Manual 2016, Page No 43, Table 1.5: per Capita Waste Generation rates, for population above 5 lakhs are 0.5 Kg/person/day Also, it is mentioned that 0.6 kg/person/day is the generation of MSW is observed in metro cities.*

### **Current Status of Construction and Demolition**

Waste (C&D Waste) The C & D activity within the VVCMC generates about 120 TPD waste. With the activities of new constructions in the city and redevelopment projects on the rise, this number is likely to rise to about 200 to 250 TPD by year 2020. Making recycling difficult, sometimes it gets mixed with municipal solid waste. The VVCMC shall accord high priority to proper management of C&D waste in accordance with the provisions of Solid Waste Management Rules 2016 and Recommendations of various committees and Task forces on the subject.

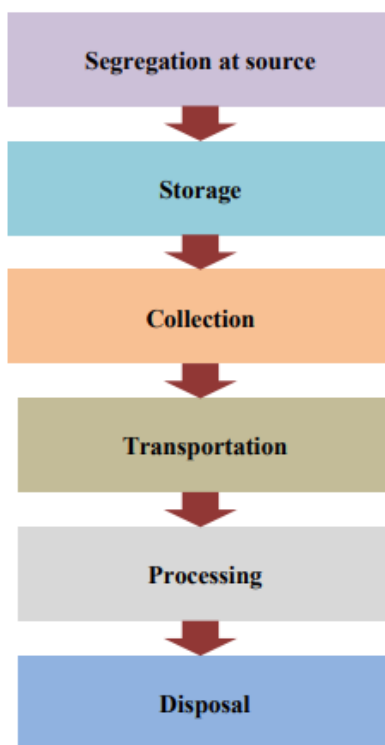
### **Current Status of Electronic Waste (E-waste)**

At the current level of domestic e-waste generation, VVCMC produces about 60 Tons of electronic waste per month (extrapolated from MPCB Report for electronic waste generation in MMR Region) and it is projected to increase upto 100 tons/month by year 2020.

## **9.2 Waste Collection, Segregation and Transportation**

The VVCMC generates about 1155 TPD solid waste from various waste generators but the waste actually collected and dumped by VVCMC is about 850-867 TPD at the disposal site

at Gokhivare. Some of this is segregated at source. The schematic diagram of the waste generation to disposal is shown below.



**Figure 9.1: Common Species of Fauna Found in Vasai-Virar City**

Present system of waste collection, storage and transportation in the VVVMC is a mixture of improved storage and transportation along with old collection and transportation system. VVCMC had brought 27 refuse compactors, 70 Auto tippers under previous government scheme and another 20 compactors are being purchased. VVCMC has achieved 73% of door-to-door collection by giving service level contracts ward wise. The solid waste from market area is collected twice a day. And the solid waste is collected more frequently as per requirements during festivals and fairs in city. Further VVCMC shall deploy compactors for daily dry waste collection from different part of city.

It is planned 60% of solid waste is segregated. The organic waste is converted into compost and later the compost is used in various gardens situated in the city. The remaining is discarded in the dumping ground.





## 9.3 Service Level Benchmark

Performance Assessment Framework was developed for the cities in India to assess the service delivery by ULB to the citizen. PAS measures performance of each sector (water, sanitation, solid waste and storm water drainage) across five themes and 32 key performance indicators. These indicators are monitored by state and local governments. It is mandatory for all the ULB's to set the Service Level Benchmark, existing scenario of services and targets to be achieved so as to assess the service level progress of the corporations.

As tabulated in Table No. 9.2, the existing scenario of Solid Waste Management services and a comparative for yearly target to be achieved has been given for VVCMC.

**Table 9.2: Service Level Benchmark and Target Setting for Solid Waste Management Services**

Proposed Indicator	2019-20	2020-21	2021-22	Target for 2021-22	Target for 2022-23
Household level coverage of SWM services (%)	100.0	100.0	100.0	100.0	100.0
Efficiency of collection of MSW (%)	100.0	100.0	100.0	100.0	100.0
Extent of segregation of municipal solid waste (%)	78.7	78.7	80.0	100.0	100.0
Extent of MSW recovered (%)	78.7	82.3	73.6	82.3	82.3
Extent of scientific disposal of MSW (%)	100.0	100.0	100.0	100.0	100.0
Extent of cost recovery in SWM services (%)	ND	6.0	26.1	50.0	50.0
Efficiency in redressal of customers complaints (%)	94.0	98.3	97.9	100.0	100.0
Efficiency in collection of SWM charges	ND	66.5	76.4	80.0	80.0
HH level coverage of SWM Services in Slum Settlement (%)	100.0	100.0	100.0	100.0	100.0



## 10 Primary Monitoring

Primary environmental monitoring was carried out in the areas inside Vasai-Virar city in the month of December 2022. Monitoring for, water quality and soil quality was done by Mahatma Phule Krishi Vidyapeeth, College of Agriculture (Soil Analysis Laboratory) & Ambient air quality, Ambient noise level was done by Horizon Lab. The number of sampling locations for primary monitoring are given in Table 10.1. The results of the primary monitoring are described in the following sub-sections.

**Table 10.1: Number of Sampling Locations for Primary Monitoring**

Particulars	No. of Sampling Locations
Ambient Air Quality	3
Ground Water Quality	9
Surface Water Quality	9
Ambient Noise Levels	3
Soil Quality	3

### 10.1 Ambient Air Quality

Ambient air quality was monitored at 3 locations inside Vasai-Virar city to assess the ambient air quality status of the area and also to check its conformity with the ambient air quality standards specified by Central Pollution Control Board (CPCB).

The monitoring locations were selected based on the data analysis of the past years and topography of the study area and the location of potential sensitive receptors such as habitations. The factors considered while selection of the monitoring locations include:

- Topography of the study area
- Representative nature of the sample
- Accessibility
- Location of the receptors
- Availability of power



Particulate Matter – size less than  $2.5 \mu\text{g}/\text{m}^3$  ( $\text{PM}_{2.5}$ ), Particulate Matter -- size less than  $2.5 \mu\text{g}/\text{m}^3$  ( $\text{PM}_{10}$ ), Nitrogen Oxides ( $\text{NO}_x$ ), Sulphur Dioxide ( $\text{SO}_2$ ), and Carbon Monoxide ( $\text{CO}$ ) were monitored at 3 locations. Monitoring was done on 23rd December 2022. Monitoring locations for ambient air quality were selected based on the guidelines given in Environmental Impact Assessment manual from the Ministry of Environment, Forest and Climate Change (MoEF&CC). The purpose is to ascertain the baseline pollutant concentrations in ambient air in and around the study area. The details of the monitoring stations are given in Table 10.2. The sampling methodology and protocol are given in Table 10.3. The monitoring results are given in Table 10.4.

**Table 10.2: Ambient Air Quality Monitoring Locations and Parameters**

Code	Site Location	Location Coordinates	Landmark	Parameters
AQ1	Bolinj Naka	19.4445° N, 72.7944° E	Residential Area	$\text{PM}_{10}$ $\text{PM}_{2.5}$ , $\text{SO}_2$ , $\text{NO}_x$ , $\text{CO}$
AQ2	Pelhar Police Station	19.4435° N, 72.8804° E	Commercial Area	
AQ3	Vasai Police Station	19.3328° N, 72.8101° E	Open Area	

**Table 10.3: Sampling Methodology and Protocol**

Sampling Parameters	Standards referred	Sample Collection	Sample Analysis	Methodology
		Sampling Equipment	Analytical Equipment	
$\text{PM}_{10}$	IS 5182-Part 23	Respirable Dust Sampler	Electronic Balance	Gravimetric Method
$\text{PM}_{2.5}$	-	Fine Dust Sampler		
$\text{SO}_2$	IS 5182-Part 2	RDS with impinger	Spectrophotometer	Improved West & Gaeke Method
$\text{NO}_x$	IS 5182-Part 2			Na Arsenite Method
$\text{CO}$	IS 5182-Part 10	Tadler Bag	GC-FID	Chromatography

Source: Standard Practices

\*Particulate Matter ( $\text{PM}_{10}$  &  $\text{PM}_{2.5}$ ),  $\text{SO}_2$  &  $\text{NO}_x$  were sampled for 24 hrs.  $\text{CO}$  was sampled for 1 hr.



**Figure 10.1: Ambient Air Monitoring at Pelhar Police Chowki & Bolinj Naka**

(19°26'25.71"N 72°52'41.67"E & 19°26'40.32"N 72°47'39.10"E )

**Table 10.4: Ambient Air Quality Monitoring Results (Pre- monsoon)**

Code	Parameters Locations	SO <sub>2</sub> (µg/m <sup>3</sup> ) 24 Hourly	NO <sub>2</sub> (µg/m <sup>3</sup> ) 24 Hourly	PM <sub>10</sub> (µg/m <sup>3</sup> ) 24 Hourly	PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 24 Hourly	CO (mg/m <sup>3</sup> ) 8 Hourly
AQ1	Bolinj Naka	8.12	15.19	116	69	0.573
AQ2	Pelhar Police Station	9.1	12.1	144	126	0.698
AQ3	Vasai Police Station	6.02	10.19	92.17	87	0.237
NAAQS		80	80	100	60	2



**Table 10.5: Ambient Air Quality Monitoring Results (Post- monsoon)**

Code	Parameters Locations	SO <sub>2</sub> (µg/m <sup>3</sup> ) 24 Hourly	NO <sub>2</sub> (µg/m <sup>3</sup> ) 24 Hourly	PM <sub>10</sub> (µg/m <sup>3</sup> ) 24 Hourly	PM <sub>2.5</sub> (µg/m <sup>3</sup> ) 24 Hourly	CO (mg/m <sup>3</sup> ) 8 Hourly
AQ1	Bolinj Naka	0.003	0.004	59	52	1.3
AQ2	Pelhar Police Station	0.003	0.021	130	74	1
AQ3	Vasai Police Station	0.003	0.019	99	52	1
NAAQS		80	80	100	60	2

**Inference:**

As seen in Table 10.4 & 10.5, the SO<sub>2</sub>, NO<sub>2</sub> and CO concentrations are below the NAAQS in all the areas. However, the concentrations of PM<sub>10</sub> & PM<sub>2.5</sub> are more than prescribed limits at Bolinj Naka and Pelhar Police Station. Generally, PM<sub>10</sub> & PM<sub>2.5</sub> concentration increases mainly due to by traffic, industrial activities, domestic fuel burning, as well as from unspecific sources of human origin. In the post-monsoon scenario, the pollution load is usually low as rain depends on particles floating in the air, its falls with them to the ground reducing the concentration of pollutants.

In the pre-monsoon scenario, the maximum PM<sub>10</sub> & PM<sub>2.5</sub> concentrations are seen at Pelhar Police Station, 144 µg/m<sup>3</sup> & 126 µg/m<sup>3</sup>, respectively. As the monitoring location site is surrounded by the industrial and commercial area. Also, the major transport route - Golden Quadrilateral national highway and Pelhar road besides the study location. Due to the industrial activities, agriculture and material transportation facilities increased particulate matter concentration in the said area. In the post-monsoon scenario, as I mention earlier that pollution load is low during monsoon so that the values reduce upto 130 (PM<sub>10</sub>) and 74 (PM<sub>2.5</sub>) µg/m<sup>3</sup>.



## 10.2 Ambient Noise Environment

Baseline noise levels were monitored at the same locations where the ambient air quality monitoring was done, using a noise measurement device. Noise level measurement locations were identified for assessment of existing sound level status, keeping in view the land use pattern, residential areas, schools, bus stands etc. The noise monitoring locations are shown in Table 10.6. The day and night time hours as prescribed by CPCB are from 06:00 AM to 10:00 PM and 10:00 PM to 06:00 AM, respectively, CPCB noise limits for day and night time are given in Table 10.7. The results of ambient noise level monitoring for day time and night time are given in Table 10.8 & 10.9.

**Table 10.6: Ambient Noise quality monitoring locations**

Code	Site Location	Location Coordinates	Area
NQ1	Bolinj Naka	19.4445° N, 72.7944° E	Residential Area
NQ2	Pelhar Police Station	19.4435° N, 72.8804° E	Commercial Area
NQ3	Vasai Police Station	19.3328° N, 72.8101° E	Open Area

**Table 10.7: CPCB Limits for Ambient Noise**

Area Code	Category of Area	Limit in dB (A), $L_{eq}$	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silent Zone	50	40

- Day time shall mean from 6:00 a.m. to 10:00 p.m.
- Night time shall mean from 10:00 p.m. to 6:00 a.m.
- Silence Zone is an area comprising not less than 100 m around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority





- Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- dB (A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- A “decibel” is a unit in which noise is measured.
- “A”, in dB (A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- Leq is the energy mean of the noise level over a specified period.

**Table 10.8: Results for Noise Level Monitoring (Pre - monsoon)**

Code	Parameters Locations	Minimum Leq, dB(A)	Maximum Leq, dB(A)	Average Leq, dB(A)
NQ1	Bolinj Naka	69	97	82
NQ2	Pelhar Police Chowki	69	97	82
NQ3	Vasai Police Station	45	95	70

**Table 10.9: Results for Noise Level Monitoring (Post- monsoon)**

Code	Parameters Locations	Minimum Leq, dB(A)	Maximum Leq, dB(A)	Average Leq, dB(A)
NQ1	Bolinj Naka	68	105	79
NQ2	Pelhar Police Chowki	70	114	85
NQ3	Vasai Police Station	50	83	62

**Inference:**

As seen in Tables 10.8 & 10.9, the noise level in commercial, residential and open areas are above the CPCB limits, which are mention in table 10.7. The Average noise level is highest in Pelhar Police Chowki area (82 dB (A)). It can be due to its proximity to the Golden Quadrilateral national highway and the industrial activities. The average noise level is the lowest at the Vasai Police Station (70 dB (A)).



## 10.3 Water Quality

The water quality of the area was assessed for physio-chemical and bacteriological analysis of ground and surface water samples. Nine ground and surface water samples were collected from Vasai-Virar city for analysis of the existing water quality in the area. For surface water, samples were collected from the pond and lakes in the city and for groundwater, samples were collected from the bore wells and hand pumps. The surface water samples were rated according to the CPCB Water Quality Criteria against A, B, C, D and E class of water based on the parameters identified in the criteria. The parameters of the ground water samples were compared with the drinking water quality standards specified in IS 10500: 2012.

The details of the ground water and surface water quality locations and parameters are given in Table 10.10. The sample results are given in the Table 10.12 & 10.13.

**Table 10.10: Surface & Ground Water Sample Collection Locations and Parameters**

Code	Site Location	Location Coordinates	Wards	Parameters
SW1	Bolinj Lake	19°26'32.48"N 72°47'44.14"E	A-Bolinj Virar West	pH, Turbidity, Total Coliform, Free Ammonia, TDS, Nitrate, Total hardness as CaCO <sub>3</sub> , Total alkalinity as CaCO <sub>3</sub> , COD, BOD, DO, TSS, Sodium Absorption Ratio
SW2	Manvel Pada Talav	19°26'37.12"N 72°49'18.30"E	B-Nalla Sopara-Virar East	
SW3	Kopri Lake	19°28'36.32"N 72°49'33.82"E	C-Chandansar Vibhag	
SW4	Achole Talav	19°24'37.30"N 72°49'44.66"E	D-Achole Gaon	
SW5	Chakreshwar Talav	19°25'0.32"N 72°47'58.73"E	E-Nalla Sopara West	
SW6	Pelhar Lake	19°26'34.51"N 72°53'54.23"E	F-Dhaniv/Pelhar	
SW7	Waliv Talav	19°24'53.76"N 72°51'41.63"E	G-Waliv	
SW8	Manikpur Talav	19°22'27.83"N 72°49'40.33"E	H-Navghar-Manikpur	
SW9	Papdi talav	19°21'18.93"N 72°48'45.90"E	I- Vasai Gaon	



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Code	Site Location	Location Coordinates	Wards	Parameters
GW1	Bolinj Naka	19°26'40.08"N 72°47'39.07"E	A-Bolinj Virar West	pH, Turbidity, TDS, Arsenic, Total hardness as CaCO <sub>3</sub> , Total alkalinity as CaCO <sub>3</sub> , DO, Chloride, TSS, Fluoride, Mercury, Lead
GW2	Tiwari Nagar Stable	19°27'19.32"N 72°49'15.47"E	B-Nalla Sopara-Virar East	
GW3	Chandansar Market	19°28'22.95"N 72°49'51.80"E	C-Chandansar Vibhag	
GW4	Santur Building, Vasant Nagri	19°24'11.53"N 72°49'54.59"E	D-Achole Gaon	
GW5	Nearby Chakreshwar Talav	19°25'7.08"N 72°47'59.59"E	E-Nalla Sopara West	
GW6	Nearby Pelhar Lake	19°26'32.89"N 72°53'11.12"E	F-Dhaniv/Pelhar	
GW7	Waliv Ward Office	19°24'59.52"N 72°51'41.24"E	G-Waliv	
GW8	Nearby Diwanman Lake	19°22'43.29"N 72°49'21.52"E	H-Navghar-Manikpur	
GW9	Nearby Papdi talav Area	19°21'19.94"N 72°48'23.19"E	I- Vasai Gaon	

### 10.3.1 Surface Water Analysis

Surface water samples were collected from pond and lakes of all the wards around the city. The parameters of the surface water samples were compared against the designated best use classification of CPCB as given in Table 10.11.



**Table 10.11: Water Quality Standards by CPCB for Best Designated Usage**

Designated- Best-Use	Class of Water	Criteria
Drinking Water Source Without Conventional Treatment but After Disinfection	A	Total Coliforms Organism MPN/100 ml shall be 50 or less.
		pH between 6.5 – 8.5
		Dissolved Oxygen: 6 mg/l or more
		Biochemical Oxygen Demand 5 Days 20 °C: 2 mg/l or less
Outdoor Bathing (Organized)	B	Total Coliforms Organism MPN/100 ml shall be 500 or less
		pH between 6.5 and 8.5
		Dissolved Oxygen: 5 mg/l or more
		Biochemical Oxygen Demand 5 Days 20 °C: 3 mg/l or less
Drinking Water Source After Conventional Treatment and Disinfection	C	Total Coliforms Organism MPN/100 ml shall be 500 or less
		pH between 6.5 and 9
		Dissolved Oxygen: 4 mg/l or more
		Biochemical Oxygen Demand 5 Days 20 °C: 3 mg/l or less
Propagation of Wildlife and Fisheries	D	pH between 6.5 and 8.5
		Dissolved Oxygen: 4 mg/l or more
		Free Ammonia (as N): 1.2 mg/l or less
Irrigation, Industrial Cooling, Controlled Water Disposal	E	pH between 6.5 and 8.5
		Electrical Conductivity at 25°C micro mhos/cm: Max 2250
		Sodium Absorption Ration: Max. 26
		Boron: Max. 2 mg/l
		Free Ammonia (as N): 1.2 mg/l or less
		Chlorides: 600 mg/l
		Sulphates: 1000 mg/l
-	Below-E	Not Meeting A, B, C, D & E Criteria

The results of the surface water monitoring are presented in Table 10.10.



**Figure 10.2: Surface Water Sample Collection from Chakreshwar Talav**



**Figure 10.3: Surface Water Collection from Waliv Talav**



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**Table 10.12: Results of Surface Water Samples Analysis (Pre- monsoon)**

Sr. No.	Parameter	Normal Range	Units	(SW1)	(SW2)	(SW3)	(SW4)
1.	pH	6.0-8.5		7.53	7.50	7.46	7.76
2.	Electrical Conductivity	< 2250.0	mS/cm	564.00	1130.00	1053.00	827.00
3.	Taste	NS	---	Agreeable	Agreeable	Agreeable	Agreeable
4.	Colour	NS	Hazen	1.10	1.20	1.25	1.10
5.	Odour	NS	---	Agreeable	Agreeable	Agreeable	Agreeable
6.	Turbidity	NS	NTU	1.00	1.12	1.12	1.04
7.	TSS	NS	mg/L	46.00	53.00	40.00	38.00
8.	TDS	< 2100.0	mg/L	488.00	854.00	796.00	708.00
9.	COD	NS	mg/L	38.90	32.40	19.40	19.50
10.	BOD@ 27°C for 3 days	NS	mg/L	11.20	10.70	6.80	6.80
11.	DO	NS	mg/L	3.70	3.90	4.00	4.05
12.	Total Hardness as CaCO <sub>3</sub>	NS	mg/L	206.00	336.00	236.00	328.00
13.	Total Alkalinity as CaCO <sub>3</sub>	NS	mg/L	72.00	70.00	66.00	76.00
14.	Free Ammonia as N	NS	mg/L	0.20	0.15	0.08	0.10
15.	Nitrates as NO <sub>3</sub>	NS	mg/L	4.10	4.25	5.25	5.00
16.	SAR	< 26.0	---	10.60	11.00	10.60	10.80
17.	Total Coliform	NS	CFU/ml	14.00	18.00	22.00	18.00

\*NS: Not Specified

NTU: Nephelometric Turbidity Unit





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Sr. No.	Parameter	Range	Units	(SW5)	(SW6)	(SW7)	(SW8)	(SW9)
1.	pH	6.0-8.5		7.70	6.99	7.50	7.54	7.60
2.	Electrical Conductivity	< 2250	mS/cm	798.00	154.00	519.00	469.00	616.00
3.	Taste	NS	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4.	Colour	NS	Hazen	0.90	0.60	0.80	0.50	0.65
5.	Odour	NS	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
6.	Turbidity	NS	NTU	1.00	0.60	0.85	0.55	0.60
7.	TSS	NS	mg/L	35.00	24.00	28.00	20.00	22.00
8.	TDS	< 2100	mg/L	705.00	132.00	472.00	390.00	574.00
9.	COD	NS	mg/L	38.90	19.40	25.90	19.40	13.00
10.	BOD@ 27°C for 3 days	NS	mg/L	11.80	6.60	7.60	6.60	4.00
11.	DO	NS	mg/L	3.60	4.14	3.95	4.30	4.50
12.	Total Hardness as CaCO <sub>3</sub>	NS	mg/L	332.00	32.00	216.00	50.00	132.00
13.	Total Alkalinity as CaCO <sub>3</sub>	NS	mg/L	74.00	40.00	70.00	58.00	70.00
14.	Free Ammonia as N	NS	mg/L	0.08	NIL	0.07	0.03	0.05
15.	Nitrates as NO <sub>3</sub>	NS	mg/L	4.50	2.25	4.25	3.20	4.10
16.	SAR	< 26.0	---	12.20	9.10	10.90	9.60	10.00
17.	Total Coliform	NS	CFU/ml	21.00	18.00	14.00	14.00	33.00

\*NS: Not Specified

NTU: Nephelometric Turbidity Unit



**Table 10.13: Results of Surface Water Samples Analysis (Post- monsoon)**

Sr. No.	Parameter	Normal Range	Units	(SW1)	(SW2)	(SW3)	(SW4)
1.	pH	6.0-8.5		7.88	7.9	7.76	8.2 1
2.	Electrical Conductivity	0 - 0.75	dSm <sup>-1</sup>	0.61	1.01	1.02	0.92
3.	Carbonates	NS	mg/L	Absent	0.8	1.60	0.6
4.	Bicarbonates	NS	mg/L	3.2	2	2.4	2.8
5.	Chlorides	0 - 5.00	mg/L	3.2	4.4	5.2	3.6
6.	Sulphates	0 - 4.00	mg/L	0.28	7.39	0.46	1.47
7.	Calcium	NS	mg/L	3.18	11.8	5.6	6.8
8.	Magnesium	NS	mg/L	2.02	1.4	2.2	0.1
9.	Sodium	NS	mg/L	0.77	1.14	1.55	1.28
10.	Potassium	NS	mg/L	0.35	0.25	0.31	0.29
11.	Mg: Ca ratio	0 - 1.50	mg/L	0.64	0.12	0.39	0.02
12.	SAR	<10	mg/L	0.48	0.44	0.79	0.69
13.	Residual sodium carbonate (RSC)	<1.25	mg/L	0	0	0	0
14.	Total Dissolved Salts (TDS)	< 2100.0	mg/L	390.4	646.4	652.8	588.8
15.	Total hardness as CaCO <sub>3</sub>	NS	mg/L	520	1320	780	690
16.	Total alkalinity as CaCO <sub>3</sub>	NS	mg/L	320	280	400	340
17.	BOD	< 30	mg/L	4.98	8.62	6.58	5.12
18.	COD	< 200	mg/L	9.32	26.96	16.28	18.46
19.	Nickel (Ni)	< 3	mg/L	Traces	Traces	Traces	Traces
20.	Chromium (Cr)	6.5 -7.5	mg/L	Traces	0.06	Traces	0.02

\*NS: Not Specified

NTU: Nephelometric Turbidity Unit



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Sr. No.	Parameter	Normal Range	Units	(SW5)	(SW6)	(SW7)	(SW8)	(SW9)
1.	pH	6.0-8.5		7.77	8.01	7.7	7.25	7.29
2.	Electrical Conductivity	0 - 0.75	dSm <sup>-1</sup>	0.78	0.87	0.52	0.55	0.6
3.	Carbonates	NS	mg/L	0.4	0.6	0.6	Absent	Absent
4.	Bicarbonates	NS	mg/L	2.4	2	1.6	6	4.8
5.	Chlorides	0 - 5.00	mg/L	3.2	4.8	3.2	3.6	4
6.	Sulphates	0 - 4.00	mg/L	2.2	0.35	1.79	5.66	3.68
7.	Calcium	NS	mg/L	4.28	6.2	5.8	1.58	2.8
8.	Magnesium	NS	mg/L	2.72	0.4	0.6	0.72	0.8
9.	Sodium	NS	mg/L	0.83	1.09	0.64	1.06	1.16
10.	Potassium	NS	mg/L	0.37	0.06	0.15	0.28	0.36
11.	Mg: Ca ratio	0 - 1.50	mg/L	0.64	0.06	0.1	0.38	0.29
12.	SAR	<10	mg/L	0.44	0.6	0.36	0.93	0.87
13.	Residual sodium carbonate (RSC)	<1.25	mg/L	0	0	0	3.4	1.2
14.	TDS	< 2100	mg/L	499.2	556.8	332.8	352	384
15.	Total hardness as CaCO <sub>3</sub>	NS	mg/L	700	660	640	260	360
16.	Total alkalinity as CaCO <sub>3</sub>	NS	mg/L	280	260	220	600	480
17.	BOD	< 30	mg/L	8.26	7.26	7.32	6.19	5.92
18.	COD	< 200	mg/L	23.18	28.18	16.78	12.52	9.26
19.	Nickel (Ni)	< 3	mg/L	Traces	Traces	Traces	Traces	Traces
20.	Chromium (Cr)	6.5 -7.5	mg/L	0.03	Traces	Traces	Traces	Traces

\*NS: Not Specified

NTU: Nephelometric Turbidity Unit



### **Inference:**

The summary of inferences of the analysis of surface water samples results is as follows:

- pH of the Surface water samples was observed to be in the range of 7.7 – 8.21.
- The Chemical Oxygen Demand (COD) value was found to be in the range of 9.26 mg/l to 38.90 mg/l. The Highest level of COD (38.90 mg/l) was seen in sample SW1(Bolinj Lake). All values obtained were within the desirable limit for COD as prescribed by CPCB.
- The maximum concentrations of Biochemical Oxygen Demand (BOD) were observed at SW5 (11.80 mg/l), whereas the minimum concentration was observed at SW1 (4.98 mg/l); but all the values are within the permissible limits.
- Total Hardness was observed to be ranging between 32 to 1320 mg/l. The highest value of hardness was recorded at Manvel Pada Talav, Nalla Sopara-Virar East & minimum value was recorded at SW6; which is a sample collected in Pelhar Lake in the study area.
- The concentrations of Total Dissolved Solids were in the range of 132 mg/l to 854 mg/l. All values obtained were within the desirable limit for TDS as prescribed by CPCB.

### **10.3.2 Ground Water Analysis**

The ground water samples were analyzed for parameters as specified in IS: 10500 (2012) standards, “Drinking Water- Specifications” and analyzed as per methods specified in IS: 3025, “Methods of sampling and test (physical and chemical) for water and wastewater”. The results of the analysis are presented in Table 10.14 & 10.15. The summary of results is presented in the following sub section.



**Figure 10.4: Ground Water sampling from Bhoirpada, Virar East**



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**Table 10.14: Results of Ground Water Samples Analysis (Pre- monsoon)**

Sr. No.	Parameter	Normal Range	Units	(GW1)	(GW2)	(GW3)	(GW4)
1.	pH	6.5-8.5	---	7.65	7.25	6.83	7.35
2.	Electrical Conductivity	NS	mS/cm	1.55	0.80	0.90	1.53
3.	Taste	Agreeable	---	Agreeable	Agreeable	Agreeable	Agreeable
4.	Colour	< 5.00	PtCo	1.50	1.00	1.20	1.35
5.	Odour	Agreeable	---	Agreeable	Agreeable	Agreeable	Agreeable
6.	Turbidity	< 1.00	NTU	1.40	1.20	1.20	1.40
7.	TSS	NS		43.00	30.00	32.00	44.00
8.	TDS	< 500.00	mg/lit	1245.00	670.00	796.00	1204.00
9.	Cl	< 250.00	mg/lit	196.50	124.15	155.75	187.65
10.	Total Hardness as CaCO <sub>3</sub>	< 200.00	mg/lit	520.00	360.00	392.00	506.00
11.	Total Alkalinity as CaCO <sub>3</sub>	< 200.00	mg/lit	65.00	60.00	48.00	72.50
12.	DO	NS	mg/lit	4.10	4.30	4.00	3.90
13.	Arsenic (As)	< 0.01	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01
14.	Fluoride (F)	< 1.00	mg/lit	0.23	0.20	0.30	0.28
15.	Mercury (Hg)	< 0.001	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01
16.	Lead (Pb)	< 0.01	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01

\*NS: Not Specified

BDL: Below Detectable Limit, DL: Detectable Limit

NTU: Nephelometric Turbidity Unit





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Sr. No.	Parameter	Normal Range	Units	(GW5)	(GW6)	(GW7)	(GW8)	(GW9)
1.	pH	6.5-8.5	---	7.66	7.10	7.33	8.12	7.75
2.	Electrical Conductivity	NS	mS/cm	0.29	0.65	0.63	3.65	0.99
3.	Taste	Agreeable	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4.	Colour	< 5.00	PtCo	0.85	0.80	0.85	2.60	1.65
5.	Odour	Agreeable	---	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
6.	Turbidity	< 1.00	NTU	0.80	0.75	0.78	1.95	1.50
7.	TSS	NS		29.00	27.00	31.00	71.00	36.00
8.	TDS	< 500.00	mg/lit	247.00	536.00	584.00	2890.00	852.00
9.	Cl	< 250.00	mg/lit	86.50	112.45	105.45	426.50	216.50
10.	Total Hardness as CaCO <sub>3</sub>	< 200.00	mg/lit	126.00	186.00	230.00	880.00	340.00
11.	Total Alkalinity as CaCO <sub>3</sub>	< 200.00	mg/lit	68.00	58.00	50.00	60.00	76.00
12.	DO	NS	mg/lit	4.40	3.90	4.12	2.20	3.75
13.	Arsenic (As)	< 0.01	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01
14.	Fluoride (F)	< 1.00	mg/lit	0.15	0.25	0.18	0.38	0.38
15.	Mercury (Hg)	< 0.001	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01
16.	Lead (Pb)	< 0.01	mg/lit	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01	BDL< 0.01

\*NS: Not Specified

BDL: Below Detectable Limit, DL: Detectable Limit

NTU: Nephelometric Turbidity Unit



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**Table 10.15: Results of Ground Water Samples Analysis (Post- monsoon)**

Sr. No.	Parameter	Normal Range	Units	(GW1)	(GW2)	(GW3)	(GW4)
1.	pH	6.5 -8.5		7.85	7.09	8.18	8.08
2.	Electrical Conductivity	0 - 0.75	dSm <sup>-1</sup>	1.43	1.58	1.43	2.84
3.	Taste	NS	mg/L	1.4	Absent	1.8	1.8
4.	Colour	NS	mg/L	10.4	4.4	2.4	4.4
5.	Odour	0 - 5.00	mg/L	4	12.4	9.2	22
6.	Turbidity	0 - 4.00	mg/L	5.48	10.11	2.14	18.02
7.	TSS	NS	mg/L	5.08	3.64	6.2	4
8.	TDS	NS	mg/L	3.12	0.76	3	1.4
9.	Cl	NS	mg/L	1.73	1.98	1.92	4.16
10.	Total Hardness as CaCO <sub>3</sub>	NS	mg/L	0.39	0.31	0.14	0.62
11.	Total Alkalinity as CaCO <sub>3</sub>	0 - 1.50	mg/L	0.61	0.21	0.48	0.35
12.	DO	<10	mg/L	0.86	1.34	0.9	2.54
13.	Arsenic (As)	<1.25	mg/L	3.6	0	0	0.8
14.	Fluoride (F)	<460	mg/L	915.2	1011.2	915.2	1817.6
15.	Mercury (Hg)	NS	mg/L	820	440	920	556
16.	Lead (Pb)	NS	mg/L	1180	440	420	620

\*NS: Not Specified



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Sr. No.	Parameter	Normal Range	Units	(GW5)	(GW6)	(GW7)	(GW8)	(GW9)
1	pH	6.5 -8.5		7.81	7.24	7.56	7.51	7.66
2	Electrical Conductivity	0 - 0.75	dSm <sup>-1</sup>	0.75	1.56	0.75	0.89	1.38
3	Carbonates	NS	mg/L	1.4	0.8	1	0.4	0.2
4	Bicarbonates	NS	mg/L	6.8	4.8	3.2	4.4	9.6
5	Chlorides	0 - 5.00	mg/L	3.6	4	11.2	4.4	5.6
6	Sulphates	0 - 4.00	mg/L	3.18	4.06	7.54	3.38	9.1
7	Calcium	NS	mg/L	3.02	6.6	5.6	3.68	2.4
8	Magnesium	NS	mg/L	2.18	5	1	0.92	1.2
9	Sodium	NS	mg/L	1.14	2	1.21	1.04	2.16
10	Potassium	NS	mg/L	2.28	0.06	0.05	0.18	0.5
11	Mg: Ca ratio	0 - 1.50	mg/L	0.72	0.76	0.18	0.25	0.5
12	SAR	<10	mg/L	0.71	0.83	0.66	0.6	1.61
13	Residual sodium carbonate (RSC)	<1.25	mg/L	3	0	0	0.2	6.2
14	TDS	<460	mg/L	480	998.4	480	569.6	883.2
15	Total hardness as CaCO <sub>3</sub>	NS	mg/L	520	1160	660	460	360
16	Total alkalinity as CaCO <sub>3</sub>	NS	mg/L	820	560	420	480	980
17	BOD	< 30	mg/L	7.72	10.17	8.14	9.42	8.12
18	COD	< 200	mg/L	12.48	32.42	21.96	21.48	18.69
19	Nickel (Ni)	< 3	mg/L	Traces	Traces	Traces	0.03	0.09
20	Chromium (Cr)	6.5 -7.5	mg/L	Traces	0.06	0.03	Traces	Traces

\*NS: Not Specified

#### Inference:

- The above results indicate that the pH of all the ground water samples was observed to be in the range of 6.83-8.18.
- Total Dissolved Solids in the samples were in the range of 247 – 2890 mg /l.
- Total Hardness was found to vary between 126-1160 mg/l.
- Chloride was detected in the range of 3.6 to 426 mg/l.
- Heavy metal concentrations in all the samples were found to be well within the limits.



## 10.4 Soil Sample Analysis

Four soil samples were collected from Residential, Commercial and Industrial area.

**Table 10.16: Soil Sample Analysis Results (Pre- monsoon)**

Sr. No.	Description	Unit	Standard as per Ministry of Agriculture 2011	SQ1	SQ2	SQ3	SQ4
1	pH	---	6.5-8.5	7.2	6.18	7.12	7.15
2	Texture	---	Not Specified	Sandy Loam	Sandy Clay	Sandy Clay	Sandy loam
3	Sand	%	Not Specified	40	42	48	50
4	Slit	%	Not Specified	40	20	16	34
5	Clay	%	Not Specified	20	38	36	16
6	EC@25 °C	mS/cm	0.15 – 0.65	1.5	0.15	0.68	0.23
7	Total Organic Matter	%	0.5 – 0.75	0.55	0.62	0.67	0.58
8	SAR	---	<26.0	13.1	10.2	12.8	10.3
9	Water holding Capacity	%	Not Specified	41.4	51.2	47	39
10	Total Nitrogen (Kjeldahl Method)	kg/ha	Not Specified	68.25	61.25	56.25	51.45
11	Potassium as K <sup>++</sup>	%	Not Specified	0.003	0.0024	0.0031	0.0033
12	Phosphorus as P	kg/ha	< 15.00	4.26	3.12	5.08	3.95

**Table 10.17: Soil Sample Analysis Results (Post- monsoon)**

Sr. No.	Parameters	Normal Range	SQ1	SQ2	SQ3	SQ4
1	pH	6.5-8.5	6.77	7.3	5.83	7.05
2	EC	< 2	12.5	0.15	0.28	0.17
3	WHC	-	49.43	252	40.16	45.44
4	Organic Carbon	0.4-0.6	0.95	1.19	1.06	0.9
5	SAR	<26.0	3.22	2.84	2.16	3.21
6	Available N (kg ha <sup>-1</sup> )	281-420	176	193	182	168
7	Available P (kg ha <sup>-1</sup> )	15-21	9.2	13.6	10.8	11.4



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10	Available K (kg ha <sup>-1</sup> )	151-200	1233	252	560	831
11	Texture	-	Slit Clay Loam	Slit Loam	Slit Clay Loam	Slit Clay Loam

**Inference:**

- pH of the soil in the study area ranged between 6.18- 7.15.
- The values for Nitrogen at all locations varied between 51.45-193 kg ha<sup>-1</sup>. This indicates as the Nitrogen is 'Low' as per the classification at all locations.
- The concentration of Phosphate was estimated to be between 3.12-13.6 kg ha<sup>-1</sup>. The lowest concentration can be observed at location SQ2 during the monitoring period. Here it is observed that Phosphate concentration observed 'Low' as per chemical classification of soil quality.
- The concentration of Potassium was found to be ranging between 252-1233 kg ha<sup>-1</sup>. Here it is observed that Potassium concentration observed 'Very High' as per chemical classification of soil quality.
- The large variation is observed in the values due to their use or application and also due to the variation in the use of fertilizers.



**Figure 10.5: Soil Sample Collection**





## 11 Conclusion and Recommendation

For the first time, the Vasai-Virar City Municipal Corporation carried out an environmental assessment study (Environmental Status Report) to identify environmental challenges and working towards better environmental management. Increased population, industrial and commercial growth, acts as driving forces for the growth of a city and all these increasing demands exerts pressure on the city's municipal facilities as well as natural resources like Air, Water and Land. Taking this into consideration the current report is prepared based on D-P-S-I-R (Drivers, Pressure, Status, Impact and Response) framework proposed by MPCB guidelines 2009. Based on the study results, the following conclusions and recommendations are made:

### Water supply and Wastewater management

1. Safe and Adequate Drinking Water is a necessity of residents in Vasai-Virar City. The Surya River, Usgaon Dam, and Pelhar Dam are the main water supply sources in Vasai-Virar City, providing 200 MLD, 20 MLD, and 10 MLD of water, respectively.
2. The city's water supply has been impacted by the city's expanding population. To fulfill the future water demand, Surya Regional Water Supply Project is implemented in Mumbai. This project will offer around 185 MLD of additional water supply to VVCMC. The installation of water supply lines has been started in VVCMC. It is a 10 km line project from Kashid Kopar MBR to Vasai Phata, of which 3.8 km supply line has been installed.
3. To prevent water loss, the VVCMC's water supply division must detect the leakage lines and replace the water pipe lines.
4. To avoid future water scarcity, it is advised that the number of Rainwater Harvesting systems should be increased.



5. The overall usage of groundwater in VVCMC is reported to be 0.95 MLD. Total of 441 Dug well & 1392 Bore wells are currently in the operation as per the water supply department of VVCMC. Mainly the groundwater is used for irrigation purpose in the city. As a result, we recommend rejuvenation. Well maintenance is required twice a year to avoid contamination and clogging and to preserve water quality.
6. It is necessary to take action to refill the aquifers by collecting storm water and using it to recharge the groundwater table.
7. To track the overall water quality of surface water resources, MPCB established water quality monitoring stations (WQMS) at 5 locations throughout Vasai Virar City. According to the findings, the water quality is good to excellent at all testing locations, although we recommend that to conduct clean up drives regularly to maintain the water bodies.
8. According to our findings, the Achole and Papdi ponds surfaces are blocked by an algal bloom. Thus we recommend that to clean the ponds and preventing the algal bloom using aeration. Aeration is an environmentally-friendly technique that rejuvenates water bodies. It increases the oxygen level in water. Aeration systems can help avoid chemicals and create a healthy ecosystem.
9. The VVCMC must make arrangements for temporary artificial ponds during Ganesh Festival to immerse Ganesh Idols at various locations in the City. The water must be treated before discharge in the water bodies and sludge must be disposed using scientific technology.
10. VVCMC has its sewage treatment plant (STP) at Bolinj, Virar (W) with a capacity of 30 MLD which is owned and operated by the corporation. Apart from this,



corporation also has private STP's for the treatment of sewage water. All these STPs are hydraulically tested and commissioned. The storm water is also collected in these STPs and treated as well.

11. The analysis conducted by IIT, Bombay reported that VVCMC produces more sewage than its treatment facilities can handle. Hence, we recommend adding more STP plants for wastewater treatment.
12. The Municipal authorities' must implement a strict compulsion for every industry to obtain permission from the State Pollution Control Board before discharging wastewater or trade effluent into bodies of water. The municipal authorities should also conduct yearly inspections of industrial activities.
13. Vasai-Virar city is encircled by an industrial sector; therefore, pollution from these industrial clusters in air and water bodies is likely to impact it. Therefore, it is recommended to develop an environmental management framework.

#### Air Quality improvement

14. In VVVCM area, MPCB installed a Continuous Ambient Air Quality Monitoring Station (CAAQMS) at Diwanman Fire Brigade and one more station is in the process of installation. We advise installing the third station close to the Pelhar police chowki (near industrial hub) as this location is one of the critical and populated region.
15. The air quality was measured at three distinct locations. Results from the monitoring show that the Pelhar Police Chowki's PM<sub>10</sub> and PM<sub>2.5</sub> concentrations were reported to be higher than permissible limits. This could potentially be due to



the selected monitoring location is surrounded by the industrial and commercial area. Also, the major transport route viz. Golden Quadrilateral National Highway and Pelhar road besides the study location. Due to the industrial activities, material transportation facilities potentially contribute to the particulate matter concentration in the area. Hence, it can be recommended that internal industrial roads should be cleaned by dust sweeping machines, and green corridors should be created for the Golden Quadrilateral National Highway.

16. It is also advised to place water fountains or water sprinklers at important traffic intersections, nakas, and city centres in order to lessen the amount of dust pollution.
17. For Building construction projects, construction sites must be inspected by VVCMC in order to determine whether project authorities adhered to environmental standards.
18. In order to mitigate air pollution, it is also advised to plant species along roadsides and on road dividers that have aesthetic value and are tolerant of pollution includes Common Ivy plant, Babhool, Marginata, Peacock Flower, Vinca rosea, etc.
19. VVCMC should put 25% vehicle charging points in the parking area as mandatory condition in each building planning.
20. CNG based public transport vehicles - The change in fuel type in public vehicles (buses, taxis, rickshaws) from conventional fuels like petrol, diesel to CNG can result in reduction of nitrous oxide by 40%, hydrocarbons by 90%, CO by 80% which are considered to be harmful to human health. The noise level of CNG engine is also low as compared to diesel engine.



21. Improvement of road quality and introduction of one-way routes to regulate the traffic is highly recommended to help reduce the air pollution of the city.
22. In order to help minimize automobile pollution, VVCMC should launch its own low-cost, heavily subsidized municipal transportation system. This system should primarily consist of electric buses, and it should also incorporate renewable energy sources to cut down on CO<sub>2</sub> emissions during the production of electricity.
23. Vasai-Virar is a center for industry, so the city's vegetation can be anticipated to be less dense. Therefore, concentration of PM<sub>10</sub> can be significantly reduced by increasing city's vegetation.
24. The air pollution mitigation measures for domestic and commercial sector can include the use of PNG as effective alternative for firewood and LPG for cooking purposes. Enhance the production and use of biogas and Biomethanization as sources of fuel for cooking. Use of firewood as source of fuel for cooking purposes can be replaced by smokeless chulhas. Smokeless chulhas reduces pollution load of CO, soot particles and particulate matter which potentially results in acute respiratory infection disorders. Also, these chulhas are time and cost effective.

#### Control and mitigation measures for noise pollution

25. Noise levels were measured using a noise level meter in all of the city's major areas, including the Silent Zone, Industrial Area, Commercial Area, and Residential Area. The data was collected continuously for 24 hours. Noise levels were noted exceed the CPCB standards in the residential, commercial, and industrial zones. Noise levels have increased as a result of increased human activity.



26. The Pelhar Police Chowki region has the highest average noise intensity. It could possibly be due its proximity to the Golden Quadrilateral National Highway and increased industrial activities.
27. To reduce traffic and noise pollution, encourage people to use public transport instead of driving their own automobiles. Create programs that raises awareness and educate the public about the negative effects of noise pollution.
28. There are several species of trees like Neem, Kusum, Kindal, Palas, Ashoka that will absorb sound and create noise barrier or reduce noise levels in metropolitan areas and along the busy highways and roads. Additionally, trees enhance air quality and provide other aesthetic benefits too.

#### Solid waste management

29. Solid waste generation is a continuously growing problem at all levels including local levels. Solid wastes are the organic and inorganic waste materials produced by various activities of the society, which have lost their value to the first user. Improper disposal of solid wastes pollute all the vital components of the living environment (i.e., air, land and water) at local and global levels.
30. The daily MSW generation in VVCMC is about 975 TPD considering 500 gms/day as the per capita waste generation for a population of about 19 Lakhs (2019) and the average daily collection and conveyance of the MSW which is actually dumped at the dump site at Gokhiware is about 525 to 565 tons. At present there is no segregation taking place at source.





31. Initially the corporation should understand the nature of solid waste of the city and develop a DPR with a long-term vision to mitigate the issues pertaining to solid waste management.
32. The development of a scientific landfill site over a dumping site is advised for proper solid waste management in order to process the solid waste. Adopt a more environmentally friendly procedure for the efficient collection of household waste.
33. Incorporate waste to energy techniques for effective disposal of solid waste such as Bio methanation plant, Biomass Gasifier, pyrolysis technique.
34. On a local level, VVCMC needs to hold workshops or awareness campaigns about wet/dry waste segregation. Encourage peoples to adopt the same behavior in their daily lives.
35. There are various gardens inside the corporation boundaries. Every garden in the city is periodically cleaned and maintained. The number of trees in gardens should be raised, and the aesthetics of gardens as well as plants with flowers are crucial components that relieve inhabitants' tension.
36. In order to make a city sustainable, it is equally necessary to clean up and beautify the roads. Roadside landscaping in vacant and open spaces will improve how the highways look. It will ease the strain on residents and commuters using the roads.
37. The Vasai-Virar region is one of the richest biodiversity regions voted by naturists and bird enthusiasts on the outskirts of Mumbai with more than 250 rare and common species of birds found and documented. VVCMC has to take more initiative



to conserve these natural habitats and ecosystems like their previous bird & tree census activities.

38. There are numerous higher educational institutions in and around Vasai- Virar City, particularly in the fields of engineering, medicine, science, technology, business, and humanities. VVCMC should encourage these institutions by offering financial aid to start up innovative and scientific projects for researching environmental impacts that are beneficial to VVCMC from an environmental standpoint to support its sustainable development.



## Annexure I

### Lists of Flora and Fauna

#### 11.1.1 List of Amphibians

	Common Name	Scientific Name
1	Common Indian Toad	<i>Duttaphrynus melanostictus</i>
2	Indian Bullfrog	<i>Hoplobatrachus tigerinus</i>
3	Ornate Narrow Mouthed Frog	<i>Microhyla ornata</i>
4	Skittering Frog	<i>Euphylyctis cyanophylyctis</i>
5	Burrowing Frog	<i>Spaerotheca breviceps</i>
6	Fungoid Frog	<i>Hydrophylax bahuvistara</i>
7	Common Tree Frog	<i>Polypedatus maculatus</i>
8	Bombay Bush Frog	<i>Raorchestes bombayensis</i>
9	Paddy field Frog	<i>Fejervarya limnocharis</i>
10	Rufescent Burrowing Frog	<i>Fejervarya rufescens</i>

Source: Vasai-Virar City Biodiversity Survey 2021-2022

#### 11.1.2 List of Reptiles

Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
1	House Gecko	<i>Hemidactylus frenatus</i>	19	Vine Snake	<i>Ahaetulla nasuta</i>
2	Brook's Gecko	<i>Hemidactylus brooki</i>	20	Checkered Keelback	<i>Xenochrophis piscator</i>
3	Yellow- bellied House Gecko	<i>Hemidactylus flaviviridis</i>	21	Striped Keelback	<i>Amphiesma stolata</i>
4	Deccan Ground Gecko	<i>Cyrtodactylus deccanesis</i>	22	Banded Racer	<i>Argyrogena fasciolata</i>
5	Lacertid aps	<i>Ophisops sp.</i>	23	Bronzback Tree Snake	<i>Dendrelaphis tristis</i>
6	Garden Lizard	<i>Calotes versicolor</i>	24	Common cat Sanke	<i>Boiga trigonata</i>
7	Bronze Grass Skink	<i>Eutropis carinata</i>	25	Red Sand Boa	<i>Eryx johnii</i>
8	Lygosoma lineata	<i>Lygosoma lineata</i>	26	Common Kukri	<i>Oligodon arnesis</i>
9	Chameleon	<i>Chameleon</i>	27	Common Wolf	<i>Lycodon aulicus</i>



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		<i>zeylanicus</i>		Snake	
10	Fan- throated Lizard	<i>Sitana spinaecephalus</i>	28	Indian Rat Snake	<i>Ptyis mucosa</i>
11	Day Gecko	<i>Cnemaspis sp.</i>	29	Montane Trinket	<i>Coelagnathus helena monticollaris</i>
12	Spotted Rock Gecko	<i>Hemiductylus maculatus</i>	30	Common Sand Boa	<i>Eryx conicus</i>
13	Russell's Viper	<i>Daboia russelii</i>	31	Indian Rock Python	<i>Python molurus</i>
14	Saw scaled Viper	<i>Echis carinatus</i>	32	Beaked Worm Snake	<i>Grypotyphlops acutus</i>
15	Bamboo Pit Viper	<i>Trimeresurus gramineus</i>	33	Brahminy Worm Snake	<i>Indotyphlops braminus</i>
16	Spectacled Cobra	<i>Naja naja</i>	34	Dumeril's Black headed Snake	<i>Sibynophis subpunctatus</i>
17	Common Krait	<i>Bungarus careuleus</i>	35	Slender Coral	<i>Calliophis melanurus</i>
18	Russel's Kukri	<i>Oligodon taeniolatus</i>	36	Flapshell Turtle	<i>Lissemys punctata</i>

Source: Vasai-Virar City Biodiversity Survey 2021-2022

### 11.1.3 List of Mammals

Sr. No.	Common Names	Scientific Name
1	Palm squirrel	<i>Funambulus palmarum</i>
2	Long tailed Tree Mouse	<i>Vandeleuria oleracea</i>
3	Wild Boar	<i>Sus scrofa</i>
4	Golden Jackal	<i>Canis aureus</i>
5	Common Indian Mongoose	<i>Herpestes adwardsii</i>
6	Palm Civet	<i>Paradoxurus hermaphrodites</i>
7	Indian Flying Fox	<i>Pteropus giganteus</i>
8	Common House Shrew	<i>Suncus murinus</i>
9	Greater Bandicoot Rat	<i>Bandicota indica</i>
10	Lesser Bandicoot Rat	<i>Bandicota bengalensis</i>
11	Field Mouse	<i>Apodemus sylvaticus</i>
12	House Mouse	<i>Mus musculus</i>
13	House Rat	<i>Rattus</i>
14	Pipistrelle Bat sps.	<i>Pipistrellus sp.</i>

Source: Vasai-Virar City Biodiversity Survey 2021-2022



### 11.1.4 List of Butterflies

Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
1	Great Eggfly	<i>Hypolimnias bolina</i>	27	Common Crow	<i>Euploea core</i>
2	Danaid Eggfly	<i>Hypolimnias misippus</i>	28	Sliverline sps	<i>Spindasis sps</i>
3	Common Pierrot	<i>Castalius rosimon</i>	29	Blue Oakleaf	<i>Kallima horsfieldii</i>
4	Red Pierrot	<i>Talicauda nyseus</i>	30	Grass Jewel	<i>Chilades trochyllus</i>
5	Grass Demon	<i>Udaspes folus</i>	31	Common Cerulean	<i>Jamides celeno</i>
6	Common Castor	<i>Ariadne merione</i>	32	Common Emigrant	<i>Catopsilia pomona</i>
7	Angled Castor	<i>Ariadne arande</i>	33	Mottled Emmigrant	<i>Catopsilia pyranthe</i>
8	Tawny Coaster	<i>Acraea terpsicore</i>	34	Common Grass Yellow	<i>Eurema hecabe</i>
9	Common Evening brown	<i>Melanitis leda</i>	35	Spotless Grass Yellow	<i>Eurema laeta</i>
10	Grey Pansy	<i>Junonia atlites</i>	36	Small Grass Yellow	<i>Eurema brigitta</i>
11	Chocolate Pansy	<i>Junonia iphita</i>	37	Common Gull	<i>Cepora nerissa</i>
12	Peacock Pansy	<i>Junonia alamana</i>	38	Common Jezebel	<i>Delias eucharis</i>
13	Lemon Pansy	<i>Junonia lemonias</i>	39	Common Leopard	<i>Phalanta phalantha</i>
14	Common Sailor	<i>Neptis hyls</i>	40	Yellow Orange Tip	<i>Ixias pyrene</i>
15	Common Jay	<i>Graphium doson</i>	41	Great Orange Tip	<i>Hebomoia glaucippe</i>
16	Grass Blue	<i>Zizina otis</i>	42	Painted Lady	<i>Vanessa cardui</i>
17	Plains Cupid	<i>Chilades pandava</i>	43	Common Palmfly	<i>Elymnias hypermnestra</i>
18	Dark Grass Blue	<i>Zizeeria karsandra</i>	44	Psyche	<i>Leptosia nina</i>
19	Pale Grass Blue	<i>Pseudozizeeria maha</i>	45	Common Fivering	<i>Ypthima baldus</i>
20	Tailed Jay	<i>Graphium Agamemnon</i>	46	Little Branded Swift	<i>Pelopidas agna</i>
21	Dart sps	<i>Potanthus sps</i>	47	Straight Swift sps	<i>Parnara sps.</i>
22	Baronet	<i>Euthalia nais</i>	48	Zebra Blue	<i>Tarucus plinius</i>
23	Common	<i>Graphium</i>	49	Plain Tiger	<i>Danaus</i>



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	Bluebottle	<i>sarpedon</i>			<i>chrysippus</i>
24	Lime Butterfly	<i>Papilio demoleus</i>	50	Stripped Tiger	<i>Danaus genutia</i>
25	Common Mormon	<i>Papilio polytes</i>	51	Common Blue Tiger	<i>Tirumala limniace</i>
26	Blue Mormon	<i>Papilio polymenster</i>	52	Glassy Tiger	<i>Parantica aglea</i>

Source: Vasai-Virar City Biodiversity Survey 2021-2022

### 11.1.5 List of Birds

Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
1	White eyed Buzzard	<i>Butastue teesa</i>	65	Bluethroat	<i>Luscinia svecica</i>
2	Greater Painted Snipe	<i>Rostratula benghalensis</i>	66	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>
3	Eurasian Cuckoo	<i>Cuculus canorus</i>	67	Crested Bunting	<i>Melophus lathami</i>
4	Barn Swallow	<i>Hirundo rustica</i>	68	Asian Palm Swift	<i>Cypsiurus balasiensis</i>
5	Pond Heron	<i>Ardeola grayii</i>	69	Great Egret	<i>Ardea alba</i>
6	Black-crowned Night Heron	<i>Nycticorax</i>	70	Shikra	<i>Accipiter badius</i>
7	Chestnut- tailed Starling	<i>Sturnia malabarica</i>	71	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>
8	Little Ringed Plover	<i>Charadrius bubius</i>	72	Green Sandpiper	<i>Tringa ochropus</i>
9	Caotton Pygmy Goose	<i>Nettaous cirimandelians</i>	73	Dusky Crag Martin	<i>Ptyonopronge concolor</i>
10	Black Kite	<i>Milvus migrns</i>	74	Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i>
11	Common Tailorbird	<i>Orthotomus sutorius</i>	75	Wooly-necked Stork	<i>Ciconia episcopus</i>
12	Plain Prinia	<i>Prinia inornata</i>	76	Spotted Dove	<i>Spilopelia chinensis</i>
13	Red- breasted Flycatcher	<i>Ficedula parva</i>	77	Rufous- tailed Lark	<i>Ammomanes phoenicura</i>
14	Magpie Robin	<i>Copsychus saularis</i>	78	Indian Robin	<i>Saxicoloides fulicatus</i>





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Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
15	Purple rumped Sunbird	<i>Leptocoma zeylonica</i>	79	Siberian Stonechat	<i>Saxicola maurus</i>
16	House Sparrow	<i>Passer domesticus</i>	80	Brahminy Starling	<i>Sturnia pagodarum</i>
17	Cattle Egret	<i>Bubulcus ibis</i>	81	Paddy field pipit	<i>Anthus rufulus</i>
18	Common Myna	<i>Acridotheres tristis</i>	82	Black-headed Bunting	<i>Emberiza melanocephala</i>
19	Pied Starling	<i>Gracupica contra</i>	83	Red-headed Bunting	<i>Emberiza bruniceps</i>
20	Alexandrine Parakeet	<i>Psittacula eupatria</i>	84	Chestnut-shouldered	<i>Petronia xanthocollis</i>
21	Ashy Drongo	<i>Dicrurus leucophaeus</i>	85	Red-naped Ibis	<i>Pseudibis papillosa</i>
22	Bronz-winged Jacana	<i>Metopidius indicus</i>	86	Short-toed Snake Eagle	<i>Circaetus gallicus</i>
23	Indian Cormorant	<i>Phalacrocorax fuscicollis</i>	87	Greater Spotted Eagle	<i>Clanga</i>
24	Little Comorant	<i>Microcarbo niger</i>	88	Marsh Harrier	<i>Circus aeruginosus</i>
25	Grey Heron	<i>Ardea cinerea</i>	89	Pallid Harrier	<i>Circus macrourus</i>
26	Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i>	90	Red-wattled Lapwing	<i>Vanellus indicus</i>
27	Amur Falcon	<i>Falco amurensis</i>	91	Laughing Dove	<i>Spilopelia senegalensis</i>
28	Red-necked Falcon	<i>Falco chicquera</i>	92	Spotted Owlet	<i>Athene brama</i>
29	Steak-throated Swallow	<i>Pertochelidon fluvicola</i>	93	Hoopoe	<i>Upupa epops</i>
30	Taiga Flycatcher	<i>Ficedula albicilla</i>	94	Common Kestrel	<i>Falco tinnunculus</i>
31	Long-billed Pipit	<i>Anthus similis</i>	95	Common Iora	<i>Aegithina tiphia</i>
32	Rose-ringed Parakeet	<i>Psittacula karameri</i>	96	Long-tailed Shrike	<i>Lanius schach</i>
33	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	97	Black Drongo	<i>Dicrurus macrocerus</i>



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Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
34	Baya Weaver	<i>Ploceus philippinus</i>	98	Ashy- crowned Sparrow Lark	<i>Eremopterix griseus</i>
35	Red- vented Bulbul	<i>Pycnonotus cafer</i>	99	Oriental Skylark	<i>Alauda gulgula</i>
36	Jungle Myna	<i>Acridotheres fuscus</i>	100	Malabar Lark	<i>Galerida malabarica</i>
37	Indian Roller	<i>Coracias benghalensis</i>	101	Zitting Cisticola	<i>Cisticola juncidis</i>
38	Coppersmith Barber	<i>Megalaima haemacephala</i>	102	Pied Bushchat	<i>Saxicola caprata</i>
39	Indian Moorhen	<i>Gallinule chloropus</i>	103	Rosy Starling	<i>Pastor roseus</i>
40	White spotted Fantail	<i>Rhipidura albogularis</i>	104	Common Quail	<i>Coturnix</i>
41	Scaly breasted Munia	<i>Lonchura punctulata</i>	105	Painted Francolin	<i>Francolinus pictus</i>
42	Aisan Koel	<i>Eudynamys scolopaceus</i>	106	Barn Owl	<i>Tyto alba</i>
43	Purple Sunbird	<i>Cinnyris asiaticus</i>	107	Wood Sandpiper	<i>Tringa glareola</i>
44	Indian Golden Oriole	<i>Oriolus kundoo</i>	108	Asian Openbill	<i>Anastomus oscitans</i>
45	Yellow Wagtail	<i>Motacilla flava</i>	109	Indian Spotted Eagle	<i>Clanga hastate</i>
46	Green Bee eater	<i>Merops prientails</i>	110	Booted Eagle	<i>Hieraaetus pennatus</i>
47	Rock Pigeon	<i>Columba livia</i>	111	Montague's Harrier	<i>Circus pygargus</i>
48	Greater Coucal	<i>Centropus sinensis</i>	112	Common Sandpiper	<i>Acititis hypoleucos</i>
49	Grey- headed Swamphen	<i>Porphyria poliocephalus</i>	113	Little Egret	<i>Egretta garzetta</i>
50	Ashy Prinia	<i>Prinia socialis</i>	114	Black-shouldered Kite	<i>Elanus axillaris</i>
51	White- throated Kingfisher	<i>Halcyon smyrnensis</i>	115	Marsh Sandpiper	<i>Tringa stangnatilis</i>



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Sr. No.	Common Name	Scientific Name	Sr. No.	Common Name	Scientific Name
52	Wire- tailed Swallow	<i>Hirundo smithii</i>	116	Syke's Short toed Lark	<i>Calandrella brachydactyla</i>
53	House Crow	<i>Corvus splendens</i>	117	Red-rumped Swallow	<i>Cecropis daurica</i>
54	Jungle Crow	<i>Corvus macrorhynchos</i>	118	Jungle Bush Quail	<i>Perdica asiatica</i>
55	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	119	Peregrine Falcon	<i>Falco peregrinus</i>
56	Indian Cuckoo	<i>Cuculus micropteru</i>	120	Grey- breasted Prinia	<i>Prinia hodgsonii</i>
57	Sirkeer Malkoha	<i>Phaenicophaeus leschenaultia</i>	121	Painted Stork	<i>Mycteria leucocephala</i>
58	Rad Avadavat	<i>Amandava amandava</i>	122	White Wagtail	<i>Motacilla alba</i>
59	Jungle Babbler	<i>Turdoides striata</i>	123	Purple Heron	<i>Ardea purpurea</i>
60	Tawny- belleied Babbler	<i>Dumetia hyperythra</i>	124	White- breasted Waterhen	<i>Amaurornis phoenicurus</i>
61	Yellow- eyed Babbler	<i>Chrysomma sinense</i>	125	Pied Cuckoo	<i>Clamator jacobinus</i>
62	Brown- headed Barbet	<i>Megalania zeylanica</i>	126	Little Swift	<i>Aous affinis</i>
63	Blue-tailed Bee-eater	<i>Merops philippins</i>	127	Common Kingfisher	<i>Alcedo atthis</i>
64	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>			

Source: Vasai-Virar City Biodiversity Survey 2021-2022



## List of Trees found in Vasai-Virar City

Sr. No.	Scientific Name	Sr. No.	Scientific Name
1	<i>Gardenia jasminoides</i>	96	<i>Eclipta prostrata</i>
2	<i>Nyctanthes arbortristis</i>	97	<i>Blainvillea acmella</i>
3	<i>Morinda citrifolia</i>	98	<i>Ageratum sp.</i>
4	<i>Albizia lebbbeck</i>	99	<i>Lepidagathis sp.</i>
5	<i>Albizia saman</i>	100	<i>Canscora sp.</i>
6	<i>Azadirachta indica</i>	101	<i>Euphorbia parviflora</i>
7	<i>Alstonia scholaris</i>	102	<i>Melochia corchorifolia</i>
8	<i>Ixora coccinea</i>	103	<i>Dopatrium lobelioides</i>
9	<i>Ixora pavetta</i>	104	<i>Trichodesma indicum</i>
10	<i>Mimusops elengi</i>	105	<i>Lindernia oppositifolia</i>
11	<i>Lawsonia inermis</i>	106	<i>Lobelia alsinoides</i>
12	<i>Syzygium cumini</i>	107	<i>Desmodium triflorum</i>
13	<i>Syzygium jambos</i>	108	<i>Murdannia wightii</i>
14	<i>Terminalia bellirica</i>	109	<i>Murdannia spirata</i>
15	<i>Terminalia arjuna</i>	110	<i>Cassia tora</i>
16	<i>Terminalia catappa</i>	111	<i>Physalis minima</i>
17	<i>Terminalia chebula</i>	112	<i>Plumeria rubra</i>
18	<i>Terminalia elliptica</i>	113	<i>Wedelia sp.</i>
19	<i>Tectona grandis</i>	114	<i>Plumeria alba</i>
20	<i>Acacia catechu</i>	115	<i>Plumeria pudica</i>
21	<i>Bauhinia purpurea</i>	116	<i>Neolamarckia cadamba</i>
22	<i>Bauhinia variegata</i>	117	<i>Leucaena leucocephala</i>
23	<i>Emblica officinalis</i>	118	<i>Eucalyptus globulus</i>
24	<i>Hibiscus tiliaceae</i>	119	<i>Moringa oleifera</i>
25	<i>Annona squamosa</i>	120	<i>Nyctanthes arbor- tristis</i>
26	<i>Prosopis juliflora</i>	121	<i>Couroupita guianensis</i>
27	<i>Phoenix sylvestris</i>	122	<i>Tabebuia rosea</i>
28	<i>Acacia auriculiformis</i>	123	<i>Bixa orellana</i>
29	<i>Dalbergia sissoo</i>	124	<i>Solanum macrophyllum</i>
30	<i>Erythrina strica</i>	125	<i>Thevetia peruviana</i>
31	<i>Saraca asoca</i>	126	<i>Delonix regia</i>
32	<i>Aegle marmelos</i>	127	<i>Callistemon citrinus</i>
33	<i>Pithecellobium dulce</i>	128	<i>Polyalthia longifolia</i>
34	<i>Semecarpus anacardium</i>	129	<i>Tabernaemontana sp.</i>
35	<i>Mangnifera indica</i>	130	<i>Calliandra haematocephala</i>
36	<i>Ziziphus mauritiana</i>	131	<i>Nerium indicum</i>
37	<i>Ziziphus sp.</i>	132	<i>Lagerstroemia speciosa</i>
38	<i>Artocarpus hirsutus</i>	133	<i>Duranta erecta</i>



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Sr. No.	Scientific Name	Sr. No.	Scientific Name
39	<i>Putranjiva roxburghii</i>	134	<i>Senna alata</i>
40	<i>Justicia santapau</i>	135	<i>Caesalpinia pulcherrima</i>
41	<i>Clerodendrum philippinum</i>	136	<i>Tecoma capensis</i>
42	<i>Solanum torvum</i>	137	<i>Passiflora edulis</i>
43	<i>Rauvolfia serpentina</i>	138	<i>Passiflora ligularis</i>
44	<i>Calotropis gigantean</i>	139	<i>Quisqualis indica</i>
45	<i>Calotropis procera</i>	140	<i>Thunbergia grandiflora</i>
46	<i>Solanum Xanthocarpum</i>	141	<i>Canna indica</i>
47	<i>Stachytarpheta jamaicensis</i>	142	<i>Cordia dichotoma</i>
48	<i>Vitex trifolia</i>	143	<i>Thespesia populnea</i>
49	<i>Tecoma stans</i>	144	<i>Mimosa pudica</i>
50	<i>Blumea lanceolaria</i>	145	<i>Arthocarpus heterophyllus</i>
51	<i>Indigofera spp.</i>	146	<i>Madhuca indica</i>
52	<i>Jatropha gossypifolia</i>	147	<i>Butea monosperma</i>
53	<i>Ricinus communis</i>	148	<i>Plumbago zeylanica</i>
54	<i>Breynia retusa</i>	149	<i>Mucuna pruriens</i>
55	<i>Ipomoea violacea</i>	150	<i>Portulaca oleracea</i>
56	<i>Ipomoea spp.</i>	151	<i>Portulaca grandiflora</i>
57	<i>Jasminim multiflorum</i>	152	<i>Tridax procumbens</i>
58	<i>Jasminum ritchiei</i>	153	<i>Scoparia dulcis</i>
59	<i>Jasminum auriculatum</i>	154	<i>Malachra capitata</i>
60	<i>Ipomoea carnea</i>	155	<i>Urena lobata</i>
61	<i>Ipomoea staphylina</i>	156	<i>Cassia fistula</i>
62	<i>Trichosanthes cucumerina</i>	157	<i>Ceiba pentandra</i>
63	<i>Merremia aegyptia</i>	158	<i>Ficus benghalensis</i>
64	<i>Leela indica</i>	159	<i>Ficus religiosa</i>
65	<i>Ipomoea mauritiana</i>	160	<i>Gliricidia sepium</i>
66	<i>Ipomoea arachnosperma</i>	161	<i>Peltophorum pterocarpum</i>
67	<i>Ipomoea marginata</i>	162	<i>Pithecellobium dulce</i>
68	<i>Ipomoea incica</i>	163	<i>Pongamia pinnata</i>
69	<i>Clitoria ternatea</i>	164	<i>Psidium guajava</i>
70	<i>Hibiscus hispidissimus</i>	165	<i>Ficus hispida</i>
71	<i>Vigna radiate var. Sublobata</i>	166	<i>Hibiscus rosasinensis</i>
72	<i>Tinospora cordifolia</i>	167	<i>Lantana camara</i>
73	<i>Tragia involucrata</i>	168	<i>Bougainvillea spectabilis</i>
74	<i>Holostemma annulare</i>	169	<i>Casuarina equisetifolia</i>
75	<i>Crinum asiaticum</i>	170	<i>Ficus benjamina</i>
76	<i>Datura ferox</i>	171	<i>Ficus elastic</i>
77	<i>Hedychium coronarium</i>	172	<i>Ficus racemosa</i>
78	<i>Alternanthera sessilis</i>	173	<i>Ficus pumila</i>
79	<i>Eupatorium adenophorum</i>	174	<i>Mussaenda spp.</i>



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Sr. No.	Scientific Name	Sr. No.	Scientific Name
80	<i>Parthenium hysterophorus</i>	175	<i>Roystonea regia</i>
81	<i>Sesamum indicum</i>	176	<i>Borassus flabellifer</i>
82	<i>Impatiens spp.</i>	177	<i>Phoenix sylvestris</i>
83	<i>Oxalis sp.</i>	178	<i>Bombax ceiba</i>
84	<i>Aeschynomene sp.</i>	179	<i>Carica papaya</i>
85	<i>Alysicarpus</i>	180	<i>Musa paradisiaca</i>
86	<i>Commelina</i>	181	<i>Euphorbia pulcherrima</i>
87	<i>Hygrophila auriculata</i>	182	<i>Gloriosa superba</i>
88	<i>Tithonia rotundifolia</i>	183	<i>Allamanda cathartica</i>
89	<i>Crotalaria sp.</i>	184	<i>Adenanthera pavonina</i>
90	<i>Melanthra biflora</i>	185	<i>Ocimum tenuiflorum</i>
91	<i>Cleome viscosa</i>	186	<i>Aloe vera</i>
92	<i>Cleome burmanni</i>	187	<i>Adhatoda vasica</i>
93	<i>Cosmos sulphureus</i>	188	<i>Catharanthus roseus</i>
94	<i>Amorphophallus paeoniifolius</i>	189	<i>Tagete spp.</i>
95	<i>Erioclon sp.</i>	190	<i>Crosandra infundibuliformis</i>
Source: Vasai-Virar City Biodiversity Survey 2021-2022			





## Annexure II

### Past Initiatives by VVCMC

Sr. No	Department	Work Type	Year	Project Name
1	Solid Waste Management Department	Awareness Activity	2023	Workshop on Wet/Dry Waste Segregation, Single Use Plastic Ban, 3R principal was organized and created public awareness through Ornet Company at Nehru Hindi Z. P. School and Pushpa Nagar Dongari under Ward Committee 'A'.
2		Awareness Activity	2023	Workshop on Wet/Dry Waste Segregation, and Single Use Plastic Ban, was organized and created public awareness through Ornet Company at Dwarka Nagari Co-H-Society under Ward Committee 'C'.
3		Awareness Activity	2023	Workshop on Wet/Dry Waste Segregation, and Single Use Plastic Ban, 3R principal was organized and created awareness at Sai Chaya School under Ward Committee 'B' through Ornet Company.
4		Awareness Activity	2023	Workshop on 3R principal, Wet/Dry Waste Segregation, and Single Use Plastic Ban, was organized and created public awareness through Ornet Company at Rock Garden Society under Ward Committee 'B'.
5		Awareness Activity	2023	A workshop was organized at Kargil Nagar under Ward Committee 'B' through Ornet Company regarding wet/dry waste and single use plastic ban and public awareness was created.



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Sr. No	Department	Work Type	Year	Project Name
6		Dry Plastic collection drive	2023	Dhyas Foundation took Dry Plastic collection drive at Vasai.
7		Dry waste collection and recycling drive	2023	Dhyas Foundation took Dry waste collection and recycling drive at Vasai.
8		Mega Drive (Collect-Reuse-Recycle)	2023	Dhyas foundation took Mega Drive (Collect-Reuse-Recycle) at Vasai.
9		Dry waste collection and recycling drive	2023	Dhyas Foundation took Dry waste collection and recycling drive at Vasai.
10		clean up drive	2023	Dhyas foundation and Usha Mittal institute of technology taken koliwada clean up drive with the help of VVCMC Prabhag I at Vasai.
11		E-Waste Collection Drive	2023	Dhyas Foundation taken Dry Plastic and E-Waste Collection Drive and recycling at Vasai.
12	Solid Waste Management Department	Dry Plastic Collection Drive	2022	Dhyas Foundation taken Dry Plastic Collection Drive at Virar.
13		Dry Plastic & E-Waste Collection Drive	2022	Dhyas Foundation taken Dry waste collection drive(Dry Plastic, E-Waste etc.) at Virar.
14		Dry waste collection drive	2022	Dhyas Foundation has organized Dry waste collection drive and recycling at Virar.
15		Beach Cleaning Campaign	2022	Under Swachhata Amrut Mohotsav-Indian Swacchata League, VVCMC conducted Beach Cleaning Campaign at Suruchi Beach, Vasai on 21st Sep 2022. More than 3000 volunteers participated in this campaign.
16		dry waste collection and recycling	2022	Dhyas Foundation taken drive of dry waste collection and recycling of waste at Vasai.



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Sr. No	Department	Work Type	Year	Project Name
17		lean Sea Campaign	2022	lean Sea Campaign taken on Suruchi beach at vasai(Ward I), In that 500 students of Sant Gonsalo Garcia College, 50 women's of SHG Groups and staff and officers of Ward Committee I also participated in this. A total of 600 people participated in this cleanliness drive.
18		Cleanliness Campaign	2022	on the occasion of Amrit Mahotsav of Independence Day, a cleaning campaign was conducted at Suruchi Beach through Ward Committee I and local citizens and municipal employees. A total of 25 people were included in it.
19		Cleanliness Campaign	2022	Under VVCMC Rajodi Beach Cleanliness Campaign was conducted by Go Green Foundation and Sanitation Staff of Ward A. 35 people participated in this campaign.
20		Beach cleaning	2022	Beach cleaning was done through the Killa pachu group, Killabandar vasai organization and Sanitary Inspectors and Sanitary workers of Ward I at Suruchi Beach vasai. A total of 35 people were included in it.
21		Workshop	2022	Workshop conducted on Ban on Single use plastic & Meeting Conducted on Domestic Hazardous Waste Management by Solid Waste Management Dept., VVCMC in Collaboration of MPCB with Industrial Associations.
22		Beach clean-up drive	2022	Suruchi Beach cleans up drive taken by Dhyas foundation and VVCMC (ward I) at Vasai.
23		Beach clean-up drive	2022	International Coastal Cleanup Day(beach cleaning campaign at Bhuigaon, Nalla Sopara West )



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Sr. No	Department	Work Type	Year	Project Name
24		awareness	2022	workshop on Under single use plastic ban public awareness on what to use and what not to use and on penal action in this regard
25		awareness	2022	Plastic Awareness program taken by Dhyas Foundation at Nirmala Mata High School, Manipur, vasai (w).
26		Workshop	2022	Workshop on plastic management was organized by Save the earth Foundation at Education B.Ed. High School, Vasai
27		Dry Plastic Collection	2022	Dhyas Foundation has organized Dry Plastic Collection Drive at Virar.
28	Water Supply Department	Well rejuvenation	2022	Well rejuvenation program arranges at Santosh Bhuvan Naka, Chandip 1, Jyoti kumchiwadi, Katarwadi goan, Manickpur gavnighar fadbav and Manickpur naupada nata bai.
29	Water Supply Department	Artificial immersion spots	2022	Vasai-Virar City Municipal Corporation creates artificial immersion spots for Visarjan at Kopari talav & makvana Complex, Prabhag C to reduce the water pollution during festivals.
30	Drainage Department	STP installation	2022	Vasai-Virar City Municipal Corporation installed 30MLD Sewage Treatment plant zone 2 at Bolinj.
31	Solid Waste Management Department	Compost from nirmalya	2022	Compost made from Nirmalya collected during Pre-Immersion Activity at Water Bodies.
32		Centralised Wet Waste Processing Facility	2022	Installed Centralised Wet Waste Processing Facility/Plant (Wet Waste Process through Windrow Composting Method) at Golani Naka, Vasai East.



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Sr. No	Department	Work Type	Year	Project Name
33	Solid Waste Management Department		2022	Initiative for earthen pots immersed in water bodies during pooja on “Dusshera festival” and “Makar Sankranti” is collected by SHGs which is reused for plantation.
34		Awareness activities	2022	Conduct awareness activities for banning single use plastic/ Use of alternatives of plastic
35	Electrical Department	LED Streetlights	2022	LED Streetlights installed at following location : 1.Ward Committee (H) at Navghar East-West flyover 2.Ward Committee (H) from Panchvati Chowk to Guruvdara (Shri Guru Singh Sabha) 3.Ward Committee (H) from Vartak Chowk to Manikpur Naka 4.Ward Committee (H) Hanuman Mandir (Manikpur Naka) to Stella Petrol Pump
36	Garden Department	plantation	2022	Miyawaki tree plantation done at Achole road, Nalla Sopara East.
37		Tree Plantation	2022	Trees plantation done during Majhi Vasundhara Abhiyan 3.0. at Mhada Complex Area, Madhuban Road , Vasai East and Vasant Nagari Road, Nalla Sopara east
38	Public work department	Water Body rejuvenation	2022	Umelman & Diwanman Talav rejuvenated during Majhi Vasundhara Abhiyan3.0
39	Water Supply Department	Rainwater Harvesting system	2022	Installed of Rooftop Rainwater Harvesting system at Golani Naka, Vasai.



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Sr. No	Department	Work Type	Year	Project Name
40	Solid Waste Management Department	Awareness campaign	2022	Conduct workshops and seminars for all age groups, all genders and social groups including tribal and villages for creative use of their talent to produce useful articles and handicrafts using the waste materials to minimize the waste quantity.
41		Awareness and education of the citizen groups	2022	For dissemination of process & technology to be adopted by the VVCMC for IMSWM and educating all audiences about the project perspectives
42		Awareness campaign	2022	Utilize public functions and festivities by displaying posters and banners, wall murals, graffiti to sensitize the general public to the emerging project, its features and expectations from the citizens
43		Awareness campaign	2022	Create and use Facebook /Twitter and other social e-platforms to form groups and spread messages of awareness
44		Awareness campaign	2022	Distribution among the residents and also the casual visitors and tourists to dump waste at designated locations and keep the roads/paths clean
45		Competitiveness for waste management and disposal	2022	Rolling trophy to be awarded to the ward within the city and the village within the Investment Area for cleanest environment
46		Awareness campaign	2022	Footnotes to capture the TV audience depicting the ill effects on health and environment due to open dumping of waste and uncontrolled burning
47		Awareness campaign	2022	Involvement of Senior Citizens and School children to improve sanitation along the major roads and thoroughfares





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Sr. No	Department	Work Type	Year	Project Name
48		To initiate a debate among the citizens	2022	Depicting case studies of success stories of municipal waste management in other similar towns
49	R.T.O, VVCMC, Traffic Police	Awareness campaign	2022	Launch public awareness campaigns for air pollution control, vehicle maintenance, minimising use of personal vehicles, lane discipline etc.
50	VVCMC	R.T.O	2022	Installed Computerised PUC check stations to avoid fake certificate.
51	Environmental Department	Water fountains	2022	VVCMC introduce water fountains for major traffic intersections
52	Solid Waste Management Department		2022	VVCMC has proposed new landfill site for segregated solid waste. Composting will be done.

Source: VVCMC Website



Workshop on Wet/Dry Waste Segregation



Workshop on plastic management was organized by Save the earth Foundation at Education B.Ed. High School, Vasai.



Dhyas foundation took Mega Drive (Collect-Reuse-Recycle) at Vasai.



Dhyas Foundation took Dry Plastic collection drive at Vasai.





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International Coastal Cleanup Day (beach cleaning campaign at Bhuigaon, Nalla Sopara West).



Under VVCMC Rajodi Beach Cleanliness Campaign was conducted by Go Green Foundation and Sanitation Staff of Ward A. 35 people participated in this campaign.



Under Swachhata Amrut Mohotsav-Indian Swachhata League, VVCMC conducted Beach Cleaning Campaign at Suruchi Beach, Vasai.



Public awareness Workshop on Wet/Dry Waste Segregation, Single Use Plastic Ban at Dwarka Nagari Co-H-Society.





## Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



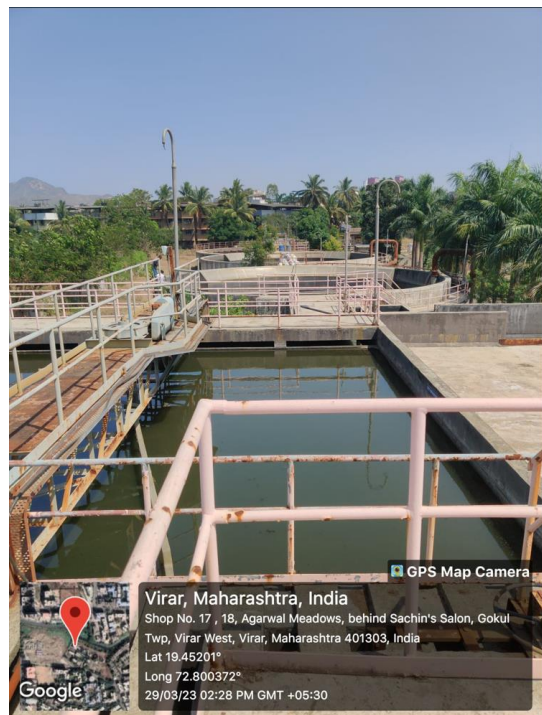
Public awareness Workshop on Wet/Dry Waste Segregation, Single Use Plastic Ban at Nehru Hindi Z. P. School



Dhyas Foundation has organized Dry waste collection drive and recycling at Virar.



Biomedical waste segregation and processing plant at Palghar.

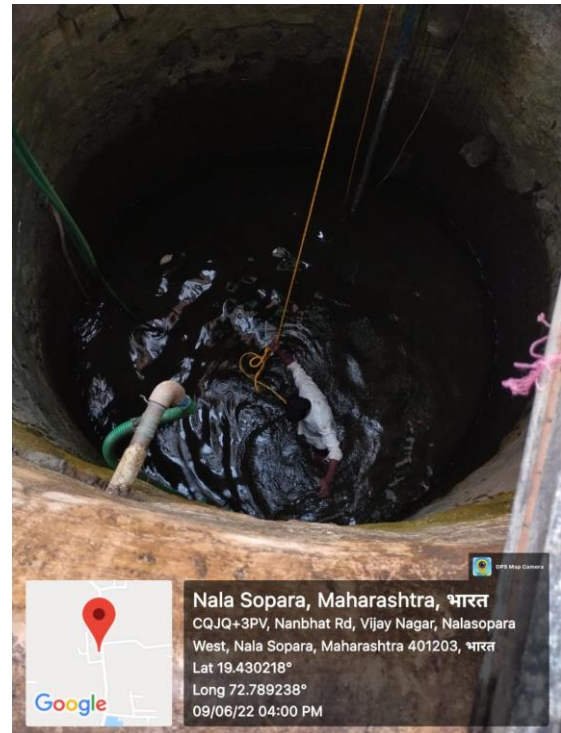


Vasai-Virar City Municipal Corporation installed 30MLD Sewage Treatment plant zone 2 at Bolinj.

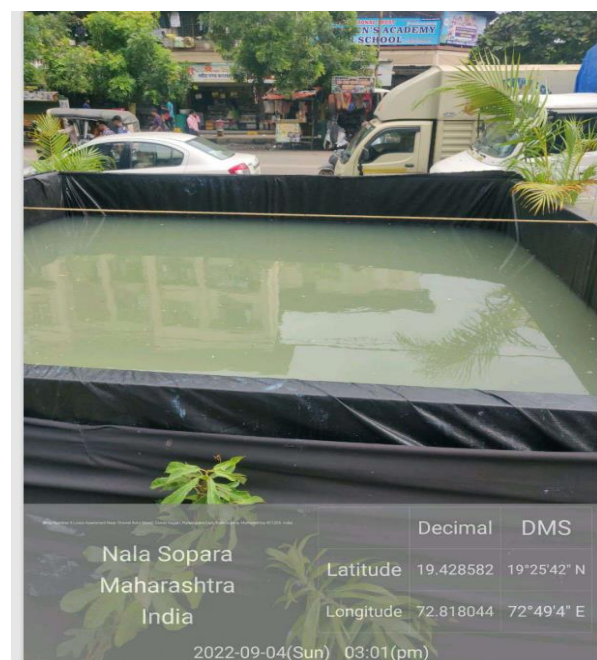
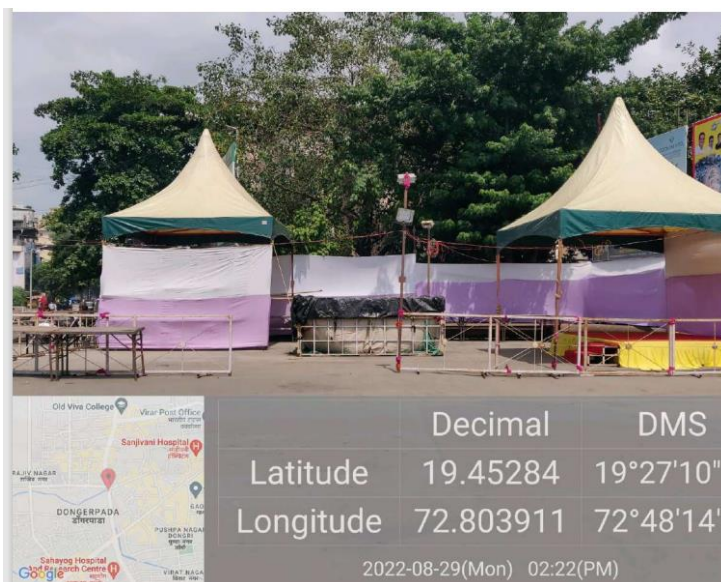




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Well rejuvenation program arranges at Santosh Bhuvan Naka, Chandip 1, Jyoti kumchiwadi, Katarwadi goan, Manickpur gavnighar fadbav and Manickpur naupada nata bai.



Vasai-Virar City Municipal Corporation creates artificial immersion spots for Visarjan to reduce the water pollution during festivals.





Compost made from Nirmalya collected during Pre-Immersion Activity at Water Bodies.

सकाळ

## जैवविविधतेमुळे पक्ष्यांना नवसंजीवनी

प्रसाद जोशी, वसई

शहरात सिमेंट काँक्रीटकरण झपाट्याने वाढत आहे. त्यामुळे त्याचा जैवविविधतेवर परिणाम होत आहे. जैवविविधता टिकून राहावी, म्हणून वसई-विरार महापालिकेने प्रयत्न सुरू केले आहेत. पर्यावरण अहवाल तयार करण्याचे काम हाती घेण्यात आले आहे. भविष्यात जैवविविधता टिकवण्यासाठी पावले उचलली जाणार आहेत. २२ मे हा जागतिक जैवविविधता दिन साजरा केला जातो.

वसई, विरार शहराला निसर्गरम्य परिसरासह डोंगर व विस्तीर्ण समुद्रकिनारा लाभला आहे. त्यामुळे हरित वसई अशी वास्तव्याची ओळख आहे. मात्र हळूहळू सिमेंट काँक्रीटकरणाने जंगल वाढत आहे. त्यामुळे वसई-विरार महापालिकेने वृक्षलगाव करून पक्ष्यांना आकर्षित करणे, त्यांचा अधिवास कायम ठेवणे, जैवविविधतेसाठी विविध उपाययोजनांवर भर देण्यास सुरुवात केली आहे. जैवविविधता ही भूपगण्या हवामानावर अवलंबून असते. तलाव, नदी, पाणथळ जागा, पक्षी, चारा याचे प्रमाण व देखभाल केल्यास जैवविविधतेला बळकटी मिळते. सद्यस्थितीत हवामानात होणारे बदल पाहता जैवविविधता अत्यंत महत्वाचा घटक मानला जात आहे. वसई, विरार शहरात फेब्रुवारी

महिन्यात एकूण ३२ टिकाणी फॉर्निरोक्षय केले होते. या गणनेत १७२ प्रजाती आढळल्या आहेत, तर पाणवटच्यावर वासाव्यास ६,९२३ पक्षी हिमून आले होते. शहरातील हिरवागार परिसर आरहाददायक असल्याने अधिवास व भक्ष्य पाहता विविध राख्य, परदेशातील पक्षी आकर्षित जात आहेत. महापालिकेने पहिल्यांदाच पक्ष्यांना करून जैवविविधतेवर अभ्यास केला आहे. शहरातील विविध भागांत दुर्मिळ पक्षी शोधात येत असल्याचे निदर्शनास आले. सर्वांच्याच्या अधिवासाला धोका निर्माण होऊ नये, वासाठी योजना आखण्यात आली आहे. त्यामुळे शहरात पक्ष्यांना पूरक वातावरण मिळणार आहे. तसेच विविध जातींच्या वृक्षांची लग्गवड करण्याची मोहीम सुरू असल्याने शहर परिसरात पक्ष्यांचा किरबिलट नाशिकांना सुखवून जाणार आहे.

### पर्यावरणपूरक वातावरणनिर्मितीचा प्रयत्न

जैवविविधतेच्या विनाशाकडे निसर्गावर परिणाम होत असतो. त्यामुळे अधिकधिक पक्षी, वृक्ष व सजीवांना संजीवनी मिळाली व त्यातून वसई-विरार शहरात सुंदर, मनमोहक वातावरण निर्माण व्हावे, वासाठी पावले उचलली जात असल्याने आरोग्याला हितकरक ठरणार आहे.

### कारवाईचे निर्देश

वसई, नालासोपारा, विरार व नायगाव परिसरात गवतळ भूगर्भ सजीवांना फायदेशीर ठरत असते. येथील नैसर्गिक गवत सुरक्षित असावे, म्हणून पालिकेकडून खबरदारी घेण्यात येत आहे. त्याचबरोबर केमिकलदुक्त पाण्यात कोणी गवत उगवून पक्षी, प्राण्यांना धोका निर्माण करत असेल तर त्यांच्यावर कारवाई केली जात असल्याचे उपायुक्त डॉ. सागर घोलप यांनी स्पष्ट केले.

वसई-विरार महापालिकेच्या परिसरात पक्ष्यांचा अधिवास टिकठिकाणी आढळला आहे. त्यांना सुरक्षा मिळावी, वासाठी प्रयत्न केले जात आहेत. जैवविविधतेसाठी गवत, मोकळी जागा, पाणथळवर काम केले जात आहे.

- डॉ. सागर घोलप, उपायुक्त



Initiative by VVCMC for conservation of Habitat and biodiversity





De-Centralized Wet Waste Processing Facility/Plant at following locations:

- Krushnakunj (RWA), Nalla Sopara
- Lotus (RWA), Nalla Sopara
- Rajiv Gandhi School, Nalla Sopara
- Rajhans Housing Co. Society, Vasai (W)
- Dosti Coral 3, Housing Co. Society, Vasai (W)



**(BEFORE)**



**Ready Compost**

Installed Centralized Wet Waste Processing Facility/Plant (Wet Waste Process through Windrow Composting Method) at Golani Naka, Vasai East.





Initiative for earthen pots immersed in water bodies during pooja on “Dusshera festival” and “Makar Sankranti” is collected by SHGs which is reused for plantation.





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Miyawaki tree plantation done at Achole road, Nalla Sopara East.

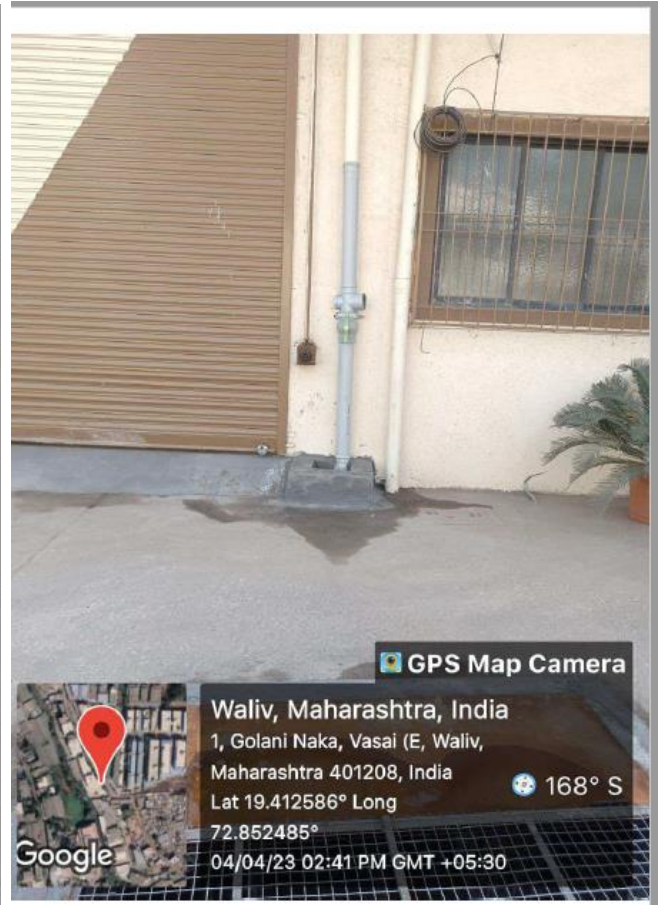
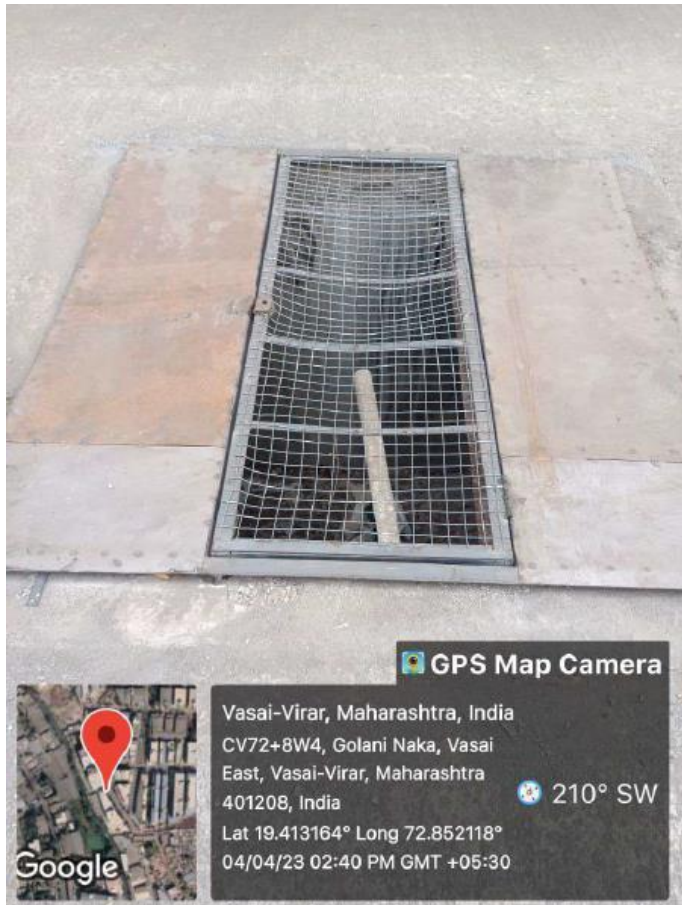


Umelman & Diwanman Talav rejuvenated during Majhi Vasundhara Abhiyan3.0





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Installed of Rooftop Rainwater Harvesting system at Golani Naka, Vasai.

Source: VVCMC Website



## Annexure III

### List of Schools

Sr.No	UDISE Code	School Name	School Management
1	27361715303	A K PATIL PRIMARY SCHOOL	19
2	27361715345	A K PATIL PRIMARY SCHOOL ENG	27
3	27361713805	A V JR COLLEGE	4
4	27361704702	A. D. SEC SCHOOL	14
5	27361716501	A. KHAIRUL HIGHSCHOOL	4
6	27361711106	A. PUBLIC SCHOOL HIGH	19
7	27361711101	A. PUBLIC SCHOOL PRI.	4
8	27361710501	A. VIDYALAYA, NARINGI	4
9	27361710506	A. VIDYALAYA, NARINGI HIGH	25
10	27361700101	A.V.A. SANSTHA'S PRI. SCHOOL	4
11	27361711301	A.V.SMARAK VIDYAMANDIR PRI.	4
12	27361711302	A.V.SMARAK VIDYAMANDIR SEC.	4
13	27361711110	AADARSH PUBLIC HIGHSCHOOL ENGLISH MEDIUM	27
14	27361713901	ABHINAV V. PRI.S. VASAI ROAD	4
15	27361715604	ACHOLE ENG HIGHSCHOOL	27
16	27361715603	ACHOLE ENG. SCHOOL	27
17	27361715805	ADARSH HINDI HIGH SCHOOL	25
18	27361715642	ADARSH JUNIOR COLLEGE OF ARTS AND COMMERCE	8
19	27361715620	ADARSH MAR VIDYALAY PRI	19
20	27361700407	ADARSH VIDYALAY PRI	4
21	27361700401	ADARSH VIDYALAYA, BOLINJ	4
22	27361710609	ADV.CHANDAN SINGH SOLANKI ENG HIGH	27
23	27361710607	ADV.CHANDAN SINH SOLANKI ENG PRI	27
24	27361716507	AL-FURQAN ENGLISH SCHOOL	8
25	27361713906	ALNOOR ENG HIGH SCHOOL	27
26	27361713905	ALNOOR PRI ENG	27
27	27361710605	ANJUMAN ISLAM URDU HIGH	4
28	27361710604	ANJUMAN ISLAM URDU PRI	4





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Sr.No	UDISE Code	School Name	School Management
29	27361715407	ANNAPURNA PUBLIC SCHOOL (MAR SEC)	19
30	27361715408	ANNAPURNA PUBLIC SCHOOL ENG PRI	27
31	27361715417	ANNAPURNA PUBLIC SCHOOL HIN PRI	27
32	27361715409	ANNAPURNA PUBLIC SCHOOL HIN SEC	19
33	27361715205	ANNIE BESANT ENG SCHOOL	27
34	27361702205	ANTS ENGLISH SCHOOL	27
35	27361710807	ANUSAYA MARATHI HIGH SCHOOL	19
36	27361710814	ANUSAYA MARATHI PR SCHOOL	19
37	27361704701	ASHRAM SCHOOL KAMAN	14
38	27361707538	ATHARV ACADEMY ENG SCHOOL	8
39	27361715420	AVDHOT BHAGWAN RAM VIDYALAY ENG PRI	27
40	27361715421	AVDHOT BHAGWAN RAM VIDYALAY ENG SEC	27
41	27361715422	AVDHOT BHAGWAN RAM VIDYALAY HIN PRI	27
42	27361715411	AVDHUT BHAGWAN RAM VIDYALAY (HIN SEC)	19
43	27361716120	B B C ENGLISH SCHOOL	27
44	27361707801	B B JADHAV S VIDYAMANDIR	4
45	27361713006	B G KINI GURUJI PRI SCHOOL	27
46	27361707106	B K HIGH SCHOOL ENG PRI	27
47	27361707107	B K HIGH SCHOOL ENG SEC	27
48	27361707112	B K HIGH SCHOOL HINDI SEC	27
49	27361707108	B K YADAV SCHOOL HINDI PRI	27
50	27361715625	B N MEMORIAL ENG HIGH SCHOOL	27
51	27361715624	B N MEMORIAL ENGLISH PRIMARY SCHOOL	27
52	27361715627	B N MEMORIAL HIGH SCHOOL HINDI	25
53	27361715626	B N MEMORIAL PRI SCHOOL HINDI	4
54	27361703902	B. V. VARTAK HIGHS. NALLE	4
55	27361703901	B. V. VARTAK PRIM. NALLE	19
56	27361713202	B.K.S. HIGHSCHOOL MANICKPUR	27
57	27361713201	B.K.S. PRI. SCHOOL MANICKPUR	27
58	27361710305	BABA HARNAMDASJI HIGH SCHOOL	19
59	27361710713	BHARTI ACADAMY ENG HIGH SCHOOL	27
60	27361710704	BHARTI ACADAMY ENG PRI SCHOOL	27



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Sr.No	UDISE Code	School Name	School Management
61	27361710721	BHASKAR WAMAN THAKUR SHIKSHAN SANKUL	27
62	27361717609	BLOOMING BUD'S HIGH SCHOOL	27
63	27361717610	BLOOMING BUD'S PRI SCHOOL	27
64	27361716127	BRILLIANT MINDS INTERNATIONAL SCHOOL	27
65	27361715607	C. LODHA ENG.HIGH SCHOOL	27
66	27361713007	CANOSA HIGH SCHOOL	27
67	27361713005	CANOSSA PRIMARY SCHOOL	27
68	27361713009	CANOSSA SCHOOL CBSE	27
69	27361700605	CARMEL CONVENT HIGH SCHOOL	27
70	27361700601	CARMEL CONVENT PRI SCHOOL	27
71	27361709901	CARMELITE PRIMARY	27
72	27361709902	CARMELITE CONVENT ENGLISH HIGH SCHOOL	27
73	27361715606	CHANDRESH LODHA MEMORIAL SCHOOL	27
74	27361702105	CHRIST PRIMARY SCHOOL	27
75	27361712302	CITIZEN HIGHSCHOOL	27
76	27361712301	CITIZEN PRIMARY SCHOOL	27
77	27361716111	CLARIDGES ENG HIGH SCHOOL	27
78	27361716106	CLARIDGES ENG PRI SCHOOL	27
79	27361709603	CO. OF JESUS & MARY HIGH	27
80	27361709601	CO. OF JESUS & MARY ST.BIDS PAL	27
81	27361707117	CONVENT ENGLISH HIGH SCHOOL	27
82	27361707411	D K MEMORIAL ENG HIGH SCHOOL	27
83	27361707410	D K MEMORIAL ENG PRI SCHOOL	27
84	27361707409	D K MEMORIAL HIN HIGH SCHOOL	19
85	27361707408	D K MEMORIAL HIN PRI SCHOOL	19
86	27361715331	DISHA ENGLISH ACADEMY	8
87	27361707533	DIVINE BLESSING HIGH SCHOOL	27
88	27361707416	DIVINE BLESSING SCHOOL ENG PRI	27
89	27361707417	DIVINE BLESSING SCHOOL ENG SEC	27
90	27361707532	DIVINE BLESSING SCHOOL PRI	27
91	27361707561	DIVINE CHILD ENGLISH ACADEMY	27
92	27361707422	DIVINE CHILD HIGH SCHOOL	8
93	27361716908	DIVINE LIFE HIGH SCHOOL	27
94	27361716907	DIVINE LIFE SCHOOL	27



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Sr.No	UDISE Code	School Name	School Management
95	27361717012	DIVINE PROVIDENCE HIGH SCHOOL	27
96	27361717013	DIVINE PROVIDENCE JUNIOR COLLEGE	27
97	27361717011	DIVINE PROVIDENCE PRI SCHOOL	27
98	27361710419	DNYANDEEP KANISHTH MAHAVIDYALAY,WALIV	27
99	27361710401	DNYANDEEP VIDYAMANDIR VALIV	19
100	27361710411	DNYANDEEP VIDYAMANDIR VALIV SEC	4
101	27361706802	DON BOSCO HIGH SCHOOL & JR COLLEGE	27
102	27361706801	DON BOSCO PRI. SCHOOL	27
103	27361700902	DR. D. J. GALVANKAR SMARAK VIDYAMANDIR	4
104	27361709803	DR. M.G.PARULEKAR MITRA MANDAL SCHOOL	27
105	27361700903	DR. N.P. GALVANKAR ENGLISH MEDIUM SCHOOL	27
106	27361700103	DR. N.P.SHAH HIGH SCHOOL	27
107	27361700901	DR. NARU GALVANKAR PRI.	4
108	27361700102	DR.N.P. SHAH PRI. AGASHI	27
109	27361715418	EBENEZER ENGLISH HIGH SCHOOL PRI	8
110	27361710727	EBENZER ENGLISH SCHOOL AND JR COLLEGE	27
111	27361715364	ELIZABETH ENGLISH HIGH SCHOOL	27
112	27361716123	EMMANUEL INTERNATIONAL SCHOOL	27
113	27361707404	EMMAUEL MISSION ENG PRI	27
114	27361707407	EMMAUEL MISSION SCHOOL (ENG SEC)	8
115	27361717402	EVER GREEN HIGH SCHOOL	27
116	27361717401	EVER GREEN PRIMARY	27
117	27361711001	EXPERTS INTERNATIONAL ENG. PRI.	27
118	27361711002	EXPERTS INTERNATIONAL HIGH SCHOOL & JR COLLEGE	27
119	27361711306	FATHER AGNEL'S ENGLISH SCHOOL	27
120	27361711307	FATHER AGNEL'S ENGLISH SCHOOL PRI	27
121	27361711308	FATHER AGNELS JUNIOR COLLEGE,VIRAR	27
122	27361709004	FATHER STEPHENS HIGHSCHOOL	27
123	27361709001	FATHER STEPHENS SCHOOL	27
124	27361704405	FATIMA SCHOOL	27
125	27361711611	FLAMINGO PUBLIC SCHOOL	8



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126	27361710417	FRAGNEL SCHOOL	27
127	27361717616	G D IDEAL ENG HIGH	27
128	27361717615	G D IDEAL ENG PRI	27
129	27361717619	G D IDEAL HINDI SEC	19
130	27361713902	G.J. VARTAK H.S. VASAI ROAD	4
131	27361710823	G.P.ENGLISH MEDIUM SCHOOL	27
132	27361706807	GIRIJA MHATRE ENGLISH HIGH SCHOOL	27
133	27361706806	GIRIJA MHATRE ENGLISH PRI SCHOOL	27
134	27361710802	GITANJALI VIDYALAYA	19
135	27361710805	GITANJALI VIDYALAYA	19
136	27361715360	GNYANDEEP MULTIPURPOSE SCHOOL	27
137	27361713702	GNYANODAYA ENGLISH HIGH SCHOOL	27
138	27361706905	GNYANODAYA M. HINDI SCHOOL	19
139	27361706903	GNYANODAYA M.HINDI SEC. SCHOOL	25
140	27361706904	GNYANODAYA MALTIPURPOSE SCHOOL	27
141	27361706902	GNYANODAYA MULTIPURPOSE HIGH SCHOOL & JR COLLEGE	27
142	27361713701	GNYANODAYA MULTIPURPOSE SCHOOL	27
143	27361707506	GNYNSAGAR HIGH SCHOOL	25
144	27361715341	GREEN HILLS SCHOOL	27
145	27361715322	GURU GOVIND VIDYALAY HIN SEC	19
146	27361715630	GURUKUL ENGLISH HIGH SCHOOL	27
147	27361715621	GURUKUL ENGLISH PRI SCHOOL	27
148	27361715325	GURUKUL VIDYAMANDIR HIGH SCHOOL	27
149	27361715343	GURUKUL VIDYAMANDIR HIGH SCHOOL (ENG PRI)	27
150	27361715344	GURUKUL VIDYAMANDIR HIGH SCHOOL (ENG SEC)	27
151	27361715336	GURUKUL VIDYAMANDIR HIGH SCHOOL MAR	27
152	27361715342	GURUKUL VIDYAMANDIR HIGH SCHOOL(HIN PRI)	27
153	27361715324	GURUKUL VIDYAMANDIR PRI SCHOOL	27
154	27361707548	GYAN SAGAR VIDYA MANDIR HINDI JUNIOR COLLEGE OF COMMERCE	27
155	27361707549	GYAN SAGAR VIDYA MANDIR JUNIOR COLLEGE OF ARTS COMMERCE AND SCIENCE	27



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Sr.No	UDISE Code	School Name	School Management
156	27361715635	GYANDEEP HINDI PRI SCHOOL	19
157	27361712601	H.F. PRI. SCHOOL EVER SHAIN	27
158	27361712602	H.F. SEC. HIGH SCHOOL	27
159	27361707546	HANSA INTERNATIONAL SECONDARY SCHOOL	27
160	27361707545	HANSA KIDS PRIMARY SCHOOL	27
161	27361710611	HASHA LAKHMA PATIL ENGLISH SCHOOL	27
162	27361710815	HOLI SPIRIT HIGH SCHOOL	27
163	27361710816	HOLI SPIRIT JR COLLEGE	27
164	27361710808	HOLI SPIRIT PRIMARY SCHOOL	27
165	27361704403	HOLLY CROSS CONVENT SCHOOL	27
166	27361704406	HOLLY CROSS CONVENT SPECIAL SCHOOL	12
167	27361704105	HOLLY CROSS HIGH ENG NIRMAL	27
168	27361704102	HOLLY CROSS HIGHS. NIRMAL	4
169	27361704401	HOLLY CROSS NANBHAT	27
170	27361704104	HOLLY CROSS PRI. ENG NIRMAL	27
171	27361704101	HOLLY CROSS PRI. NIRMAL	4
172	27361703401	HOLLY FAMILY PRI. BHUIGAON	4
173	27361717005	HOLY MARY ENG HIGH SCHOOL (PRI)	8
174	27361717006	HOLY MARY HIGH SCHOOL	27
175	27361717614	HOLY MOTHER ENG HIGH	27
176	27361717613	HOLY MOTHER ENG PRI	27
177	27361714502	HOLY P. HIGH S. DIWANMAN	27
178	27361714501	HOLY P. PRI.S. DIWANMAN	27
179	27361707543	HORIZON ENGLISH ACADEMY AND JR COLLEGE	27
180	27361712201	HUZAIFA URDU HIGHSCHOOL	4
181	27361712208	HUZAIFA URDU PRI SCHOOL	25
182	27361710212	INDIRA GANDHI VIDYALAY	4
183	27361710201	INDIRA GANDHI VIDYALAYA	4
184	27361716902	INFANT JESUS HIGH SCHOOL	27
185	27361716901	INFANT JESUS PRIMARY	27
186	27361707526	IRIS INTERNATIONAL SCHOOL	27
187	27361711803	ISAAC NEWTON GLOBAL SCHOOL	27
188	27361717612	J B S HIGH SCHOOL	27
189	27361717611	J B S PRI SCHOOL	27



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Sr.No	UDISE Code	School Name	School Management
190	27361712603	J.B.LUDHANI PRI SCHOOL, E.S.	27
191	27361712604	J.B.LUDHANI SEC SCHOOL, E.S.	27
192	27361707724	J.S.S ENGLISH HIGH SCHOOL SEC	8
193	27361710811	JAYDEEP ENGLISH PRI	27
194	27361710809	JAYDEEP HINDI HIGH	19
195	27361710810	JAYDEEP HINDI PRI	19
196	27361710822	JAYDEEP JR. COLLEGE	27
197	27361710818	JAYDEEP VIDYA MANDIR ENG HIGH SCHOOL	27
198	27361710820	JAYDEEP VIDYA MANDIR MAR HIGH SCHOOL	19
199	27361710817	JAYDEEP VIDYA MANDIR MAR PRIMARY	27
200	27361710505	JEEVDANI VIDYA VARDHINI HIGH SCHOOL	19
201	27361710502	JEEVDANI VIDYAVARDHINI PRI SCHOOL HIN	4
202	27361702107	JESUS INTERNATIONAL ACADEMY AND JR. COLLEGE	27
203	27361700104	JHON 23 ENG. PRI. AGASHI	27
204	27361707412	JIJAMATA VIDYAMANDIR PRI SCHOOL HIN	27
205	27361712206	JIVDANI MATIMAND MULANCHI SCHOOL	11
206	27361700105	JOHN 23 ENG. SEC. AGASHI	27
207	27361712502	JOHN BASCO HIGHSCHOOL	27
208	27361712501	JOHN BOSCO PRI. SCHOOL	27
209	27361700414	JOHN XXIII SCHOOL VIRAR	27
210	27361700106	JONH 23 MARATHI AGASHI	4
211	27361717202	JYOTI HINDI VIDYALAY PRI	4
212	27361706804	K B PATIL VIDYALAY	4
213	27361710238	K M ENGLISH HIGH SCHOOL PRI	27
214	27361710239	K M ENGLISH HIGH SCHOOL SEC	27
215	27361712402	K.B.C.R.K.BALVIDYAVIHAR, VASAI	4
216	27361700107	K.G. HIGHSCHOOL AGASHI	4
217	27361716704	K.M.P.D. ENGLISH SECONDARY	27
218	27361716702	K.M.P.D. MARATHI HIGH SCHOOL	4
219	27361715640	KALINDI ENG HIGH SCHOOL	27
220	27361715636	KALINDI PRI ENG SCHOOL	27
221	27361716802	KANCHAN ENG. HIGH SCHOOL	27
222	27361716801	KANCHAN ENG. PRIMARY	27
223	27361716805	KANCHAN HIGHSCHOOL GUJ	19





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Sr.No	UDISE Code	School Name	School Management
224	27361716806	KANCHAN MAR PRI SCHOOL	19
225	27361711013	KASHIBAI PATIL HIGH SCHOOL	27
226	27361711011	KASHIBAI PATIL PRI SCHOOL	27
227	27361707562	KAUSTUBH VIDYALAY AND JUNIOR COLLEGE	27
228	27361717212	KIDS CORNER PUBLIC ACADEMY	27
229	27361707521	KIRAN PATIL JR COLL.OF ARTS,COMM,SCI.	27
230	27361704706	KISAN PATIL HIGH SCHOOL	25
231	27361710214	KISHOR MANGALMURTI	25
232	27361710223	KISHOR MANGALMURTI HIGH	25
233	27361717403	KRIST RAJ PRIMARY SCHOOL	27
234	27361717407	KRIST RAJ ENG HIGH SCHOOL	27
235	27361707531	KUMARI ENGLISH PRIMARY SCHOOL	27
236	27361711608	L B S ENGLISH SCHOOL PRI	27
237	27361711609	L B S ENGLISH SCHOOL SEC	27
238	27361711007	LATE SHRI PANDURANG RAGHUNATH PATIL UTKARSHA MADHYMIK VIDYALAY AND JR COLLEGE	4
239	27361707553	LIMRA ENGLISH SCHOOL	27
240	27361715612	LIONS ADARSH HINDI SCHOOL	19
241	27361707551	LITTLE ANGEL ENGLISH SCHOOL	8
242	27361705006	LITTLE ANGELS HIGH SCHOOL	8
243	27361711402	LITTLE FAIRY HIGH SCHOOL	27
244	27361711401	LITTLE FAIRY PRIMARY ENGLISH	27
245	27361717302	LITTLE FLOWER ENGLISH HIGH SCHOOL	27
246	27361717301	LITTLE FLOWER PRIMARY	27
247	27361716602	LITTLE FLOWERS HIGH	27
248	27361716601	LITTLE FLOWERS PRIMARY	27
249	27361716906	LOKMANYA ENG HIGH SCHOOL	27
250	27361716905	LOKMANYA ENG. PRIMARY	27
251	27361710708	LOKMANYA HINDI HIGH SCHOOL	19
252	27361716904	LOKMANYA HINDI HIGH SCHOOL	19
253	27361710703	LOKMANYA HINDI PRI SCHOOL	19
254	27361716903	LOKMANYA HINDI PRIMARY	4
255	27361711004	LORD CHILD HIGH SCHOOL	27
256	27361711003	LORD CHILD PRI. ENG. SCHOOL	27



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Sr.No	UDISE Code	School Name	School Management
257	27361706703	LORDS ENGLISH SCHOOL	8
258	27361710407	LUDHANI VIDYAMANDIR EVER SHINE	27
259	27361710410	LUDHANI VIDYAMANDIR HIGH	27
260	27361700403	M G M ACADEMY'S HIGH SCHOOL	27
261	27361700402	M G M ACADEMY'S PRI SCHOOL	27
262	27361711108	M G M PRI SCHOOL	27
263	27361711201	M. M.N.DUGGAD GUJ. HIGHSCHOOL	4
264	27361710222	MAHURA BAL VIKAS HIGH SCHOOL	19
265	27361710234	MAHURA BAL VIKAS HIGH SCHOOL HIN	19
266	27361710237	MAHURA BAL VIKAS JR COLLEGE	27
267	27361710233	MAHURA BAL VIKAS PRI SCHOOL HIN	27
268	27361710221	MAHURA BAL VIKAS PRIMARY SCHOOL	27
269	27361707602	MANTI MEMORIAL HIGH SCHOOL	8
270	27361707527	MATA BHAGVATI YUG. NIRMAN VIDYALAY	8
271	27361707563	MATOSHREE VIDYANIKEAN ENGLISH SCHOOL	27
272	27361711206	MATOSHRI MOTIBAI NANALAL DUGGAD PRATHAMIK GUJRATI SCHOOL	27
273	27361700409	MATRIX ACADEMY SCHOOL	27
274	27361713203	MAUNT CARMEL HIGHSCHOOL MANIKAPUR	27
275	27361713204	MAUNT CARMEL JUNIOR COLLEGE	27
276	27361716128	MAX FORT ENGLISH HIGH SCHOOL	8
277	27361702108	MODERN ENGLISH HIGH SCHOOL	27
278	27361710409	MOHAN BHAGAT HINDI HIGH SCHOOL	19
279	27361710416	MOHAN BHAGAT PRATHMIK VIDYALAYA	19
280	27361715313	MORESHWAR VIDYALAY	19
281	27361715323	MORESHWAR VIDYALAY & P P PATIL JR COLLEGE	27
282	27361715348	MORESHWAR VIDYALAY ENG PRI	27
283	27361715372	MORESHWAR VIDYALAY ENGLISH SEC	8
284	27361715327	MORESHWAR VIDYALAY MAR SEC	27
285	27361715428	MORNING STAR ENGLISH HIGH SCHOOL	27
286	27361707109	MOTHER BLESS ENGLISH HIGH SCHOOL AND JUNIOR COLLAGE	27
287	27361707430	MOTHER BLESS NATIONAL SCHOOL	27
288	27361716117	MOTHER MARY SRIPRASTHA ENG HIGH	27



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Sr.No	UDISE Code	School Name	School Management
289	27361716116	MOTHER MARY SRIPRASTHA ENG PRI	27
290	27361715802	MOTHER MERRY'S HIGHSCHOOL	27
291	27361715804	MOTHER MERRY'S PRI SCHOOL	27
292	27361715806	MOTHER TERESA ENGLISH SCHOOL PRI	27
293	27361715807	MOTHER TERESA ENGLISH SCHOOL SEC	27
294	27361717204	MOTHER VELANKANI ENG. HIGH	27
295	27361717203	MOTHER VELANKANI ENG. PRI.	27
296	27361717211	MOTHER VELANKANI JR COLLEGE	27
297	27361710706	MOUNT MARY ENG HIGH SCHOOL	27
298	27361710705	MOUNT MARY ENG PRI SCHOOL	27
299	27361710712	MOUNT MARY MAR HIGH SCHOOL	27
300	27361710711	MOUNT MARY MAR PRI SCHOOL	27
301	27361700410	MULJIBHAI MEHTA INT SCHOOL	27
302	27361715618	MUNSHI P. HINGI HIGH SCHOOL	19
303	27361715619	MUNSHI P. HINGI PRI SCHOOL	19
304	27361707429	N N ENGLISH HIGHSCHOOL	27
305	27361717620	N N PRIMARY ENGLISH SCHOOL	27
306	27361712401	N.D.SAMAMANT ADARSH SCHOOL	4
307	27361711304	N.G.V ENG HIGHSCHOOL	27
308	27361711303	N.G.V.PRIMARY ENGLISH	27
309	27361713002	N.M.GIRLS H.S. MANICKPUR	4
310	27361710235	NALLASOPARA PUBLIC ENGLISH SCHOOL	27
311	27361710236	NALLASOPARA PUBLIC ENGLISH SCHOOL SEC	27
312	27361716129	NARAYAN JUNIOR COLLEGE	27
313	27361716130	NARAYANA E-TECHNO SCHOOL	27
314	27361707507	NARVADE HIGH SCHOOL	25
315	27361707505	NARVADE PRI	25
316	27361710813	NATIONAL ENG HIGH E	27
317	27361710812	NATIONAL ENG ICSE	27
318	27361710806	NATIONAL ENG PRI E	27
319	27361710901	NATIONAL ENG. SCHOOL PRI.	27
320	27361710902	NATIONAL ENG. SCHOOL SEC.	27
321	27361715330	NAVJEEVAN HINDI HIGH SCHOOL	27
322	27361715329	NAVJEEVAN HINDI PRI SCHOOL	27
323	27361715368	NAVJEEVAN VIDYAMANDIR ENG SEC	27



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Sr.No	UDISE Code	School Name	School Management
		SCHOOL	
324	27361714101	NAZARETH PRIMARY SCHOOL	27
325	27361714103	NAZRETH CONVENT HIGH SCHOOL	27
326	27361712403	NERKAR HIGHSCHOOL	27
327	27361712404	NEW ENGLISH SCHOOL	4
328	27361707556	NEW GENERATION ENGLISH SCHOOL	8
329	27361710309	NEW LIFE EDUCATION ENG HIGH SCHOOL	27
330	27361716506	NEW ORCHID HIGH SCHOOL	27
331	27361716505	NEW ORCHID PRIMARY SCHOOL	27
332	27361704103	NIRMAL VIDYALAYA NIRMAL	4
333	27361704106	NIRMAL VIDYALAYA PRI	19
334	27361707103	NIRMALA HINDI VIDYALAY	27
335	27361713001	NIRMALA MATA PRIMARY SCHOOL	4
336	27361709904	NISHKALANKA CONVENT SCHOOL	27
337	27361710002	NOTRE DAME SCHOOL	27
338	27361715301	NUTAN MARATHI SCHOOL	4
339	27361715302	NUTAN VIDYALAY SEC MAR	4
340	27361715314	OM CHILDREN'S ACADEMY	27
341	27361715315	OM CHILDREN'S ACADEMY HIGH	27
342	27361710310	OM SAI ENG HIGH SCHOOL	27
343	27361717409	OM SHANTI NIKETAN VIDYALAY	19
344	27361706809	OUR LADY OF VAILANKANNI SCHOOL	27
345	27361706814	OUR LADY OF VAILANKANNI SCHOOL SEC	27
346	27361712405	P.MADHAVAN PRIMARY	27
347	27361703904	PADMASHREE BHAUSAHEB VARTAK ENG SCHOOL	27
348	27361715639	PANCHAM ENGLISH HIGH SCHOOL	27
349	27361715638	PANCHAM ENGLISH PRIMARY	27
350	27361715617	PANCHAM HINDI HIGH SCHOOL	19
351	27361715613	PANCHAM HINDI PRI SCHOOL	4
352	27361715632	PANCHAM JUNIOR COLLEGE	27
353	27361701401	PO. BE. A. S. BELWADI	13
354	27361709906	PODDAR INTERNATIONAL SCHOOL	27
355	27361707522	PRARTHANA ENGLISH PRI SCHOOL	27
356	27361707520	PRARTHANA ENGLISH SCHOOL	27



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357	27361705702	PRATIBHA VIDYAMANDIR	4
358	27361706813	PREMNATH ENGLISH PRIMARY SCHOOL	27
359	27361707504	PURUSHOTTAM PRI HINDI	4
360	27361707508	PURUSHOTTAM SEC VIDYALAY	25
361	27361707523	PURUSHOTTAM SECONDARY VIDYALAY ENG	27
362	27361707515	PURUSHOTTAM VIDYALAY ENG PRI	27
363	27361714105	PYRAMID GLOBAL SCHOOL	8
364	27361706606	R D MEMORIAL HIGH SCHOOL	27
365	27361715644	R K ENGLISH HIGH SCHOOL	27
366	27361715637	R M PAL HINDI HIGH SCHOOL	27
367	27361715622	R M PAL HINDI PRI SCHOOL	4
368	27361710231	R S DUBE JR COLLEGE	19
369	27361707104	R.C.MARUTI HIGH SCHOOL	27
370	27361707418	R.K.D. ACADEMY ENG	8
371	27361711802	R.P.WAGH HIGHSCHOOL	4
372	27361713806	RAGINI PRAMOD JR COLLEGE OF ARTS SCIENCE AND COMMERCE	27
373	27361717010	RAHUL HINDI HIGH SCHOOL	19
374	27361716118	RAHUL INTERNATIONAL	27
375	27361716126	RAHUL INTERNATIONAL SCHOOL (ICSE)	27
376	27361717404	RAJA SHIVAJI PRIMARY	4
377	27361717406	RAJA SHIVAJI MAR HIGH SCHOOL	25
378	27361715203	RAJIV GANDHI ENG HIGH SCHOOL	27
379	27361713904	RAJIV GANDHI HIGHSCHOOL	4
380	27361715201	RAJIV GANDHI HINDI HIGH SCHOOL	19
381	27361715204	RAJIV GANDHI HINDI PRI SCHOOL	19
382	27361715202	RAJIV GANDHI MAR HIGH SCHOOL	19
383	27361715206	RAJIV GANDHI MAR PRI SCHOOL	19
384	27361713903	RAJIV GANDHI PRI.S. VASAI ROAD	4
385	27361715309	RAJIV GANDHI VIDYALAY	19
386	27361700415	RAMAKRISHNA ENG MED SCHOOL	27
387	27361711403	RAMKRISHNA VIDYA. PRIMARY	4
388	27361707514	RANA PRATAP MADHYAMIK VIDYALAY	27
389	27361707513	RANA PRATAP PRATHMIK VIDYALAY	27
390	27361707524	RANA PRATAP PRI HINDI VIDYALAY	27





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Sr.No	UDISE Code	School Name	School Management
391	27361707525	RANA PRATAP SEC HINDI VIDYALAY	27
392	27361706808	RASHMI INTERNATIONAL SCHOOL	27
393	27361707720	RECKON PUBLIC ACADEMY & JR CO.	27
394	27361707718	RECKON PUBLIC ACADEMY ENG PRI	27
395	27361707717	RECKON PUBLIC ACADEMY ENG SEC	27
396	27361707715	RECKON PUBLIC ACADEMY HIN PRI	19
397	27361707716	RECKON PUBLIC ACADEMY HIN SEC	27
398	27361706108	RISHI VALMIKI JR COLLEGE	19
399	27361706107	RISHI VALMIKI PRI SCHOOL	19
400	27361706101	RISHI VALMIKI SEC. SCHOOL	4
401	27361700412	ROYAL ACADEMY	27
402	27361700413	ROYAL ACADEMY HIGH	27
403	27361713602	ROYAL ENG HIGH SCHOOL	27
404	27361713601	ROYAL ENG.PRIMARY S.DIWANMAN	27
405	27361710821	ROYAL PUBLIC SCHOOL	27
406	27361710819	ROYAL PUBLIC SCHOOL	27
407	27361711205	RUSTAMJEE CAMBRIDGE INTERNATIONAL SCHOOL	27
408	27361716119	RYAN INTERNATIONAL SCHOOL-CBSE	27
409	27361701705	S K CHAUDHARI HIGH SCHOOL	25
410	27361701704	S K CHAUDHARI PRI SCHOOL	19
411	27361707511	S K NATIONAL VIDYALAY	27
412	27361707550	S K NATIONAL VIDYALAY	8
413	27361710610	S R T VIDYAMANDIR HIGH SCHOOL	27
414	27361710612	S R THAKUR VIDYAMANDIR	27
415	27361713008	S S DHURI HIGH SCHOOL	27
416	27361710241	S S HIGH SCHOOL	27
417	27361707003	S S MORESHWAR N PATIL VIDYALAY	19
418	27361712611	S V M JR COLLEGE OF SCI & COM	27
419	27361710906	S Y MAYEKAR HIGH	27
420	27361710903	S.Y.MAYEKAR PRIMARY	27
421	27361716102	SACRED HEART HIGH SCHOOL	27
422	27361716101	SACRED HEART PRIMARY SCHOOL	27
423	27361706815	SAHYADRI SHIKSHAN SEVA MANDALS ENGLISH HIGH SCHOOL & JR COLLEGE	27



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Sr.No	UDISE Code	School Name	School Management
424	27361715339	SAI CHHAYA MODERN HIGHSCHOOL AND JR COLLEGE	27
425	27361715338	SAI CHHAYA VIDYAMANDIR AND JR COLLEGE	27
426	27361710707	SAI SHANTI DHAM MAR PRI	19
427	27361710709	SAI SHANTIDHAM VIDYAMANDIR	19
428	27361711103	SAINT MARY PRIMARY ENGLISH	27
429	27361716605	SAMEL PRATHAMIK VIDYALAY	27
430	27361714106	SANJEEVANI SCHOOL FOR THE MENTALLY CHALLENGED	12
431	27361710230	SANT LEELA SHAH ENG HIGH	19
432	27361710229	SANT LEELA SHAH ENG PRI	19
433	27361710242	SANT LEELA SHAH HIGH SCHOOL AND JUNIOR COLLEGE	27
434	27361710228	SANT LEELA SHAH HINDI HIGH	25
435	27361710227	SANT LEELA SHAH HINDI PRI	27
436	27361710220	SARASWATI HIGH SCHOOL	19
437	27361708601	SARASWATI MADHYAMIK VIDYALAYA TILHER	19
438	27361717206	SARASWATI MARATHI HIGH	19
439	27361717205	SARASWATI MARATHI PRIMARY	19
440	27361702705	SARASWATI VIDYALAY PRI	27
441	27361702701	SARASWATI VIDYALAYA	4
442	27361710213	SARASWATI VIDYAMANDIR PRI SCHOOL	19
443	27361711105	SARSWATI VIDYAMANDIR HIGH GUJ.	4
444	27361711104	SARSWATI VIDYAMANDIR PRI. GUJ.	19
445	27361715001	SATYA SAI VIDYALAYA	27
446	27361702802	SATYAM CATHOLIC SCHOOL	27
447	27361710608	SATYANARAYAN R THAKUR HINDI SCHOOL	19
448	27361710601	SATYANARAYAN R THAKUR SCHOOL	19
449	27361710606	SATYANARAYAN R THAKUR SCHOOL	27
450	27361710209	SENT JOSEPH ENG HIGH SCHOOL	27
451	27361706811	SEVEN SQUARE ACADEMY	27
452	27361714802	SHAH M K HIGH SCHOOL	4
453	27361716807	SHANKARRAO JADHAV MAR HIGH SCHOOL	19
454	27361707804	SHANTARAM BAPUJI JADHAV ENG. MED. SCH.	27



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455	27361706605	SHANTI GOVIND ENG PRI	27
456	27361706604	SHANTI GOVIND HINDI HIGH	25
457	27361706603	SHANTI GOVIND HINDI PRI	25
458	27361707558	SHARDA JR COLLEGE	27
459	27361710509	SHARDA VIDHYALAYA ENG	27
460	27361707516	SHARDA VIDYAMANDIR ENG HIGH	27
461	27361707518	SHARDA VIDYAMANDIR HIN PRIMARY	27
462	27361707510	SHARDA VIDYAMANDIR HINDI HIGH	19
463	27361707542	SHARDA VIDYAMANDIR PRI	27
464	27361711601	SHASTRI VIDYALAYA HIN. PRIMARY	4
465	27361711602	SHASTRI VIDYALAYA HIN. SECONDA	4
466	27361714801	SHETH K M GUJ PRI SCHOOL	4
467	27361712610	SHETH V.M.ENG HIGH SCHOOL CBSC	27
468	27361712606	SHETH VIDYAMANDIR HIGH SCHOOL	27
469	27361712605	SHETH VIDYAMANDIR P. VASANTNAGARY	27
470	27361717801	SHISHU VIDYALAY GUJ PRI	4
471	27361707406	SHIVAJI VIDYAMANDIR HINDI HIGH	19
472	27361707405	SHIVAJI VIDYAMANDIR HINDI PRI	19
473	27361707415	SHIVAJI VIDYAMANDIR SCHOOL PRI	27
474	27361715423	SHREE BAIJNATH VIDYALAYA	27
475	27361710304	SHREE HANUMANT VIDYAMANDIR	27
476	27361710314	SHREE HANUMAT VIDYAMANDIR HIGH SCHOOL	27
477	27361710246	SHREE KISHOR MANGALMURTI JUNIOR COLLAGE OF ARTS SCIENCE AND COMMERCE	27
478	27361715334	SHREE MAHADEV MEMORIAL SCHOOL (PRI)	27
479	27361715335	SHREE MAHADEV MEMORIAL SCHOOL (SEC)	27
480	27361707725	SHREE SAI VIDYALAYA	27
481	27361706202	SHREE SANT DNYANESHWAR SARASWATI VIDYAMANDIR	19
482	27361702103	SHREE SIDDHIVINAYAK ENG SCHOOL	27
483	27361715328	SHRI GAJANAND SINGH HIGH SCHOOL	27
484	27361714804	SHRI J J DOSHI JUNIOR COLLEGE OF ARTS VASAI	27
485	27361714803	SHRI J P JAGANI JUNIOR COLLEGE OF SCIENCE VASAI	27



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Sr.No	UDISE Code	School Name	School Management
486	27361715634	SHRI KANJIBHAI VITHALDAS PAREKH ANAND FR COLLEGE	27
487	27361710216	SHRI R S DUBEY ADARASH VIDYALAYA PRI	19
488	27361710224	SHRI R S DUBEY ADARASH VIDYALAYA SEC	19
489	27361715346	SIR G N SINGH ENG HIGH SCHOOL PRI	27
490	27361715347	SIR G N SINGH ENG HIGH SCHOOL SEC	27
491	27361715641	SMT DROPADI ENGLISH HIGH SCHOOL	8
492	27361710247	SMT INDIRA GANDHI VIDYALAY AVM JUNIOR COLLEGE	27
493	27361714805	SMT K K SHAH JUNIOR COLLEGE OF COMMERCE VASAI W	27
494	27361710307	SMT YAMUNA PASI VIDYALAY	27
495	27361715629	SMT. DROPATI ENG PRI SCHOOL	27
496	27361715628	SMT. DROPATI HINDI PRI SCHOOL	4
497	27361703603	SMT. K.L.TIWARI JUNIOR COLLEGE OF COMMERCE AND SCIENCE	27
498	27361715608	SMT.K.V.P.VIDYAMANDIR	27
499	27361716603	SOPARA ENGLISH PRIMARY	19
500	27361716604	SOPARA ENGLISH SECONDARY	4
501	27361715359	SPARKLE KIDS INTERNATIONAL SCHOOL	27
502	27361715633	ST ALOYSIUS HIGH SCHOOL & JR COLLEGE	27
503	27361703505	ST ANN'S MILENNIUM ENG SCHOOL	27
504	27361703506	ST ANN'S MILENNIUM ENG SCHOOL SEC	27
505	27361715352	ST ANNE'S SCHOOL	8
506	27361715355	ST ELIZABETH ENGLISH HIGH SCHOOL	27
507	27361716808	ST FRANCIS DE SALES SCHOOL	27
508	27361715430	ST GENIUS KIDS SCHOOL	8
509	27361717411	ST JEMS ENGLISH HIGH SCHOOL	8
510	27361710215	ST JOHN ENG PRI	27
511	27361706908	ST JOHN'S ENGLISH SCHOOL	8
512	27361717410	ST JOSEPH & MARY CONVENT SCHOOL	27
513	27361704202	ST JOSEPH JR COLLEGE	27
514	27361715350	ST MARY'S ENGLISH HIGH SCHOOL PRI	27
515	27361715351	ST MARY'S ENGLISH HIGH SCHOOL SEC	27
516	27361715623	ST PAUL ENG PRI SCHOOL	27
517	27361715631	ST PAUL HIGH SCHOOL ENG	27



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518	27361711605	ST PETER HIGH SCHOOL	27
519	27361711604	ST PETER SCHOOL	27
520	27361709905	ST THOMAS HIGH SCHOOL AND JR COLLEGE DEVTALAV SANDOR	27
521	27361710101	ST THOMAS SCHOOL ICSE BOARD	27
522	27361717210	ST. AGASTI ENG HIGH SCHOOL	27
523	27361717209	ST. AGASTI PRIMARY	27
524	27361715614	ST. ALLOYSIUS SCHOOL	27
525	27361715615	ST. ALLOYSIUS VIDYALAYA	27
526	27361712006	ST. ALOYSIUS ENG HIGH	27
527	27361712002	ST. ALOYSIUS GIRL'S HIGH SCHOOL	4
528	27361712001	ST. ALOYSIUS PRIMARY	4
529	27361712003	ST. ALOYSIUS PRIMARY ENG	27
530	27361712203	ST. ANTHONY HIGHSCHOOL	4
531	27361712202	ST. ANTHONY PRI. SCHOOL	27
532	27361715305	ST. ANTHONY'S HIGH SCHOOL	27
533	27361715304	ST. ANTHONY'S PRI SCHOOL	27
534	27361709102	ST. ELIZABETH HIGHSCHOOL	4
535	27361709101	ST. ELIZABETH PRI. SCHOOL	4
536	27361709801	ST. FRA. XAVIER VIDYALAYA GIRIZ	4
537	27361716103	ST. FRANCES DE SALES PRI. S.	27
538	27361706103	ST. FRANCES XAVIER HIGHSCHOOL	27
539	27361706102	ST. FRANCES XAVIER'S CONVENT SCHOOL	27
540	27361716804	ST. FRANCIS THE SELES SCHOOL	27
541	27361703502	ST. GONSALO HIGHSCHOOL	4
542	27361700112	ST. JAMES ENG HIGH	27
543	27361700111	ST. JAMES ENG PRI	27
544	27361700108	ST. JAMES PRI. AGASHI	4
545	27361700109	ST. JAMES SEC. AGASHI	4
546	27361710202	ST. JOSEPH FATHERWADI SCHOOL	27
547	27361700606	ST. JOSEPH'S ENGLISH SCHOOL	27
548	27361700607	ST. JOSEPH'S ENGLISH SCHOOL SEC	27
549	27361700603	ST. JOSEPH'S HIGH SCHOOL & JR COLLEGE	4
550	27361700602	ST. JOSEPH'S PRIMARY SCHOOL	4
551	27361717607	ST. LUKES HIGH SCHOOL	27





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552	27361717618	ST. LUKES JR COLLEGE	27
553	27361717605	ST. LUKES PRIMARY	27
554	27361716105	ST. MARY HIGH SCHOOL	27
555	27361709501	ST. MARY MAGADALENA MULGAON	4
556	27361716104	ST. MARY PRIMARY SCHOOL	27
557	27361711107	ST. MERRY HIGHSCHOOL	27
558	27361700202	ST. PETER ARNALA	4
559	27361712303	ST. PETER CHURCH PRI. SCHOOL	4
560	27361700207	ST. PETER ENG SCHOOL	27
561	27361714402	ST. PETER HIGH SCHOOL DIWANMAN	27
562	27361712204	ST. PETER HIGHSCHOOL	4
563	27361714401	ST. PETER PRI.SCHOOL DIWANMAN	27
564	27361713101	ST. PHILOMINA PRIM. S. MANICKP	4
565	27361716110	ST. STANISALUES HIGH SCHOOL	27
566	27361709903	ST. THO. HIGHSCHOOL DEVTALE	4
567	27361708801	ST. THOMAS PRIMARY SCHOOL SANDOR	4
568	27361706105	ST. XAVIER HIGH NAIGAON	27
569	27361706104	ST. XAVIER PRI. S. NAIGAON	27
570	27361713102	ST. XEVIER'S ENG MEDIUM SCHOOL	27
571	27361700405	ST. XEVIOR HIGHSCHOOL	27
572	27361700404	ST. XEVIOR PRIM.	27
573	27361713402	ST.ANNES HIGH SCHOOL	27
574	27361713401	ST.ANNES PRIMARY SCHOOL	27
575	27361714104	ST.AUGUSTIN HIGH SCHOOL	27
576	27361714102	ST.AUGUSTIN PRI. S. BABHOLA	27
577	27361714504	ST.FRANCIS H.S. DIWANMAN	27
578	27361714503	ST.FRANCIS PRI.S. DIWANMAN	27
579	27361712205	ST.GONSALO GARCIA	27
580	27361712207	ST.GONSALO GARCIA HIGHSCHOOL	27
581	27361703501	ST.GONSALO PRI. GAS	4
582	27361717408	ST.JEMS ENGLISH HIGH SCHOOL	27
583	27361710225	ST.JOHN ENG. HIGH SCHOOL	27
584	27361714404	ST.PETER'S JUNIOR COLLEGE OF SCI & COMM	27
585	27361716112	ST.STANISALUES PRI. SCHOOL	27
586	27361712608	ST.STANISLAUS HIGH SCHOOL	27



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587	27361712609	ST.STANISLAUS PRI SCHOOL	27
588	27361706702	ST.THOMAS ENGLISH SCHOOL	27
589	27361716705	ST.WILLIBRORD'S ENG HIGH SCHOOL	27
590	27361716706	ST.WILLIBRORD'S ENG PRI SCHOOL	27
591	27361713003	ST.XEVIER H.S. MANIKPUR	4
592	27361707512	SUDARSHAN ENG HIGH SCHOOL	27
593	27361707517	SUDARSHAN ENG HIGH SCHOOLPRI	27
594	27361717602	SUMMER FIELD ENG. HIGH SCHOOL	27
595	27361717601	SUMMER FIELD ENG. PRIMARY	27
596	27361717604	SUMMER FIELD GUJ. HIGH SCHOOL	19
597	27361717603	SUMMER FIELD GUJ. PRIMARY	19
598	27361710311	SUN-RISE ENG HIGH SCHOOL	27
599	27361710306	SUNRISE ENG-HINDI SCHOOL	27
600	27361716124	SURYODAY TRUST SCHOOL FOR STUDENTS WITH INTELLECTUAL DISABILITY	12
601	27361711502	SWAGAT ACADEMY SCHOOL	27
602	27361710715	SWAMI J V ENG ACADEMY	8
603	27361700416	SWAMI PARIJNANASHRAM EDUCATIONAL CENTRE FOR MENTALLY RETARDED SECTION	11
604	27361700411	SWAMI PARINANASHRAM	11
605	27361710507	SWAMI VIVEKANAND ENG SCHOOL	27
606	27361710218	SWAMI VIVEKANAND HINDI HIGH	4
607	27361710217	SWAMI VIVEKANAND HINDI PRI.	4
608	27361710243	SWAMI VIVEKANAND VIDYALAY ENGLISH MEDIUM	27
609	27361710232	SWAMI VIVEKANAND VIDYALAYA PRI	27
610	27361711305	SMT. TARAMAI VARTAK MEMORIAL ACADEMY	27
611	27361715320	THAKUR VIDYA MANDIR HIGH ENG	27
612	27361715321	THAKUR VIDYA MANDIR HIGH HINDI	25
613	27361715318	THAKUR VIDYA MANDIR PRI ENG	27
614	27361715319	THAKUR VIDYA MANDIR PRI HINDI	19
615	27361710415	THE AMBASSADOR HIGH SCHOOL	27
616	27361710412	THE AMBASSADOR HIGH SCHOOL PRI	27
617	27361715609	THE KAPOL BANK HIGH SCHOOL	27
618	27361711902	THOMAS BAPTISTA HIGHSCHOOL	4



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Sr.No	UDISE Code	School Name	School Management
619	27361711901	THOMAS BAPTISTA PRIMARY	4
620	27361712507	TREE HOUSE HIGH SCHOOL	27
621	27361711016	TREE HOUSE HIGH SCHOOL	27
622	27361707115	TRINITY HIGH SCHOOL	27
623	27361716701	TULINJ EDUCATION TRUST'S MAR PRI SCHOOL	4
624	27361716703	TULINJ EDUCATION TRUST'S PRI SCHOOL	27
625	27361707701	TUNGARESHWAR ACADEMY	19
626	27361707712	TUNGARESHWAR ENG	27
627	27361707713	TUNGARESHWAR ENG HIGH	27
628	27361707711	TUNGARESHWAR HINDI HIGH	19
629	27361715311	U S ENG ACADEMY HIGH	27
630	27361715310	U S ENGLISH ACADEMY PRI	27
631	27361711309	UMANG SPECIAL SCHOOL	12
632	27361711006	UTKARSHA VIDYALAYA ENGLISH PRIMARY	27
633	27361711005	UTKARSHA VIDYALAYA MARATHI MADHYAM PRATHMIK VIBHAG	4
634	27361711012	UTKARSHA VIDYALAYA ENGLISH SECONDARY	27
635	27361702201	V. V. THAKUR V. CHANDANSAR	4
636	27361705804	VAGAD GURUKUL INTERNATIONAL SCHOOL	27
637	27361715317	VEDANT PUBLIC HIGH SCHOOL	27
638	27361715316	VEDANT PUBLIC PRI SCHOOL	27
639	27361715410	VIDYA VARDHI JR COLLEGE	27
640	27361715405	VIDYA VARIDHI ENG HIGH	8
641	27361715404	VIDYA VARIDHI ENG PRI	27
642	27361715402	VIDYA VARIDHI HINDI PRI	4
643	27361715403	VIDYA VARIDHI HINDI SEC	25
644	27361710726	VIDYA VARIDHI VIDYALAYA	27
645	27361710210	VIDYA VIKASINI ENG HIGH SCHOOL	27
646	27361710211	VIDYA VIKASINI JR COLLEGE	27
647	27361710240	VIDYA VIKASINI SCHOOL (ICSE)	27
648	27361717003	VIDYABHUSHAN HIGH SCHOOL	19
649	27361717007	VIDYABHUSHAN HINDI PRI SCHOOL	19
650	27361717008	VIDYABHUSHAN HINDI VIDYALAY	27
651	27361717004	VIDYABHUSHAN MAR HIGHSCHOOL	19



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Sr.No	UDISE Code	School Name	School Management
652	27361711009	VIDYAVIHAR ENGLISH HIGH SCHOOL	27
653	27361711008	VIDYAVIHAR PRIMARY ENGLISH	27
654	27361710203	VIDYAVIKASINI PRIMARY SCHOOL	27
655	27361715312	VINAY VIDYALAY MAR PRI	19
656	27361715358	VINAY VIDYALAYA	27
657	27361716707	VIVA JUNIOR COLLEGE OF COMMERCE	27
658	27361715643	WELKIN NATIONAL SCHOOL	8
659	27361715413	YADVESH VIKAS VIDYALAY	27
660	27361715406	YADVESH VIKAS VIDYALAY	25
661	27361715414	YADVESH VIKAS VIDYALAY ENG	8
662	27361711015	YASH VIDYA NIKETAN HIGH	27
663	27361711014	YASH VIDYA NIKETAN PRI	27
664	27361711606	YASH VIDYA NIKETAN PRI VIRAR E	27
665	27361711607	YASH VIDYA NIKETAN SEC VIRAR E	27
666	27361711610	YASH VIDYANIKETAN CBSE SCHOOL	27
667	27361716108	YASHKIRTI ENG PRI SCHOOL	27
668	27361716113	YASHKIRTI ENG HIGH	27
669	27361715357	YASHWANT VIDYALAYA	8
670	27361710602	Z P BAGARSHOME	16
671	27361700408	Z P DIVLAIPADA	16
672	27361707509	Z P HARVATEPADA	16
673	27361710219	Z P JANKIPADA	16
674	27361702102	Z P SCHOOL BARAFPADA	16
675	27361701202	Z P SCHOOL BHUTPADA	16
676	27361704802	Z P SCHOOL BIBIPADA	16
677	27361707001	Z P SCHOOL BOBADPADA	16
678	27361710226	Z P SCHOOL CHINCHPADA	16
679	27361704902	Z P SCHOOL DIVEKARPADA	16
680	27361710413	Z P SCHOOL FANASPADA	16
681	27361703504	Z P SCHOOL GAS URDU	16
682	27361708604	Z P SCHOOL JADHAVPADA	16
683	27361705003	Z P SCHOOL KARKHANPADA	16
684	27361707204	Z P SCHOOL KARNALPADA	16
685	27361705805	Z P SCHOOL KELICHAPADA	16
686	27361708606	Z P SCHOOL KHAIRPADA	16



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Sr.No	UDISE Code	School Name	School Management
687	27361708002	Z P SCHOOL KOLOSHI	16
688	27361708605	Z P SCHOOL KUVARPADA	16
689	27361701409	Z P SCHOOL MADKEPADA	16
690	27361707002	Z P SCHOOL MALJIPADA	16
691	27361708607	Z P SCHOOL MASKARPADA	16
692	27361705004	Z P SCHOOL MASKINPADA	16
693	27361708608	Z P SCHOOL PALIPADA	16
694	27361712005	Z P SCHOOL PAPDI URDU	16
695	27361707719	Z P SCHOOL PELHARPADA URDU	16
696	27361701703	Z P SCHOOL SAKHARPADA	16
697	27361705005	Z P SCHOOL SASTIKARPADA	16
698	27361703002	Z P SCHOOL TALYACHAPADA	16
699	27361708609	Z P SCHOOL VARTHAPADA	16
700	27361702303	Z P SCHOOL, PATICHAPADA	16
701	27361717001	Z P TULIN 1	16
702	27361704707	Z. P. KHINDIPADA	16
703	27361704301	Z. P. SCHOOL, SATPALE	16
704	27361704001	Z. P. SCHOOL NAVALE	16
705	27361706501	Z. P. SCHOOL, BAPANE	16
706	27361706701	Z. P. SCHOOL, CHINCHOTI	16
707	27361707702	Z. P. SCHOOL, JABARPADA	16
708	27361706901	Z. P. SCHOOL, KOHLI	16
709	27361706106	Z. P. SCHOOL, PRI. NAIGAON	16
710	27361706201	Z. P. SCHOOL, PRI. PANJU	16
711	27361707101	Z. P. SCHOOL, RAJAVALI	16
712	27361706301	Z. P. SCHOOL, UMELE	16
713	27361707102	Z. P. SCHOOL, VAGHARALPADA	16
714	27361707710	Z. P. SCHOOL, VAKANPADA	16
715	27361707601	Z. P. SCHOOL, BAVKHAL	16
716	27361704703	Z. P. SCHOOL, BELKADI	16
717	27361705301	Z. P. SCHOOL, BHALIVALI	16
718	27361705801	Z. P. SCHOOL, BHAROL	16
719	27361707401	Z. P. SCHOOL, BILALPADA	16
720	27361706601	Z. P. SCHOOL, CHANDRAPADA	16
721	27361705401	Z. P. SCHOOL, CHIMANE	16





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Sr.No	UDISE Code	School Name	School Management
722	27361704601	Z. P. SCHOOL, DEVDAL	16
723	27361707501	Z. P. SCHOOL, DHANIV	16
724	27361705001	Z. P. SCHOOL, DONGARIPADA	16
725	27361707402	Z. P. SCHOOL, GAVRAIPADA	16
726	27361705501	Z. P. SCHOOL, HEDAVADE	16
727	27361704704	Z. P. SCHOOL, KAMAN MARATHI	16
728	27361704705	Z. P. SCHOOL, KAMAN URDU	16
729	27361705601	Z. P. SCHOOL, KASHID	16
730	27361707403	Z. P. SCHOOL, KHAIRPADA	16
731	27361705701	Z. P. SCHOOL, KHANIVADE	16
732	27361707201	Z. P. SCHOOL, KHOLANDE	16
733	27361705602	Z. P. SCHOOL, KOPAR	16
734	27361707703	Z. P. SCHOOL, MANPADA	16
735	27361704801	Z. P. SCHOOL, MORI	16
736	27361704901	Z. P. SCHOOL, NAGLE	16
737	27361705802	Z. P. SCHOOL, PATILPADA	16
738	27361707704	Z. P. SCHOOL, PELHAR	16
739	27361707705	Z. P. SCHOOL, PELHARGAON	16
740	27361707706	Z. P. SCHOOL, PELHARPADA	16
741	27361705002	Z. P. SCHOOL, POMAN	16
742	27361707707	Z. P. SCHOOL, SAGPADA	16
743	27361705803	Z. P. SCHOOL, SAKAVAR	16
744	27361705101	Z. P. SCHOOL, SARAJA MORI	16
745	27361707202	Z. P. SCHOOL, SASUNAVGHAR	16
746	27361707203	Z. P. SCHOOL, SASUPADA	16
747	27361707502	Z. P. SCHOOL, SHANTINAGAR	16
748	27361707519	Z. P. SCHOOL, SHANTINAGAR URDU	16
749	27361705201	Z. P. SCHOOL, SHILOTTAR	16
750	27361705901	Z. P. SCHOOL, SHIRSAD	16
751	27361707301	Z. P. SCHOOL, TIVARI	16
752	27361706602	Z. P. SCHOOL, VAKIPADA	16
753	27361707709	Z. P. SCHOOL, VANVATHAPADA	16
754	27361707708	Z. P. SCHOOL, VARTAK VASAHAAT	16
755	27361716504	Z.B. ZAKARIA HIGH SCHOOL	27
756	27361716503	Z.B. ZAKARIA ENGLISH PRIMARY SCHOOL	27



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Sr.No	UDISE Code	School Name	School Management
757	27361710503	Z.P. AAMACHISHALA NARINGI MAR.	16
758	27361717405	Z.P. BABHULPADA PRIMARY	16
759	27361701201	Z.P. SCHOOL ADANE	16
760	27361700110	Z.P. SCHOOL AGASHI	16
761	27361701301	Z.P. SCHOOL AMBODE	16
762	27361700203	Z.P. SCHOOL ARNALA	16
763	27361700301	Z.P. SCHOOL ARNALA KILLA	16
764	27361700205	Z.P. SCHOOL ARNALA URDU	16
765	27361701403	Z.P. SCHOOL BELWADI	16
766	27361701404	Z.P. SCHOOL BHATANE	16
767	27361702101	Z.P. SCHOOL BHATAPADA	16
768	27361701501	Z.P. SCHOOL BHINAR	16
769	27361700501	Z.P. SCHOOL CHIKHALDONGARE	16
770	27361701406	Z.P. SCHOOL HATTIPADA	16
771	27361701405	Z.P. SCHOOL JAMBHULPADA	16
772	27361701602	Z.P. SCHOOL KALBHON	16
773	27361701601	Z.P. SCHOOL LENDIPADA	16
774	27361701701	Z.P. SCHOOL MEDHE	16
775	27361700801	Z.P. SCHOOL MUKKAMPADA	16
776	27361703903	Z.P. SCHOOL NALLE	16
777	27361701101	Z.P. SCHOOL NAVAPUR	16
778	27361701407	Z.P. SCHOOL PACHRUKHA	16
779	27361701702	Z.P. SCHOOL PLOTPADA	16
780	27361701408	Z.P. SCHOOL THALYACHAPADA	16
781	27361702601	Z.P. SCHOOL, BHOYEPADA	16
782	27361703301	Z.P. SCHOOL, BHUIGAON DONGARI	16
783	27361700406	Z.P. SCHOOL, BOLINJ	16
784	27361702202	Z.P. SCHOOL, CHANDANSAR	16
785	27361702301	Z.P. SCHOOL, DAHISAR	16
786	27361702401	Z.P. SCHOOL, DOLIV	16
787	27361702702	Z.P. SCHOOL, FANASPADA	16
788	27361702501	Z.P. SCHOOL, GASAKOPARI	16
789	27361701901	Z.P. SCHOOL, GHATEGHAR	16
790	27361702001	Z.P. SCHOOL, INAMPADA	16
791	27361702302	Z.P. SCHOOL, JAMBHULPADA	16



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Sr.No	UDISE Code	School Name	School Management
792	27361703602	Z.P. SCHOOL, KALAMB	16
793	27361702602	Z.P. SCHOOL, KANER	16
794	27361702703	Z.P. SCHOOL, KASARALI	16
795	27361703001	Z.P. SCHOOL, KHARDI	16
796	27361702801	Z.P. SCHOOL, KOPARI	16
797	27361701801	Z.P. SCHOOL, NAVASAI	16
798	27361703202	Z.P. SCHOOL, RAIPADA	16
799	27361703601	Z.P. SCHOOL, RANBHAG	16
800	27361701902	Z.P. SCHOOL, SAIVAN	16
801	27361703201	Z.P. SCHOOL, SHIRGAON	16
802	27361702704	Z.P. SCHOOL, TALAVAPADA	16
803	27361702002	Z.P. SCHOOL, VADGHAR	16
804	27361711204	Z.P.A.S.HIRA VIDYA. VIRAR NO.1	16
805	27361711404	Z.P.AAMACHI S. KWARI URDU	16
806	27361711501	Z.P.AAMACHI SHALA VIRAR EAST	16
807	27361711603	Z.P.AAMACHI SHALA VIRAR URDU	16
808	27361711701	Z.P.AAMACHISHALA KANYA GUJRATI	16
809	27361710801	Z.P.AAMACHISHALA MANVELPADA	16
810	27361711010	Z.P.AAMACHISHALA N. HIN. VIDYA	16
811	27361710504	Z.P.AAMACHISHALA NARINGI GUJ.	16
812	27361710702	Z.P.AAMACHISHALA PHULPADA	16
813	27361710904	Z.P.AAMACHISHALA VIRAR GUJRATI	16
814	27361710905	Z.P.AAMACHISHALA VIRAR STATION	16
815	27361711203	Z.P.AAMACHISHALA, DONGARPADA	16
816	27361710603	Z.P.AAMACHISHALA, GOPACHARPADA	16
817	27361710701	Z.P.AAMACHISHALA, JIVDANINAGAR	16
818	27361712902	Z.P.PRI. SCHOOL MAR. NAVGHAR E	16
819	27361712901	Z.P.PRIMARY GUJ. S.NAVGHAR E.	16
820	27361706803	Z.P.SCHOOL JUCHANDRA	16
821	27361715307	Z.P.SCHOOL, NILEMORE	16
822	27361715801	Z.P.SCHOOL, ACHOLE 1	16
823	27361710204	Z.P.SCHOOL, BHATPADA	16
824	27361710205	Z.P.SCHOOL, BHOIDAPADA	16
825	27361708602	Z.P.SCHOOL, BURUDPADA	16
826	27361707802	Z.P.SCHOOL, CHANDIP	16



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Sr.No	UDISE Code	School Name	School Management
827	27361707901	Z.P.SCHOOL, DEPIVALI	16
828	27361709301	Z.P.SCHOOL, DEWALE	16
829	27361708301	Z.P.SCHOOL, DONGARIPADA	16
830	27361710301	Z.P.SCHOOL, GIDRAI PADA	16
831	27361710206	Z.P.SCHOOL, GOKHIVARE NO.1	16
832	27361711903	Z.P.SCHOOL, GOVARDHAN V.PAPDI	16
833	27361716402	Z.P.SCHOOL, GUJ. SOPARA	16
834	27361708001	Z.P.SCHOOL, KARANJON	16
835	27361710404	Z.P.SCHOOL, KATELPADA	16
836	27361708101	Z.P.SCHOOL, MANDAVI	16
837	27361716401	Z.P.SCHOOL, MARATHI SOPARA	16
838	27361708201	Z.P.SCHOOL, MAZIVALI	16
839	27361710405	Z.P.SCHOOL, NAVAJEEVAN	16
840	27361708302	Z.P.SCHOOL, PAROL	16
841	27361714301	Z.P.SCHOOL, PRI. MANICKPUR	16
842	27361713801	Z.P.SCHOOL, PRI. NAVGHAR HINDI	16
843	27361713802	Z.P.SCHOOL, PRI. NAVGHAR MAR.	16
844	27361713004	Z.P.SCHOOL, PRI. UMELMAN	16
845	27361710302	Z.P.SCHOOL, SATIVALE	16
846	27361708401	Z.P.SCHOOL, SHIRAVALI	16
847	27361708501	Z.P.SCHOOL, SHIVANSAI	16
848	27361707803	Z.P.SCHOOL, TABALEPADA	16
849	27361710208	Z.P.SCHOOL, TANDAPADA	16
850	27361710403	Z.P.SCHOOL, TARKEPADA	16
851	27361708603	Z.P.SCHOOL, TILHER	16
852	27361709003	Z.P.SCHOOL, TOKPADA	16
853	27361715308	Z.P.SCHOOL, TULINJ URDU	16
854	27361710303	Z.P.SCHOOL, TUNGARPHATA	16
855	27361708701	Z.P.SCHOOL, USGAON	16
856	27361708702	Z.P.SCHOOL, USGAON GAON	16
857	27361715401	Z.P.SCHOOL, VALAIPADA	16
858	27361710406	Z.P.SCHOOL, VALIV	16
859	27361712505	Z.P.SCHOOL, VASAI NO.1	16
860	27361712506	Z.P.SCHOOL, VASAI URDU	16
861	27361713301	Z.P.SCHOOL, PRI. CHULNE	16



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Sr.No	UDISE Code	School Name	School Management
862	27361714403	Z.P.SCHOOL,PRI. DIWANMAN	16
863	27361709802	Z.P.SCHOOL,SALOLI	16
864	27361716502	Z.P.SCHOOL,SOPARA URDU	16





### List of Hospitals

Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
1	Astha Hospital 101 -104, New Krishna Housing Soc., Ambadi Rd.,Vasai (W.)	Dr .Sanjay Waghani M.D., DCH. - 9326066106	15
2	Colony Nursing Home Opp. New English school, vasai gaon , vasai(w)	Dr. Neha R. Desai (M.D.,D.A., D.G.O.) 32322150	14
3	SUSHILA NURSING HOME Shankarbaba Gvankar Rd,Bhasker Aali,Vasai (W)	Dr. Sandeep L. Gavankar (M.D. D.G.O) 9823278753	12
4	CHAITANYA NURSING HOME Sarswati Prasad Bldg.,Gaulwada, Nr. Parnaka, Vasai (W)	Dr.Amita A. Marathe (M.D.,D.G.O) 2309304	15
5	SANKHE HOSPITAL Vishwakarma Nagar, Phase-II, 100 Ft. Rd., Vasai (W)	Dr.Sandesh D. Sankhe (M.D.,D.G.O.,D.F.P) -9823146347	15
6	DR.GOYAL'S CHILDREN & GENERAL HOSPITAL B-1,2,3, EC-36, Evershine City, Vasai (E)	Dr.Anil K.Goyal (M.B.B.S.,D.C.H.) 2460770	16
7	Om sai hospital Tulip,A Wing, Ground Floor, Vrindavan Complex, Behind HDFC Bank, Opp. J.B. Ludhani School, Evershine City, Vasai (E.)	Dr. Baliram D.Parsewar (M.B.B.S., M.D.,D.N.B) 9326087281	15
8	THE VASAI BLIND RELIEF ASSOCIATIONS EYE & GENERAL HOSPITAL Azad Rd., Parnaka, Vasai (W)	Mrs.Meghna S. Kulkarni 9324261143	20
9	Ashwini Hospital Tulinj Road, Near East -West Breez, Nsp(E)	Dr.Hemant Samel MD., DCH 9766431253	12
10	Ashwini Hospital Patankar Park, Nsp(W.)	Dr.Hemant Samel MD., DCH 9766431253	14
11	OM HOSPITAL Priyanka Complex, 1st Flr.,Chandan Naka, Chandresh Lodha Marg, Nallasopara (E)	Dr.Sanjay S.Vagghani (M.D.(Paed),D.C.H.,F.C.P.S.) 9326066106	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
12	ASHASUMAN HOSPITAL Gopani Nagar, Agashi Rd., Bolinj, Virar (W)	Dr.Mahesh K. Kharde (M.S. (Orth.), D.N.B.(Orth.),D.Orth. ) & Dr.(Mrs.) Maitreyee M. Kharde (M.B.B.S., D.G.O (Mum.)) 9823146287	15
13	KRISHNADEEP HOSPITAL Kini Arcade, 'C'Wing, 2nd Flr., Nr.Stella Petrol Pump, Barampur, Vasai (W)	Dr. Jayesh A. Gharat (M.S.(Oph.)) & Dr.Namita J. Gharat (M.B.B.S. (D.G.O)) 9890044118	4
14	HARSH PAEDIATRICS CENTRE A-16/17, Bhagyoday Building, Gokhiware, Vasai (E.)	Dr. Parag R. Dhande (M.B.B.S., D.C.H.) 9324518260	10
15	VIJAYALAXMI MATERNITY, SURGICAL & GENERAL HOSPITAL A/101 - 104, Savita Apt., Near New Kanchan School, Virar Road, Nallasopara (E.)	Dr. Vidya Vinayak Sawant (M.S., (D.G.O.)) 9763892040	37
16	RIDDHI NURSING HOME & GENERAL HOSPITAL A/101 to 103, Veena Complex, Vasant Nagari, Nallasopara (E.)	Dr. Omnarayan Sitaram Singh (M.B.B.S.) 9890079688	15
17	GLOBUS HOSPITAL 101,102 Shalibhadra Classic, Above Union Bank, New Link Rd, Nallasopara (E)	Dr. Sunil M. Apotikar (M.D.) 9822291838	18
18	SANE NURSING HOME Patankar Park, P-001, P-004,P-005,P-006, Gr. Floor, Station Rd., Nallasopara (W)	Dr. Bhuraj T. Sane (M.D) 9326469690	20
19	RAKIYA HOSPITAL Bably Apt.,Behind Axis Bank, Station Rd., Nallasopara (W)	Dr. Farook R. Chinde (M.B.B.S., D.Ortho, M.S.,M.Ch (Ortho) ) 9763567411	14
20	ADITYA ORTHOPAEDIC & SURGICAL HOSPITAL Ashirwad, Opp.Sushila Nursing Home, Ramedi, Vasai (W)	Dr.Ameya N. Galvankar (M.S. (Ortho.)) 9850665922	10
21	SAHAYOG HOSPITAL S.No.190, Yashwant Vihar Complex, Bolinj, Virar (W.)	Dr. Harshvardhan D. Patil (M.S.(Paed.),(F.I.A.P.S.)) 9823146256	25



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
22	Laxmi My Nest Test Tube Baby Clinic Papdi, Vasai (W.)	Dr.Mukesh Patil Dr.Nitin Deshpande 9765908092	7
23	DR. JOSHI MATERNITY & EYE HOSPITAL Friendship Corner, Ground Floor, Dindayal Nagar, Vasai Road (W.)	Dr. Mrs. Kunda Raghuveer Joshi (M.D.,D.G.O.) 9823216769	15
24	Veena eye care hospital & ayurveda centre 107/B, Ashok Nagar,Ambadi Rd.,Vasai Rd. (W)	Dr.Ketan P. Dewan (M.S.,Ophthalmology) 9890238530	2
25	Menon's ENT Hospital Abhijat, Panchal Nagar, Vasai(w)	Dr.Vinod P. Menon (M.B.B.S.,M.S.,Ent.) 9822089832	2
26	SAIDHAM MATERNITY & NURSING HOME B-3, Saidham Tower, Achole Road, Nallasopara (E.)	Dr. Sanjay R. Manjalkar (M.D., D.G.O., D.F.P.) 9850043083	15
27	ABHINAV MATERNITY & NURSING HOME A-01, Ground Floor, Chawre Arcade, Beside Civic Center, Station Road, Nallasopara (W.)	Dr. Charudatta Mohan Patil (M.B.B.S., D.A., D.N.B) & Dr. Rohini Charudatta Patil (M.B.B.S., D.G.O.) 9881276317	15
28	VRINDAVAN MATERNITY & NURSING HOME Achole Rd., Chandan Naka, Behind Syndicate Bank, Nallasopara (E.)'	Dr. Vijay D. Borkade (M.D.) 9226147050	8
29	ASHIRWAD NURSING HOME 1St Flr., C-Wing, Seema Complex, Tulinj Rd., Nallasopara (E)	Dr. Mr. Ravindra R. Deshpande (M.D.,Med.) & Dr.Mrs. Jayshree R. Deshpande (M.D.,Paed.) 9822391246	24
30	VIKAS CHILDREN'S HOSPITAL 105, Mukesh Apt., Station Rd., Above Hotel Priya, Vasai (W.)	Dr.Suhas S.Gokarn (M.D.,D.C.H.) 9326472323	33
31	ABHINAV PAEDIATRIC HOSPITAL & NICU 14, Dayasagar, Opp. Jogalekar Hospital, Jakatnaka, Virar (W.)	Dr. Nilesh Shyamsundar Palwankar (M.D.(Paediatric), D.N.B.))  9890878316	10



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
32	ABHINAV PAEDIATRIC CLINIC & DAY CARE CENTRE 201, Mataji Krupa, 2nd Flr., Phoolpada Rd., Virar (E)	Dr. Nilesh Shyamsundar Palwankar (M.D.(Paediatric), D.N.B.) 9890878316	8
33	PARAM MATERNITY & SURGICAL NURSING HOME E-101/102, Ambo Vihar, Tirupati Nagar, Bolinj, Virar (W.)	DR.Kiran E. Dane (M.S) 9320055215	15
34	KULKARNI EYE HOSPITAL Sai Ratna Apt., 1st Floor, Above Snehanjali Electronics, Agashi Rd., Virar (W)	Dr.Parag P. Kulkarni (M.S. (Opthal.) D.N.B) 9820341961	2
35	DR. JOGLEKAR'S "ABHYUDAY MATERNITY HOME Prerna Bld. No.1, Opp.Octroi Naka, Virat Nagar, Virar (W)	Dr.Uday M. Joglekar (M.D.(Obs./Gyn.)) 9822656117	18
36	DR. D.J.SAMEL MATERNITY & NURSING HOME Nile - More ,Station Rd., Near Flyover Bridge, Nallasopara (W)	Dr. Prajakta V.Samel (M.D.,D.G.O) & Dr.Ulka Vijay Samel 9892701115	15
37	MAHAVIR NURSING HOME Vimalnath Apt., Ground Flr., M.B.Estate, Virar (W)	Dr. Naresh J. Chheda (M.S.,D.N.B) 9823146202	25
38	Manorama Nursing Home Saisadan bldg.3, Ambawadi Rd., Tulinj, Nsp(E.)	Mr.Bhagavat Mishra Dr.Swapnil Gautam (M.D. (Gen. Med.)) 9322506039	20
39	Manoram Nursing Home Shree Omkar CHS, Prince Park, Bldg.No. 5, Nagindaspada, NSp East.	Mr.Bhagavat Mishra Dr.Swapnil Gautam (M.D. (Gen. Med.)) 9322506039	20
40	Neminath Hospital Neminath nagar./, Achole cross Rd., Nsp(E.)	Dr.Rajesh Jain 9325696607	15
41	Kudalkar Maternity & Nursing Home M/2,3 ,West Avenue CHS., Station Rd., Nallasopara(W)	Dr.Santosh Kudalkar MD., DGO. 9822052101	9
42	Dr.Vishwakarma Hospital & Diagnostic Centre Gokhiware, Range Office, Vasai(E.)	Dr.Subhashchandra Vishwakarma BAMS 9890179222	7



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
43	Dr.Pratibha Rathi Eye Care Centre A/201, Ornament C.H.S.,Ltd., Above State Bank Of India, Evershine City, Vasai (E)	Dr. Pratibha M. Rathi (M.B.B.S. D.O.M.S.) 9326476734	1
44	SNEHA HOSPITAL – East Unit-II Shree Om Shanti CHS., Plot No. 20, 1st Flr.,Central Park, Nallasopara (E)'	Dr.Ranjit H. Sonaye (M.S.,D.Ortho.) & Dr.Veena H. Pandey (B.H.M.S.) 9922993868	14
45	GOLDEN PARK HOSPITAL 1st flr., Golden park Commercial Complex, Behind Parvati Cinema Hall, Sai Nagar, Vasai(W)	DR. Malcolm D . Pestonji (M.S. Ortho.) 2334780	50
46	DR. YADAV HOSPITAL 101/102, Silver Link ,Station Rd., Nallasopara (W)	DR. Shivshekhar R. Yadav (M.D., M.B.B.S.) 9823281496	21
47	DR.YADAV HOSPITAL B-01, Saidham Tower , Achole Rd., Nallasopara (E.)	DR. Suman S. Yadav (M.D.,D.G.O.) 9823146325	9
48	PRAKASH NURSING HOME Vishal Apt.,Dindayal Nagar,Vasai Rd.(W.)	Dr. Prakash N. Shinde (M.S.) 9890293888	13
49	INDU DIABETES SPECIALITY & DIABETIC FOOT CARE HOSPITAL 953-1, J.C. House, Plot No.20, Near K.T.Wadi Hall, Diwanman, Vasai (W)	DR. Janardan N.Yadav (M.D.(Gen.Med.)) 6455191	14
50	Alliance Hospital Near Atmavallabh Soc. Tulinj, Nallasopara (E)	Dr.Anil Goyal M.B.B.S., D.C.H. 0250-2439999	45
51	ACHOLE HOSPITAL B/102, Saidham Tower, Achole Rd., Nallasopara(E)	Dr. Ramkumar R. Warriar (M.B.B.S.,M.D.) 9823191656	8
52	VATSALYA MATERNITY & NURSING HOME Mohak Chambers II,Groung Flr., Manvelpada Rd., Virar (E)	Dr. Sunita R. More (M.B.B.S.,D.G.O.,D.N.B.) 9960075045	15
53	CENTRE FOR COSMIC HOMOEOPATHY C-1/C-2, Shanti Van,Vasant Karishma Cmpl., Ambadi Rd., Vasai (W)'	Dr.Abhay M. Chheda (B.H.M.S.) 9326665333	2





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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
54	DR. BIJUR'S EYE HOSPITAL A2/105, Vishwakarma Paradise, Ambadi Rd., Vasai (W)	Dr. Ravindra N. Bijur (M.B.B.S., D.O.M.S.) 9822403232	3
55	VIJAY ENT HOSPITAL & MICRO SURGERY CENTRE 101,102,103 Sterling Apt., Nr. Woodland Cinema, Virar (W)	Dr. Vijay S. Jadhav (M.S.(ENT)),DORL,MCPS) 9822146260	7
56	NEW PATIL MATERNITY & NURSING HOME Near Civic Centre, S.T. Stand Rd., Nallasopara (W)	Dr. Kishor D. Patil (M.D.,D.G.O.) 9890164632	13
57	SHREE SAI HOSPITAL Dhaniv Bag, Near Shiv Mandir, Highway Rd., Nallasopara (E)	Dr. Vinay Kumar S. Pandey (B.A.M.S.) Dr.Jnanendra B. Dwivedi (M.B.B.S) 7498206709	14
58	GARDEN VIEW NURSING HOME PVT.LTD. Mahesh Park - Garden View, Tulinj Rd., Nallasopara (E)'	Dr.Vipul H. Gada (B.H.M.S.) Dr.Deepakkumar H. Patel (M.B.B.S.,M.S.) 9890138980	20
59	OM SAI HOSPITAL Reliable Plaza, 1st Flr., Ashok Nagar, Achole Rd., Opp. Dwarka Hotel, Nallasopara (E)	Dr.Baliram D. Parsewar (M.B.B.S,M.D.,D.N.B.(Obst.& Gynaec.) 9545495111	15
60	SHREE BALAJI HOSPITAL B/Mirza Nagar, Near railway Station,Bazar Ward, Virar (E)	Dr. Mahesh S. Ayyar (M.B.B.S.,M.S.,Surg.) 9823146580	15
61	AGARWALA EYE CLINIC & LASER CENTRE 2nd Flr., Madhupuri Cmpl., Opp. Catholic Bank, Station Rd., Vasai (W)	Dr.Salil R. Agarwala (M.S., DOMS,FCPS, DNB, Ophth.,) 982129625	1
62	SHREEJI NURSING HOME Sonal Apt., 1st Flr., Raja-Shivaji Rd., Virar(W)	Dr. Meena R. Kadrekar (M.D.,D.G.O.) 9890544914	12
63	TONDARE MATERNITY HOSPITAL & NURSING HOME Ambika Plaza, 1st Flr.,Above SBI ATM , Jivadani Rd., Virar (E)	Dr.Aparna M. Tondare (M.B.B.S.,D.G.O.) & Dr.Mahadev R. Tondare (M.B.B.S.,D.G.O., D.F.P.) 9320432666	10



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
64	SUSHRUT HOSPITAL A/101, Satyam Cmpl., Station Rd., Nallasopara(W)'	Dr. Rohit C. Dandawate (M.S.,Gen.Surgary) 9326699267	15
65	SHREE GANESH NURSING HOME Ground Floor, Giridarshan Apt., Jivdani Rd., Munshi Nagar, Virar (E)	Dr.Deepak D. Mahimkar (M.D.,Obst.& Gyanaec.) 9823034727	18
66	ACHOLE HOSPITAL Ganesh Shopping Centre, Achole Rd., Nallasopara (E)'	Dr. Ramkumar R. Warriar (M.D. (Med.))	8
67	NAVJEEVAN HOSPITAL & VASAI TEST TUBE BABY CENTRE Near Saibaba Temple, Bhabola Naka , Vasai (W)	Dr.Vijay V. Shirishkar (M.D.,D.G.O.) 9890534151	16
68	ASHWINI HOSPITAL 2,109,110,111, Swapna Nagar No.01, P.P. Marg ,Virar (W)	Dr.Vinit C. Dandawate (M.D.,M.N.A.M.S, P.G.D.M.L.S) 9326656163	15
69	ARTH HOSPITAL Nallasopara - Vasai New Link Road, Vasai (E)	Dr.Mithilesh R. Mishra (M.B.B.S.,M.S.,M.R.C.S.,M.C.H.(Plastic Surgery)) 9321748294	36
70	SURYA HOSPITAL Shri Ganesh Shopping Centre, Tanda Pada, Santosh Bhuvan, Nallasopara (E)	Dr. Suhas M. Rao (M.D.,(Med.)) 9323416497	14
71	Virar Maternity & Nursing Home Vishal Apt., Chhatrapati Shivaji Marg, Virar(W)	Dr. Dipak A. Desai (M.D.,Obst.& Gynac.) 9730015720	23
72	Sir D.M.Petit Hospital Parnaka,Opp.Bazar Peth,Vasai Gaon,Vasai (W)	M/s.Commiisioner VVCMC, Dr.Rani Badlani (M.B.B.S.)	80
73	AASTHA CHILDREN HOSPITAL G - 9/10/11, Gopani Nagar, Opp. Premium Park, Bolinj, Virar (W)	Dr. (Mrs.) Inderjit S. Pandit (M.D.,Pediatrics) 9028300121	8
74	SHUSHRUSHA HOSPITAL Near K. G. High School, Chalpeth Rd., Agashi, Virar (W)'	Dr.Harshavardhan D. Patil (M.B.B.S., M.S.(Paed. & Gen.Surgeon) 9823146256	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
75	Kalyani children Hospital Madhukunj Apt, Chandansar rd, Virar (E)	Dr. Shankar P. Mukharjee (M.B.B.S.,D.C.H.) 9225127276	5
76	SHUBHAM HOSPITAL & NURSING HOME B/001, 002, Ankita Apt., Behind HDFC Bank, Kumbharwada, Agashi, Virar (W)	Dr. Madhuri V. Shahane (B.A.M.S.) Dr.Shubhangi Gite (M.B.B.S) 0250-2343630	7
77	Ravi Hospital 50, Anand Nagar, Navghar, Opp. Platform No.01, Vasai (W)	Dr. Yogendra J. Ravi (M.S., Ortho, D'ortho, M.B.B.S. ) 9823055864	30
78	Kalyani Children Hospital C-1, 1st Floor., Shakti Apt., Near Ram Mandir, M.B. Estate, Virar (W)	Dr. Shankar P. Mukharjee (M.B.B.S.,D.C.H.) 9225127276	5
79	Sankalp Hospital Kishor Kunj, Building No.01, C-Wing, Opp. Old VIVA College, Near Ganpati Mandir, Virar (W.)	Dr. Suresh G. Sonawane (M.B.B.S., M.D.(Med.)	10
80	SHUBHAM LIFELINE MULTISPECIALITY HOSPITAL 101& 106, 1st flr., Makwana Cmplx.,V.S.Marg, Virar(E)	Dr. Shivshankar R . Kabade (M.B.B.S, D.Ortho., Mch.Ortho.) 9049197755	25
81	PLATINUM HOSPITAL'S PVT. LTD. Shri Sankalp Siddhi Complex, Opp. Range Office, Gokhiware, Vasai (E.)	Sanjit Paul (B.P.T.) Dr. Nitin B. Ahire (M.B.B.S., D.A.C.P.S.) 9320835502 9320835525	60
82	CARDINAL GRACIAS MEMORIAL HOSPITAL Bangli, Sandor, Vasai(W)'	Ms. Evette C. Coutinho 7350742424	130
83	Ankur Padet. Hospital A/204/206/207/203,Thakur Tower,R.C.S.Rd.,Virar(W)	Dr.Shailesh R. Barot (M.D.,Pediatrics) 9822840801	30
84	Omkar Orth.Hospital B/102/103,Prathamesh Vihar C.H.S.Virar,Agashi Rd., Virar (W)	Dr. Jayant D. Jadhav (M.S.,D.Orth.)	12
85	Dhanwantari Hospital First Floor, Om Arcade, Shop No.106, Gawad Wadi, Jivdani Rd.,Virar (E.)'	Dr. Sandeep G. Kale (B.A.M.S.) 9867011055	16



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
86	Chaitanya Hospital A /Wing, 2nd Flr. Mata Pita Apt., Sant Nagar, Manvelpada Rd.,Virar(E)	Dr. Amit Samant MBBS, DNB PAED. DCH Dr. Anamika Samant MBBS, DNB Gen. Medicine	25
87	Sanjivani Hospital Near Datta Mandir, Virar (W)	Shri .Vivek Waman Samant 9220822806	100
88	DHANWANTARI AYURVEDIC HOSPITAL & PANCHKARMA CENTRE A-001/002,Vishnu Govind Nagar CHS., Kamanwala Compound, Agashi Rd., Bolinj, Virar (W)	Dr.Dattatraya B. Muzumdar (M.D.,Ayu.) & Dr. Sarita D. Muzumdar (B.A.M.S.,Ayu.)	5
89	Dr. Chitres Creation Fertility Centre 201, Almeida Landmark, 2nd Floor., Next to Hanuman Mandir, Manikpur Naka, Vasai(W)	Dr.Pradeep L. Chitre (M.D.,(Obst. & Gyn.) D.G.O.,) 9322873255	5
90	Dr. Sheetal Deshpandes Materntiy Home 104, Mukesh Apt. Soc., Station Rd., Vasai (W)	Dr.Sheetal A. Deshpande (M.B.B.S.,D.G.O.) 9890275111	5
91	DR.JOSHI PRIMATURE BABY UNIT 2nd Flr., J.M. Shopping centre ,Virar (W)	Dr.(Mrs.) Archana H. Joshi (M.B.B.S.,M.D.,D.C.H.) 9823281447	5
92	DR. JOSHI CHILDREN'S HOSPITAL 1st Flr., 'A'Wing, Manor CHS., Vartak Rd., Virar (W)	Dr. Hemant A. Joshi (M.B.B.S.,D.C.H.,M.D.(Paediatrics)) 9823281447	15
93	Riddhivinayak Multispecility Hospital Plot No.302, Nallasopara-Virar Link Rd., Beside Railway Carshed, Nallasopara (W)	Dr.Venkat S. Goyal (M.D.,D.M.,Cardiology) 9820321815	200
94	Dr.Waghmare Hospital 101,102,Shree Ganesh Apt., chinch PAda Gokhivare,Vasai(E)	Dr.Ramesh Waghmare MBBS 9423081388	25
95	Balaji Nursing Home Ground Flr., Guaraipada Naka, nallasopara (E)	Dr.Lochan Patil MBBS 7798162893	14
96	Desouza Hospital Ramedi,Dhowali,Vasai(W)	DR. JOSEPH S. D'SOUZA ( M.S.(Gen. Surgeon)) 9326471145	35



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
97	Chaphekar Hospital 101/102/202, Ashok Nagar Chs., Ambadi Rd., Vasai (W)	DR. Prashant D. Chaphekar (M.D.,Med.) & DR. Mrs. Priya P. Chaphekar (M.B.B.S.) 9823057028	15
98	Shreepal Netralaya 127A/132/133/134, Shreepal Shopping Centre, Agashi Rd., Virar (W.)	DR. Chandrashekhar P. Ranade (M.S.,(Oph.),D.O.M.S.)	2
99	Life Line Hospital Nandanvan Soc., Behind Raja Dairy, Chorghe Tower, Phoolpada Rd., Virar (E)	Dr. Rajesh B. Dhole (M.D.,Chest Physician ) 9764323364	15
100	SHREE SURGICAL & GENERAL HOSPITAL Kuber Apt., Ambadi Rd., Vasai (W)	Dr.Shripad R. Kanekar (M.B.B.S., M.S.(Gen.Surgery) 9689734863	20
101	Shri.Narsingh K. Dube Cha.Trust & Ayu.Medical College & Medical Hospital Nallasopara East	Dr. Omprakash N. Dube (B.A.M.S.(MD.Sch.)) 9637644551	60
102	Ankur Mat. & Nursing Home Ashok Nagar Ambadi Rd., Vasai (W)	Dr. Sheela P. Paknikar (M.D.,D.G.O.,DFP)	15
103	Mamata Hospital 32, Gurukrupa Apt., Sainagar , Vasai West	Dr. Dilip Chaniary M.D. D.G.O	8
104	TONDARE HOSPITAL A/1st flr.,Mata-Pita Apt., Sant Nagar Rd., Opp.Manvelpada Rd., Near Canara Bank, Virar (E)	DR.Mahadev R.Tondare (M.B.B.S.DGO,DFP) & DR.Aparna M. Tondare (M.B.B.S.DGO)	10
105	Paras Mat. & Nursing Home Shivshakti Buld., Ramu compound, near Ganpati mandir,V.S.Marg,Virar(E)	DR. Sushil S. Tarfe (M.B.B.S. DGO) 8605040923	15
106	Om Hospital Shree Pant Nagari, 3rd Flr., Azad Rd., Opp. Shani Mandir, Remedy Vasai (W)	Dr.Sampada P. Patil (M.D.(Chest))	28
107	SHUBH MATERNITY HOME Kumbhar Build., Tulinj Rd., Nallasopara (E)	Mrs. Dr.Yogita R. Jagdale-Kumbhar (M.B.B.S.,D.G.O.)	5
108	SHRI K.V.O.JAIN MAHAJAN MUMBAI NAVNEET HOSPITAL 2nd Flr., Residency Apt., Achole Talaw, Achole Rd., Nallasopara(E)	Dr.Nemji Gangar	15





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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
109	Sushrut Hospital ARC Bhavan, Evershine City, Last Stop, Vasai (E)	Dr.Avinash Wanjarwadkar MBBS	20
110	St.Theresa's Hospital St.theresa Convent,At.Post-Agashi,Virar(W)	Sr.Ivy Sebastian Kharjia Dr.Bharat B. Rathod (M.B.B.S.,D'Ortho)	30
111	Shreyas Hospital Dream House,Sai Nagar,Vasai(W)	Dr. Sandeep V. Potdar (M.S.)	15
112	Dr.Kulur's Hospital Sahyagiri,Navghar,Veer Savarkar Nagar,Vasai (W)	Dr. Raghuram G. Kulur (M.B.B.S.,M.S.(Gen.Surgery))	16
113	Saibaba Hospital A/01,Ground Flr.,New Siddhi Vinayak C.H.S.,IDBI Bank,Station Rd., Nallasopara(W)	Dr.Deepakkumar Patel (M.B.B.S.,M.S.)	4
114	Divekar Hospital C/001,Gulmohar Cmpl.,Phase III,Bypass Rd., Bolinj,Virar(W)	Dr. (Mrs.) Namita G. Divekar (M.B.B.S.,D.M.R.D.,P.G.D.M.L.T.)	15
115	Shree Sidhivinayak Eye Hospital B/104,Bharat Vaibhav Build.,Above Syndicate Bank,Achole Rd.,Nallasopara(E)	Dr. Sachin M. Gaidhankar (M.B.B.S.,M.S.,(Oph.)) 7758039603	15
116	Bhushan Hospital Mohak Chambers-III,Behind Vatsalya Hospital,MANvelpada rd., Virar(E)	Dr.Sushant Mahale M.S. Ortho.	25
117	Mahavir Nursing Home 1st floor, above bank of maharashtra, Ambawadi Rd, Tulinj Rd, Nallasopara E.	Dr.Amit Tiwari (BHMS) Dr.Brijesh Patel (M.B.B.S.) 8149063533	25
118	Risha Eye Hospital B/01/02,Krishna Retail Space,Opp.K.M.P.D. School,Tulinj Rd., Nallasopara(E)	Dr. Rakshit K. Galia (M.B.B.S., D.O.M.S., D.N.B.,)	2
119	Iasis Hospital Evershine City Vasai (E)	Dr. (Mrs.) Silvi John (M.B.B.S.,D.G.O.,M.D.,) & Mr.K.V.John 02503056248	56
120	LIFECARE CHARITABLE HOSPITAL C-Wing, Martin Complex, New Nallasopara- Vasai Link Rd., Nallasopara (E.)	Dr. Mahabali A. Singh (M.B.B.S., P.G.D. (Cardiology)) 9867708862	40



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
121	Virar Homeopathic Medical College & Hospital Gaurangi Apt.,Veer Savarkar Marg, Begger's Home, Virar (E)	Dr.Arun Bhure (L.C.E.H) 0250-6585760	25
122	Rajsukh Nursing Home Bilalpada,Pellhar Rd., Near Dubey's Nursing Hospital,Nallasopara(E)	Dr.Rajendra P. Kushwaha (M.D.,Ayu.) 9850076249	5
123	Mamata Nursing Home 1st Fllr.,Somnath Cmpl.,At east side end of Nallasopara Flyover,Nallasopara (E)	Dr.Pijush Saha (M.D.,D.N.B,D.G.O.)	14
124	Eshwar Children Hospital Ashok Nagar, Ambadi Rd., Vasai W	Dr. Pramod Kumar Mehata M.B.B.S., M.D., (Ped.)	15
125	Eshwar Clinic Shri Nidhi Shri krishna Complex, Stella, Vasai West	Dr. Chetana Mehta M.B.B.S.,M.D.,D.C.H	15
126	Apollo Children Hospital E001, 002,, D/004, Jay Vijay Galaxy, Jay Vijay Nagar, Opp. Sarswat Bank, 100 ft. Rd., New Link Rd., Nallasopara (E.)	Dr. Sunil Birade (M.B.B.S., D.C.H) 9404043984	17
127	Evershine Multispecility Hospital Flat NO.4/5/6/7/8,Ground Fllr., Aster Build., Vrindavan Soc.,Avershine City,Vasai (E)	Dr.Ganesh Rane (M.B.B.S.,M.D.) 02506577070.	21
128	Dr.Palaskar Hospital Behind Sai Baba Mandir,Bhabola Naka Vasai (W)	Dr.Sameer Palaskar (D.N.B.,D.Ortho	18
129	Indranush Health Care Centre Akshar Bhuvan CHS., Vijay Vihar Cmpl.,Avershine City,Vasai (E)	Dr.Shishir Garg (M.B.B.S.) 0250- 6062606	15
130	Vatsal Eye Care & Laser Center B/02, Panchal Nagar Soc, Navghar Vasai Rd, Vasai(w)	Dr. Pritam Dedhia (M.B.B.S,M.S, OPHTHAL)	1
131	Guru Krupa Hospital A Wing Darshan Nagar, Manvel Pada Rd, Virar(e)	Dr. Janardan Yadav (M.B.B.S, M.D,Medicine)	15
132	Vasai Virar City Municipal Corporation Vijay Nagar, Tulinj Hospital Vijay Nagar, Tilinj, Nallsopara East	M/s.Commiisioner VVCMC Dr. Bhakti Choudhari (MBBS)	80



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
133	Ojas Super Speciality Eye care Hospital Jai Heritage, 1st Floor, marry Villa, Vasai (W)	Dr. Sagar S. Kharosekar Dr. Gauri s. Kharosekar 7507371850	1
134	Dr. Gulve eye Hospital 104, Dattatreya Shopping Center, 1st floor, Navghar, Vasai Road (W.)	DR. SHAHAJI D. GULAVE (M.B.B.S, M.S. (Oph.)) 9890475930	1
135	Dr. Jyoti Patil Hospital 102, Royal House, Waliv Naka, Waliv, Vasai (E.)	Dr. Jyoti Jitendra Patil (M.B.B.S., D.G.O.) 8378096003	10
136	Anusaya Children Hospital Makwana Cmplx, Near Vasai vikas Sahkari Bank,V.S.Rd. Virar East	Dr. Kishan Kale M.D., Ped. 9730316211	15
137	Sidhhi IVF Fertility Service 1st Flr., Parshv Parvati, Above Gangar Eye Nation , Vasai W 0250-6060609	Dr. Kaustubh D. Kulkarni (M.D., D.G.O., D.N.B) & Dr.SanjayR.Manjalkar (M.D.,D.G.O.,D.F.P) 9850043083	4
138	Siddharth Hospital Rashmi Pink City, Phase 1, Nr. Don Bosko School, Juchandra, Naigaon E.	Dr. Ashok Waghmare BHMS Dr.Melville Alvarez (M.D.(Gen.Med.)) 9930163263	20
139	Arnala Health Trust's Shree Mahalakshmi Hospital Opp. Ram Mandir, Arnala, Tal- Vasai	Dr. Heman Shantaram Kulkarni (M.S.,(D.N.B.))	20
140	Surya Eye Hospital 004, Groung Floor, Keshav Apt., Bhaji Lane, Aagashi Rd, Virar west	Dr. Vishwas Gavai MBBS, DOMS, MS 9320413121	2
141	Krushnai Nursing Home Ground Floor, Viva Choraghe Tower, Phoolpada Rd, Virar E	Dr. Prasad Dhodapkar M.D., Gyn. Dr. Ashwarya Dhodapkar MBBS., DA 8806785477	7
142	Shri K. V.O. Jain Mahajan, Mumbai Navneet Hospital Chandra Darshan Chs.,Plot no.10, Nr.Railway Stn.,Behind Jain Mandir, Achole Rd.,	Shri Nemji Gangar 7709722247	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
	Nallasopara (E)		
143	Gayatri Hospital F-001, Ground Floor, Lavdeep Apt., Waliv, Vasai E	Dr. Pravin Talele MBBS 8698699545	14
144	Yashoda Children Hospital B/10, Madhu Maitri Apt., Above PMC Bank, Manvelpada, Virar E	Dr. Santkumar Zha BAMS, DCH, Dr. Amitkumar Rai MBBS 9766902022	25
145	Dr. Raut E.N.T. Hospital Jamuna, Veer Savarkar Nagar, Vasai Rd., West	Dr. Deepak Raut M.S.(E.N.T) 0250-2334086	3
146	Global Hospital Yashwant Sidhhi, Y.K. Nagar, Virar W	Dr. Jigar Wala M.B.B.S., MS.ORTHO 0250-6908585	15
147	Seema Hospital Chavare Avenue, Nile More, Nrar East- Westy Flyover, Nallasopara West	Dr. Raupani Julfikar M.B.B.S., M.S. 8888400079	30
148	DR. LAHANE HOSPITAL & NURSING HOME C/101, Om Garden, Manvelpada Rd., Virar (E.)	Dr. Shilpa A. Lahane (M.B.B.S., DFW) 9850125635	5
149	Asian Eye Institute & Laser Center 112/113, Pushp Plaza, 1st Flr., Above Snehanjali, Manvelpada, Virar East	Dr. Hitesh Cheda MS 0250-6908822	1
150	Aarush Hospital Suruchi Apt., Ground Floor, Shop No.A-001 To A-007, Mohak City, Virar East	Dr. Pramod Yadav BAMS Dr. Manvendra Yadav MBBS 0250-6903838	18
151	Aanand Netralaya Office No 2, Charbhujia Apt., Kharodi Naka, Bolinj, Virar W.	Dr. Anand Raut MBBS, DOMS, DNB 9764580968	3



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
152	Gupta Eye Hospital Shop No. 1,21 & 7, Ganesh Shopping Center, Nile Gaon, Nallasopara W.	Dr. Amal Gupta MBBS. DOMS, MS 8888441074	1
153	DR. DESAI'S CHILDREN HOSPITAL Sharda Palace, Behind Navghar Municipal, Vasai Rd.(W.)'	Dr. Ramakant Z. Desai (M.D.,DCH) 9822031876	12
154	JANSEVA HEALTHCARE LLP 1st Floor, Dattani Prism-1, Behind Dattani Square Mall, Papdy, Vasai (W.)'	Shri. Shailesh Thakur Dr.Merina Philips (M.B.B.S) 8390887766	60
155	SHREE GANESH HOSPITAL 1st Floor, Shree Dattatreya Shoping Centre, Nr. Parvati Theatre, Vasai (W.)	Dr. Praveen Kumar (M.B.B.S., M.D., D.M(Gastro)) 7057373385	9
156	STERLING HOSPITAL & KIDNEY CARE CENTRE 1ST Floor, A-Wing, Karari Residency, Laxmiben Chheda Marg., Nallasopara (W)	Dr.Nitin L.Sonavane (M.D.(Med.),DNB (Nephrology)) 0250-6424881	15
157	ISHAAN UROLOGY & KIDNEY CARE HOSPITAL Nr. Dosti Diamond Bldg.,Opp. Kini Auto, Behind Stella Petrol Pump, Barampur, Vasai (W)	Dr.Devendra K. Patil (M.S.(Gen.Surg.), D.N.B.,(Urology) ) 9322106422 8080004499/88	16
158	DR.MUKESH PATIL'S CENTRE FOR WOMENS HEALTH Beside The Bassein Catholic Co.Op. bank, Bhabola branch, Nr. Mac Donald, Bhabola, Vasai (W)	Dr.Mukesh M. Patil (M.B.B.S., M.D.(OB/GY)) 9765908092	45
159	J.P.HOSPITAL & DIAGNOSTICS Opp. To D.M.Petit Municipal Hospital, Parnaka, Vasai Gaon,Vasai (W)	Dr.Kaushik J.Joshi (M.S. (Gen.Surg.) ) & Dr.Harshali Joshi (M.D.,D.N.B., (Anaes.)) 9226873376	10





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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
160	KRISHNA HOSPITAL R/A,R/B, Sai Ram Chs.,S.T. Depot Rd., Nallasopara (W)	Dr.Dilip K. Palange M.S.(Ortho.),M.S.(Gen.Surg.) & Dr.Charulata D. Palange(M.B.B.S.,(Anaes.)) 7066014875	10
161	DR.MORE HOSPITAL Banking Hall, First Floor, Prabhat C.H.S. Ltd., Kulvaibhav Nagar, Achole Road, Nallasopara (E.)	Dr.Nitin Chandrakant More (M.B.B.S.,D'Ortho.) 9833861933	15
162	KRISHNA HOSPITAL Prabhu Niwas, Meena Nagar,Ambadi Rd.,Vasai (W.)	Dr.Raafe R. Shaikh (B.U.M.S) Dr.Merina Philips (M.B.B.S) 8237033782	25
163	OZONE MULTISPECIALITY HOSPITAL S-005, S-006,S-007, Ground Floor & S-101 to S-114 on first floor, Garden Supreme Bldg.,Next to Vasai fire brigade, Vasai- Nallasopara Link Rd., Vasai East	Dr.Atul D. Paraskar (B.H.M.S)  Dr.Swapnil A. Sonar (M.B.B.S., DNB (Gen.Med.)) 9867990039	45
164	NETRA -JYOT EYE HOSPITAL Shop No.B-12, Garden View Chs., Mahesh Park, Tulinj Rd., Nallasopara (E.)	Dr. Praful G. Nakar (M.B.B.S.,D.O.,D.N.B. (Oph.))	1
165	DR.RAUT'S MATERNITY & GENERAL HOSPITAL Near Darga Naka, Papdy - Naigaon Rd., Vasai (W)	Dr.Pravin P. Raut (M.B.B.S.,D.G.O.) Dr. Rajendra S. Pingale (M.B.B.S.,D.N.B, D.G.O) 9822218028	15
166	DR.SONNEKAR'S NURSING HOME Gagan Galaxy Bldg., Near Evershine Bhaktidham Mandir, Evershine City, Vasai (E.)	Dr.Shilpa G. Sonnekar (M.B.B.S.,D.G.O.) Dr.Girish G.Sonnekar (M.B.B.S.,D.C.H, D.N.B) 9326471218	10
167	PRABHAVATI ENT CENTRE G-003, Chandresh Palace Chs.Ltd., S.T. Depot Rd., Nallasopara (W.)	Dr.Sangamlal B.Pal (M.S.(E.N.T.))  9833604464	1



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
168	SHREE SIDDHIVINAYAK MULTISPECIALITY HOSPITAL A-Wing, First Floor, Madhuvan Heights, Bldg.-1, Madhuvan Township, Near Evershine Gate, Gokhivare, Vasai (E.)	Dr.Mrs.Priti P. Kadam (M.S.(Obs. & Gyn.))	15
169	SARTHAK MATERNITY & NURSING HOME Groung Floor, Viva Mall Tower, Pushpanagar, Opp. Bus Depot., Virar (W.)	Dr.Sachin B. Deshmukh (M.S., D.G.O.(Obs. & Gyn.)) 9819138696	15
170	PARIMAL HOSPITAL Tirupati Balaji soc., Manvelpada Rd., Virar (E.)	Dr.Pavitra P. Borkar (M.S.) 9823264576	13
171	DRISHTI EYE HOSPITAL A-102, Gokul Kshitij, Gokul Township, Bolinj, Virar (W.)	Dr.Hemantkumar Chasia (M.S.(Opthal.) D.O.M.S.) 9819117847	1
172	GAYATRI HEALTHCARE A-002, EC-70, Mangal Madhuli CHSL., Evershine City, Vasai (E.)	Dr.Ganesh S. Munjwal (M.B.B.S.,D.O.M.S.)	4
173	VAJRESHWARI HOSPITAL & ICU Mohak City, First Floor, Virar-Nallasopara Link Rd., Manvelpada, Virar (E.)	Dr.Vijay S. Tiwari (B.H.M.S) Dr. Manvendra Yadav (M.B.B.S) 9272813167	15
174	JAI AMBE POLYCLINIC NURSING HOME & MATERNITY HOSPITAL Near Shyam Shraddha School,Dhaniv Baug, Nallasopara (E.)	Dr.Jagnnath Prasad Yadav (B.A.M.S) Dr.Ajay Chaurasia (M.B.B.S, F.C.P.S(Med.)) 9869659898	15
175	NAVODAYA CHILDREN'S HOSPITAL Mohak City, Virar-Nallasopara Link Road, Virar (E.)	Dr.Venkat T. Gunale (M.B.B.S., DCH)	15
176	SUNSHINE MULTISPECIALITY HOSPITAL Riddhi Siddhi Residency, A/101, First Floor, V.S. Road, Next to Bank of India, Naringi, Virar (E.)	Santosh B. Bari Dr.Avinash P. Chaurasia (M.B.B.S) 9665180840	20
177	RISK CARE HOSPITAL Dubey Apt., First Floor, Near Phoolpada Rikshaw Stand, Virar (E.)	Dr.Manoj Kumar R. Singh (B.A.M.S) Dr.Shardul Sushil (M.D., D.N.B.E) 7276350008	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
178	NAIK HOSPITAL & ORTHOPAEDIC CENTRE Gala No.17,19 & 20, New Patankar Park Chs., Near Sane Hospital, Nallasopara (W.)	Dr.Hrishikesh Naik (M.B.B.S., DNB (Ortho.)) 8080106583	7
179	SAI CHAITANYA HOSPITAL 07, Yashvant Apt., Opp. Indian Oil Petrol Pump, Sainath Nagar, Virar (E.)	Dr.Dilip V. Salunkhe (M.B.B.S.) 8097848457	15
180	SWAMI SHRADDHANAND HOSPITAL Near Shankaracharya Mandir, Nirmal, Vasai (W.)	Dr. Ajay P. Sankhe (M.B.B.S., M.D., (Paed.)) Dr. Ajinkya R. Bhoir (M.B.B.S)	45
181	NETRAM EYE CARE CENTRE G-4, Ground Floor, Devdarshan Society, Evershine City, Opp. J.B. Lidhani School, Vasai (E.)	Dr. Jitendra A. Suthar (M.S.(Ophthalm))	2
182	NEW AYUSH NURSING HOME Om Sai Shopping Centre, Near Shiv Mandir, Dhaniv Baug, Nallasopara (E.)	Dr.Triloki A. YADAV (B.A.M.S) Dr.Bhanupratap V.Dubey (M.B.B.S)	12
183	INDRADHANUSHYA HEALTH CARE CENTRE Building No.133, Flat No. G-4, Arise Soc., Evershine city, Vasai East.	Dr. Radheshyam Garg MBBS., MD 9823146345	15
184	ZYGOTE IVF CENTRE Surya Sagar building, Ground Floor, Near VVCMC Garden, Vasai Rd. Vasai West	Dr. Baliram Parsevar M.D., DNB 9545495111	4
185	KALPTARU HOSPITAL 101, First Floor, Ashoka Shopping Centre, Near Jakat Naka, Virar West.	Dr. Narendra Pawar M.S. Gen . Surg. 9967329159	10
186	OM SAI HOSPITAL Gala No 1 & 2, Shirsad Phata, Near Jain Mandir, Virar East	Dr. Sunilkumar Patel MBBS, D'Ortho 9890302391	14
187	Jaypuriya Eye Care Centre Shop No 9 & 10, Sunshine Garden, Opp. S.T. Merry School, Nallasopara East	Dr. Anand Jaypuriya MBBS, DOMS 8767480808	1
188	VIVAAN HOSPITAL 1401, Tungar Phata, Sativali, Western Express Highway, Vasai (E.)	Vibhuratna Jiyalal Yadav Dr. Megha D. Mane (M.B.B.S., D.G.O.)	15



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189	UNITED MULTISPECIALITY HOSPITAL C-Wing, First Floor, Paccha Plaza, Samelpada, Nallasopara (W.)	Dr. Mahendra Ramashankar Pal (M.B.B.S.) 9619725805	20
190	TULIP MATERNITY & NURSING HOME Shop No.1, Flat No. E-01, E-02, Gokul Park, Opp. D-Mart, Near New Viva College, Virar (W.)	Dr. Rahul V. Patil (M.B.B.S., D.G.O., D.N.B.) 7767852828	10
191	AAROGYAM CHILDREN'S HOSPITAL B1-16/16A, Vishwakarma Paradise, Phase-I, Ambadi Road, Vasai (W.)	Dr. Sunil Laxman Birhade (M.B.B.S., D.C.H.) 8600930333	13
192	SWARA HOSPITAL First Floor, APPOLO Shopping Center, Near S.K. Dairy, Virar-Agashi Road, Virar (W.)	Dr. Prashant Khobaji Walke (M.B.B.S., M.D.(Medicine)) 98900844434	15
193	VASAI-VIRAR CITY MUNICIPAL CORPORATION, MATERNAL & CHILD HEALTH CENTRE- SATIVALI Opp. Shivsena Office, Sativali, Vasai (E.)	THE COMMISSIONER, VASAI VIRAR CITY MUNICIPAL CORPORATION	30
194	NEW LAXMINARAYAN HOSPITAL 3, Indraprastha No.01 C.H.S. Ltd., VijayNagar, Tulinj, Nallasopara (E.)	Dr. Ashish Harindra Shukla (B.A.M.S.) Dr. Pavitra Borkar (M.S.) 9822196403	10
195	SHRUTI EYE CARE AND LASER CENTRE 103, First Floor, Tania Horizon, Station Road, Nallasopara (E.)	Dr. Saurabh Prabhakar Chaudhari (M.S.,(Ophthalmology)) 8446811543	1
196	VINAYAKA HOSPITAL Doctors House, Surve No.237/241, Achole Gaon, Nallasopara East.	Dr. Ranjeet Harinath Upadhyay (B.A.M.S.) Dr. Mukund Shinde (M.S.,(Gen. Surg.)) 7028352381	75
197	STAR HOSPITAL Beside Krish Garden Bldg., Opp. Shani Mandir, Laxmiben Chheda Road, Patankar Park, Nallasopara (W.)	Dr. Mahabali Adhyashankar Singh (M.B.B.S.,P.G.D.,Cardiology) 9867708862	60



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198	INFOGO EYE CARE HOSPITAL Shop No.10, and 12 to 20, Ground Floor, First Floor, Twin Tower, Near Vijay Sales, Tirupati Nagar, Virar (W.)	Shridhar Raghunath Thakur Dr.Prasad Kamat (M.S. Opthal.)	10
199	VIBHAS HOSPITAL Bungalo No.1 & 2, Opposite old VIVA College, Bypass Road, Kishorkunj, Virar (W.)	Dr. Kirti Yashwant Tandel (M.B.B.S., D.P.M.) 9987230222	14
200	VASAI-VIRAR CITY MUNICIPAL CORPORATION, MATERNAL & CHILD HEALTH CENTRE- JUCHANDRA Juchandra, Behind Devki Hotel, Naigaon (E.)	THE COMMISSIONER, VASAI VIRAR CITY MUNICIPAL CORPORATION	25
201	CARE 'N' CURE MULTISPECIALITY HOSPITAL 101-106, Kamdhenu C.H.S.Ltd., First floor, Opp. S.B.I. Bank, Achole Road, Nallasopara (E.)	Chandrakant Shambhunath Mishra 8888444609 Dr. Gaurav Sharma (M.B.B.S., M.D. (Pediatrics))	16
202	WANI HOSPITAL First Floor, Topaz Trade Centre, Tulinj Road, Nallasopara (E.)	Dr. Shaheda Sumra (M.B.B.S., D.G.O.) 9869333645	30
203	JEEVAN JYOTI TRUST HOSPITAL Sitaram Commercial Complex, Santosh Bhavan Naka, Nallasopara (E.)	Dr. Subhash Laxmishankar Yadav (M.D. (Medicine)) 9967281605	39
204	OM SAIRAM NURSING HOME C-201, Veer Splender Yashwant VIVA Township, Near Swastik Mall, Opp. D-Mart, Railway Link Road, Nallasopara (E.)	Dr. Anil Kumar Mitthoo Yadav (M.S. (Ayurveda) (Prasooti And Streeroga)) 9823884756	15
205	SAI SAMARTH HOSPITAL Grond Floor, Vinayaka III, Ramchandra Nagar, Opp. Z.P. School, Phoolpada, Virar (E.)	Dr. Dilip Vitthal Salunkhe (M.B.B.S.) 7021214009	15
206	SHREE SAI MULTISPECIALITY HOSPITAL & ICU First Floor & Ground Floor, Shanta Jyot Shopping Centre, Near Manikpur Post Office, Manikpur, Vasai (W.)	Dr. Padmaraj Shetyappa Patil (M.B.B.S., D.N.B.) 9767697912	25





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207	PULSE HOSPITAL Shop No.05, D-001, E-001, Kalpana Garden, Near D-Mart, Yashwant Viva Township, Link Road, Nallasopara (E.)	Dr. Arvindkumar Surendra Singh (B.A.M.S.) 9225101312 Dr. Yashwant Babar (M.D. (Medicine))	12
208	SALIHA HOSPITAL Shop No. 1 & 2, Lav-Deep Building, Near Navjeevan, Waliv, Vasai (E.)	Dr. Abul Wafa Khan (B.U.M.S.) 8390996090 Dr. Sunil Patel (M.B.B.S.)	10
209	SPARSH HOSPITAL Ekta Manzil, First floor, Above Sainidhi Veg Hotel, Near Fly Over Bridge, Virar (E.)	Dr. Gaurav Narottam Patil (B.A.M.S.) 8149356858 Dr. Linus Rodrigues (M.D., Physician)	10
210	AL-SHAFAT HOSPITAL Shop No.08, Saba Apt., Rehmat Nagar, Near Sitara Bakery, Nagindas Pada, Nallasopara (E.)	Dr. Abdul Rahman Choudhary (M.B.B.S.,(D'Ortho.)) 9579492341	10
211	ISHAAN MULTISPECIALITY HOSPITAL First Floor, Vishnu Apt., Phase-1, Next to Navakar City, Pareira Nagar, Naigaon (E.)	Dr. Siddharth Arvindkumar Mishra (B.H.M.S.) 7972205104 Dr. Dharmendra Dubey (M.B.B.S.,D.N.B. (Chest Med.))	16
212	VASAI KIDNEY CARE Ground Floor, Madhav Mahal, Chulane Road, Vasai (E.)	Dr. Anurag Rakesh Kumar Shukla (M.D. (Medicine), D.N.B. (Nephrology) 8527580205	15
213	PATHDARSHAK MEDICAL CENTER – VIRAR Daffatari Complex, Gala No.14, First floor, M.B. Estate, Plot No. 09, Virar (W.)	Jagdish P. Dani 7498888477 Dr. Rahul Kulkarni (M.D., D.N.B. (Medicine))	5
214	IRA HOSPITAL Second Floor, Aaradhya, Near D-Mart, Bhabola Naka, Vasai (W.)	Dr. Anish Deepak Raut (M.B.B.S., D.N.B. (Plastic Surgery)) & Dr. Amruta Anish Raut (M.B.B.S., D.G.O.) 9890312050	4
215	SWASTIKA CHILDREN'S HOSPITAL N-183, Civic Center, Co-Op. HSG. Soc., Station Road, Nallasopara (W.)	Dr. Sushank Sankatha Patel (M.B.B.S., D.C.H.) 7738433966	15



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216	KSHITIJ VISION CENTER & ARTHRITIS CLINIC C-03, Indraprastha C.H.S., S.T. Depot Road, Nallasopara (W.)	Dr. Sanjay Raghunath Sonawale (M.B.B.S., M.S. (D.O.M.S.)) 9892156620	1
217	MATA BAL SANGOPAN KENDRA SARVODAY VASAHAT Ambedkar Nagar, Sarvoday Vasahat, Nallasopara (E.)	THE COMMISSIONER, VASAI VIRAR CITY MUNICIPAL CORPORATION	25
218	BHAKTIVEDANTA – SUKRIT AYURVEDA HEALTH CENTRE Suleshwar Road, Village Navale, Nirmal, Tal- Vasai, Dist- Palghar	Dr. Nanasaheb Somnath Memane (B.A.M.S., M.S.(Ayurved))	25
219	VIVAAN HOSPITAL C/101, First Floor, Saidham Tower, Next to Kaushalya Diagnostic, Achole Road, Nallasopara (E.)	Vibhuratna Jiyalal Yadav Dr. Megha D. Mane (M.B.B.S., D.G.O.) 9833322123	15
220	ANANDVAN WELLNESS FOUNDATION'S ANANDVAN WELLNESS CENTRE 003, Vidula Apt., Near S.T. George Church, Panchalnagar, Ram-Laxman marg, Nallasopara (W.)	Akshay Vilas Bhoir & Shri. Omkar Nilprakash Patil Dr. Neeta Balam (M.B.B.S.) 7276705356	25
221	WELLCURE MULTISPECIALITY HOSPITAL Gagan Giri Apartment, Opp. Old Post Office, G.M. Factory, Chandansar Road, Virar (E.)	Dr. Atul Kumar Rajendraprasad Tiwari (B.H.M.S.) Dr. Dharmendra Sharma (M.B.B.S.) 7715848454	20
222	UNIVERSAL HEALTH CARE CENTRE 15, Om Vinayak Darshan C.H.S., Achole Cross Road, Near Sangam Medical, Nallasopara (E.)	Dayashankar Nandraj Upadhyay Dr. Radheshyam Garg (M.D., D.A.) 9970452105	5
223	SANJIVANI CLINIC AND DAY CARE CENTER Shop No. 03-04, Dhanlaxmi Apt., Chintamani Marg, Gandhi Chouk, Phoolpada Road, Virar (E.)	Dr. Ashish Prakash Nirgude (B.A.M.S.) Dr. Shailendra More (M.B.B.S., D.C.H.) 8446709363	5



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224	RAMRAKSHA HOSPITAL First Floor, A-Wing, Poonam Park View, Near Club One/Yazoo Park, Global City, Virar (W.)	Dr. Mrs. Deepanjali R. Deshpande (M.S., (E.N.T.)) 7775860274	10
225	PRIYADARSHANI NURSING HOME Second Floor, M. Baria Estate, Kargil Nagar Road, Near Manvelpada Talao, Virar (E.)	Dr. Dinesh Kumar Gangwani (M.B.B.S., D.A., F.C.P.S.(Anaes.)) 9833527266	25
226	MAMTA NURSING HOME First floor, Somnath Complex, Near Flyover, Tulinj Road, Nallasopara (E.)	Dr. Dineshkumar Gangwani (M.B.B.S., Dip. Anaes., F.C.P.S. (Anaes.)) 9833527266	14
227	VEDICARE – KERALA AYURVEDA PANCHKARMA CHIKITSALAY A-1 Farm, Patala Talo, Navapur Road, Umbergothan, Virar (W.)	Justine Jacob 9545131237	13
228	JIVDANI EYE CARE HOSPITAL 07, Om Vinayak Darshan, Below MSEB Office, Achole Road, Nallasopara (E.)	Dr. Poonam Jagannath Rai (M.S. (Ophthalmology)) 8097767877	2
229	GALAXY HOSPITAL Tulip Avenue, Pl. No.03/96, N.H.-48, Pelhar, Vasai (E.)	Dr. Pooja Khan (M.P.T.) Dr. Gaurav Sharma (M.D., Paediatrics) 8693876117	25
230	DR. MANGESH PRABHUDESAI CLINIC & DAY CARE CENTER A-Wing, Flat No.02/03, Shivshakti Complex, Phanspada, Waliv, Vasai (E.)	Dr. Mangesh Arvind Prabhudesai (M.B.B.S.)	2
231	PRIME MULTISPECIALITY HOSPITAL 101, First Floor, Dhanraji Apt., Opp. Moregaon Talao, Moregaon, Nallasopara (E.)	Dr. Moyeenuddin Zaheeruddin (B.U.M.S.) Dr. Siddhesh Rane (M.B.B.S.) 7021627969	15
232	KAUL CITY – DEDICATED COVID HOSPITAL” ‘Kaul City, Bhabola, Vasai (W.)’		45



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233	CHIRAYU CHILDRENS HOSPITAL First Floor, Sandor Village, Bhabola, Vasai (W.)	Dr. Praphull Ramchandra Rane (M.B.B.S., D.N.B. (Paediatrics)) 8884925875	16
234	WANI HOSPITAL Near Sopara English School, Samelpada, Survey No. 29, Nallasopara (W.)	Dr. Shaheda Sumra (M.B.B.S., D.G.O.) 9869333645	30
235	K & K SUPERSPECIALITY HOSPITAL Shop No 1 & 2, A- Wing, Shanti Life spaces II, New Alkapuri Link Road, Near – D- Mart, Nallasopara (E.)	Dr. Suraj Ashok Baghel (M.B.B.S., Mch Ortho, MS, DNB, FCPS (ortho.)) 9930445856	30
236	SHREE JEEVDANI DEVI HOSPITAL, CHANDANSAR Chandansar Road, Next to Raj Karnav Hotel, Chandansar, Virar (E.)	THE COMMISSIONER, VASAI VIRAR CITY MUNICIPAL CORPORATION	150
237	CITY HOSPITAL Sai Plaza, Opp. Yash Vidya Niketan School, Manvelpada, Virar (E.)	Dr. Shivshankar R. Kabade (M.B.B.S., D'Ortho., Mch. Ortho.) 9049197755	25
238	ARISE HOSPITAL & ICU Ground Floor, Vimal Residency, Yashwant Gaurav, Fun Fiesta Road, Nallasopara (W.)	Dr. Mrs. Khushboo Sushil Mishra (B.H.M.S.) Dr. Sneha Bhoir (M.B.B.S., Dip. (Gynac. & Obst.)) 9356216568	15
239	NISWAARTH HOSPITAL First Floor, Sandeep Heights, Opp. DGS Building, Morya Nagar, Besides Railway Yard, Nallasopara (W.)	Dr. Mahabali Adhyashankar Singh (M.B.B.S.) 9867708862	25
240	NISWAARTH HOSPITAL Third Floor, Kanch Bldg., Sharda Mata Ashram, Old Viva College, Mangalmurti Mandir Lane, Near Lion Gym, Virar (W.)	Dr. Mahabali Adhyashankar Singh (M.B.B.S.) 9867708862	50
241	SPARSH MATERNITY HOME Ground Floor, Aakar Building, Opp. 100 Feet Road, Ambadi Road, Vasai (W.)	Dr. Shobha Himanshu Patil (M.S. (Obst. & Gynec.)) 9769998933	12



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242	SANSKRITI HOSPITAL Romana Complex, First Floor, Unit No. 5, 6 & 7, Vasai Phata, Vasai (E.)	Vinay Chhotelal Singh Dr. Suryakant Pandit (M.B.B.S.) 8830706542	25
243	APPASHETH THORAT MULTISPECIALITY HOSPITAL & CRITICARE CENTER Shanti Niwas, Opp. Nidan Diagnostic Center, Gurudwara Nagar, Vasai (W.)	Dr. Pravin Appaso Thorat (B.H.M.S.) Dr. Shulmit Vaidya (M.B.B.S., M.S. (General Surgeon)) 8605550099	25
244	AARTI HOSPITAL 101, First Floor, Falak Residency, Santosh Bhuvan, Nallasopara (E.)	Dr. Deepak Sarjan Bhardwaj (M.B.B.S.)	11
245	MAA URMILA HOSPITAL & I.C.C.U. Keshav Apt., Behind New India Co.Op. Bank, Bhaji Galli, Virar (W.)	Dr. Dinesh V. Dubey (D.H.M.S.) Dr. Linus Rodrigues (M.B.B.S.) 9561569892	10
246	HITAM HOSPITAL B/01, Bright Land Plaza, Behind Vasai Janta Bank, S.T. Depot Road, Nallasopara (W.)	Chandrajeet K. Yadav Dr. Manvendra Yadav (M.B.B.S., D.A.) 7385133239	10
247	FEVER AND BRAIN HOSPITAL OPC PVT. LTD. Gaurav Villa Juchandra Road, Ground Floor, Shop No. 1 & 4, First Floor 1 & 2, Second Floor 1 & 2, Third Floor 1, Naigaon (E.)	Dr. Vinod Anant Singh (B.H.M.S.) Dr. Bharatkumar Chaudhary (M.B.B.S., D.N.B. (General Surgery)) 9222221103	42
248	MANGALMURTI HOSPITAL Flat No. 01, 02, 03, Bldg. No. 32, Ground Floor, Mangalmurti Nagar, Opp. Shani Mandir, Near Tungreshwar Phata, Vasai (E.)	Ahsan Ali (B.P.T.) Dr. Tarun Tandon (M.B.B.S.)	15
249	S M MULTISPECIALITY HOSPITAL Sai Pariwar, First Floor, Pragati Nagar, 90 Feet Road, Nallasopara (E.)	Dr. Akshata Mangesh Patil (B.A.M.S.) Dr. Adesh Mishra (M.D. (Pharmacology)) 7715988369	30
250	MEERA CHILDREN'S HOSPITAL Gangotri Gokol Tower Co.Op. Hsg. Soc. Ltd., Tulinj Road, Opp. Radha Krishna Hotel, Nallasopara (E.)	Dr. Sushank Sankatha Patel (M.B.B.S., D.C.H.) 7738433966	15



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251	SOPARA MULTISPECIALITY HOSPITAL Gala No.3380, Ground Floor, Near National Hotel, Sopara Phata, Nallasopara (E.)	Dharmendra Summat Yadav Dr. Dilip Yadav (M.B.B.S.) 8097051953	15
252	GRACE ONCOLOGY CANCER CARE CENTRE 106, D'Almeida Landmark, First Floor, Near Hanuman Mandir, Manikpur Naka, Vasai (W.)	Dr. Hollis Henry D'Souza (M.D., D.M. (Oncology)) 9820562306	5
253	KIRAN HOSPITAL & DIAGNOSTIC CENTRE Ground Floor, Pooja Tanisha Apt., Near Gurudwara, Sadee Compound, Achole Road, Nallasopara (E.)	Sunil Singh Dr. Rahul Singh (M.B.B.S., D.N.B. (Ortho.)) 9773937739	15
254	SHREE SAI HOSPITAL Building No. 20, Ground Floor, Avenue-D, Chikhhal Dongri Road, Global City, Virar (W.)	Dr. Nilesh Jagannath Chavan (B.A.M.S.) Dr. Kiran Dane (M.B.B.S., M.S. (Obst. & Gynec.)) 9960616840	16
255	YOGYAM HOSPITALS Vartak Arcade, Next To Farmhouse Restaurant, Ambadi Road, Vasai (W.)	Dr. Yogesh Pitamber Patil (M.B.B.S., M.S. (Ortho.)) 8554057601	25
256	AMRAVATI HOSPITAL 101, 102, 103 Sai Anant Sakharam Baba Sankul, Above Kangir, Near Masjid, Bolinj, Virar (W.)	Dr. Sanjay Kumar Vishwakarma (B.H.M.S.) Dr. Suhas Rao (M.D.(Physician)) 7620014928	15
257	ICON MULTISPECIALITY HOSPITAL B/104-105, Tania Regency, Near Dubey Medical College, Vasai Link Road, Nallasopara (E.)	Dr. Gyanendra Sakalnarayan Singh (B.A.M.S.) Dr. Mohammad Taif Khan (M.B.B.S.) 9930609444	25
258	SWASTIK HOSPITAL Ground Floor, B-Wing, Sai Paradise C.H.S. Lrd., Naringi, Virar (E.)	Dr. Mahendraprasad Jarottam Vishwakarma (B.A.M.S.) Dr. Suhas Rao (M.D.(Physician)) 8082237625	15
259	UNIVERSAL MULTISPECIALITY HOSPITAL Rafiya Aparrrtment, Santosh Bhuvan, Nallasopara (E.)	Dayashankar Upadhyay Dr. Radheyraman Radheyshyam (M.D.(D.A.)) 9970452105	40





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260	KRISHNA DIALYSIS & GENERAL HOSPITAL Shiv Shakti Apt., V.S. Road, Near Ganpati Mandir, Ramu Compound, Virar (E.)	Dr. Abhana Sakham Bhawar (M.B.B.S., T.D.D., M.D) 9850309096	15
261	KRISHNA RESEARCH INSTITUTE & SUPERSPECIALITY HOSPITAL PVT. LTD. 207, Second Floor, C-Wing, Kingstone Court, Near Old Viva College, Virar (W.)	Dr. Abhana Sakham Bhawar (M.B.B.S., T.D.D., M.D) 9850309096	15
262	MAA SARASWATI HOSPITAL & DIALYSIS CENTRE First Floor, Saraswati Heights, Otswal Nagari, Above SBI Bank, Central Park, Nallasopara (E.)	Dr. Kundan Durvijay Singh (B.H.M.S.) Dr. Oschen D'Souza (M.S., General Surgeon) 9969581104	68
263	VASAI VIRAR CITY MUNICIPAL CORPORATION HOSPITAL, SOPARA Nilemore, Nallasopara (W.)	Dr. Gaurav Wagh	50
264	AYUSH HOSPITAL Shop No. 5,6, First Floor, C-Wing, Shreenath Nagar, Building No.1, Near Yashwant Gaurav Complex, Nallasopara (W.)	Dr. Sneha Sharad Bhoir (M.B.B.S., D.G.O.) 9987394110	30
265	NEW SIDDHAKALA MATERNITY AND SURGICAL HOSPITAL Rambaug Society, Near Eye Hospital, Azad Road, Vasai (W.)	Dr. Prerna Ankit Patel (More) (M.B.B.S., D.G.O.) 9769213405	11
266	TRIVENI HOSPITAL D-1 to D-5 Siddhi Vinayak Complex, Next to Fly Over Bridge, Station Road, Nallasopara (W.)	Dr. Atul Devidas Paraskar (B.H.M.S.) Dr. Shivprasad Shinde (M.B.B.S.) 9867990039	17
267	CHAUDHARI MULTISPECIALITY S.N..135, 1st floor, kajal apartment, shreeram nagar, Nallasopara (East)	Dr. Jubir Chaudhari (B.H.M.S.)	15
268	FATHERWADI MULTISPECIALITY HOSPITAL Groundfloor, wonder residency, Near H.P.PetrolPump, Fatherwadi, Vasai (East).	Dr. Rakeshkumar Yadav (B.H.M.S.) 8856816301	11



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
269	AUSKAR MULTISPECIALITY Shop no.147, 1st & 2 nd floor, Reliable Rrestij, Opp.Axis Bank, Chandannaka, Nallasopara (East)	Dr. Tushar Ravindra Karnavat (B.A,M.S.) Dr.Mahendra Yadav (MBBS; DNB, AURTHO) 8208280688	18
270	SAFALYA MULTISPECIALITY HOSPITAL & ICU Mahavir Plaza, Bhabola Naka, Bangli Road, Near Police Chauki, Vasai (West.)	Dr.Pritam M.Ahire (M.D. Medicine) 9881915890	25
271	UNIVERSAL MULTISPECIALITY HOSPITAL 170, Sari Compound, Achole Rd, Near Gurudwara, Nallasopara (East).	Dr. Dayashankar Uppdhay	40
272	ZOYA HOSPITAL Arif Compound, Bilalpada Road, Santosh Bhuvan, Nallasopara (East)	Dr.Zoya Khan (MBBS) 823757787	14
273	TITAN HOSPITAL House no.414, Ram Lakshman Nagar, Panchal Nagar, Nallasopara (West)	Dr.Abhaykant Jitendra Mishra (MAMS) Dr. Gaurav Sharma (MBBS) 7219202361	25
274	EKDANT MULTISPECIALITY 1st floor, Govind Hights, Old Viva College Road, Near Flyover, Virar (West)	Shree.Sushilkumar Mishra Dr.Rajeshkumar Gupta (MBBS) 9356216598	15
275	SPRP'S SAHYADRI MULTISPECIALITY HOSPITAL PVT.LTD '35,36,37,38, Ground Floor, Cosmos Sq., Near Agarwal Paramount, Chikal Dongari Road, Gobal City, Virar (W.)	Dr. Ramdas Rayajee Gade (B.H.M.S)	13
276	OMKAR HOSPITAL Shop no. 9,10,01,101,102,103, Mahalaxmi Nagar, Bld.No.-3, B-Wing, Juchandra-Naigaon Road, Naigaon (E)'	Dr. MANOHARLAL A. SUTHAR	15
277	R.K. HOSPITAL 'Ground Floor, Gangaram Niwas, Babul Pada, Don Lane, Achole Road, Nallasopara (E).	Dr. Kalpana Prakash Warang	12
278	SAIBABA HOSPITAL "Shop No -6, Bilalpada, Santosh Bhuvan, Near Annupurna School, Nallasopra (E)	Dr.Megha D. Mane	12



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
279	Durva Multispecialty HOSPITAL 'C-101,102,103, Maurya Shopping Complex, Ambadi Road, Vishal Nagar, Vasai (W)	Dr. Vikram Ram Gajare	16
280	Max Care Multispeciality Sai Siddhant Palece, Shop No.1-6,101,102, Shantilife Spaces-2, D- Mart, Nallasopara (E)	Dr. Pratik Pandurang Patara	40
281	Health Care Multispeciality Sadguru Krupa, 1st Floor, Jadhav Pada, Pelhar Road, Dhaniv Baug, Nallasopara (E).	Dr. Moyeenuddin Khan (B.U.M.S)	20
282	Vendant Hospital 1st Floor, Mahavir Industrial Estate, Near Ganpati Mandir, V.S.Marg, Virar (E).	Dr. Rahul Dinesh Goswami (B.H.M.S)	25
283	Apex Hospital Shop No.04, Ground Floor, Opp. akasha Complex, Waliv Road, Vasai (E)	Dr. Mustakim Atiullah Khan (B.A.M.S)	14
284	Breath Care Hospital N-1/4, Girivihar C.H.S., Ltd., Anand Nagar, Next to Mahadev Mandir, Vasai (W.)	Dr. Yogendra Jatindar Ravi (M.S. (Ortho.))	18
285	Wellcare MULTISPECIALITY HOSPITAL Shop No.02, 1st Floor, Yashwant Suit Tower, Behind Big Bazar, Y.K.Nagar, NX Virar (W)	Dr. Nitesh Dilip Salunkhe (B.A.M.S)	20
286	SHREE MULTISPECIALITY HOSPITAL S.Y.No.14, CFC Building No.01, Pushpa Park Residency, Near Bolinj Naka, Opp. Saptashringi Mandir, Padmavanti Nagar, Virar (W.)	Dr. Prahlad Pyarelal Chaurasia (B.H.M.S)	37
287	MODERN HOSPITAL 102, Vimal Paradise, Sainath Nagar, Near Radha Krishna Hotel, Nallasopara	Dr. Mohammed Shah (MBBS) 7385243314	5
288	Vaarush Multispeciality Hospital and ICU 1 floor, Dew Berry, Opp. Deep Heights, Funfista Road, Near Yashwant Gaurav Complex, Nallasopara	Dr. Himmatalal Yadav (BHMS) Dr. Shilmit Vaidya (MBBS)	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
289	Global Hospital 1 st floor, H wing, Shubham Paradise, Chikhal Dongari Road, Virar (W)	Dr. Jigar Wala (M.S.(Ophthalm))	25
290	Dange Maternity And General Hospital 368, Hawabi Palace, Near Hanuman Mandir, Gass Road, Naallasopara (W)	Dr. Tanzil Ansar Ahmad Monin	10
291	Park View Hospital 1st Floor, Poona Park View Building, Phase-2, Global City, Virar (W)	Dr. Sachin Naiknavare (M.S (Obs&Gynac.)	25
292	ST. MARY ADVANCED WOMEN CARE HOSPITALHathi Mohalla Road, Near Municipal Garden, Vasai (W)	DR. Pranav Kabra 9869459951	25
293	JANSEVA MULTISPECIALITY HOSPITAL '1st Floor, Z.M. Star Arcade, Opp. Don Bosco High School, Preira Road, Naigaon (E.)	Dr. Mahendra Yadav	21
294	BAXAY PRIME MULTISPECIALITY & ICU Plot No.16, Ambadi Road, Vasai (W)	Dr. Rohit Kevat	45
295	GLOBAL CARE AND WELFARE HOSPITAL kf- 01/12, Kophard, Agashi, Virar (W)	Dr. Pushpkant Harichandra Chauhan (DNB, Ortho)	30
296	SHWETA HOSPITAL Kapil Apartment, Building-1, 1st floor, 90 Feet Road, Ostwal Nagari, Nallasopara (E)	Dr. Sanjay G. Dubey (B.A.M.S)	15
297	TRINITY HOSPITAL Shop No.01/101, Kini Arcade, Near Stella Petrol Pump, Vasai (W)	Dr. Mateen K. Dafedar (B.H.M.S)	30
298	UR FAMILY HOSPITAL Survay No. 34/1, Near Gaon Devi Mandir, Kolhi Chinchoti, Naigaon, (E)	Dr. Vivek Umesh Rai (M.B.B.S)	10
299	SUNSHINE MULTISPECIALITY HOSPITAL Off No. 03, 1st floor, Gulmohar Heritage Bldg. No.03, C&D Wing, Shriprastha Road, Nallasopara (W)	Dr. Sachin Salunke (B.A.M.S) And Dr. Prashant Bhoir (D.H.M.S)	15
300	SHREE KRISHNA HOSPITAL Opp. Riksha Stand, Sativali Naka, Vasai (E)	Dr. Virendra Sharma (MBBS) 8898285152	15
301	GRACE HOSPITAL 1st Floor, Hilton Regency-1, Opp. Holy Family Convent School, Evershine City, Vasai (E)	Rajesh Yadav Dr. Manvendra S. Yadav (M.B.B.S, (D.A)	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
302	RADIANT HOSPITAL Doctor House, Sheetal Anjali Building, Near D' Mart, Manvel Pada, Virar (E)	Dr. Sachin Suresh Dhamne (B.A.M.S) Dr. Abdul Rahman Choudhary (M.B.B.S., (D. Ortho))	49
303	VASAI VIRAR CITY MUNICIPAL CORPORATION GENERAL HOSPITAL-BOLINJ Bolinj, Virar (W.)	Dr. Ravi Gaikwad	100
304	SAI CARE MULTISPECIALITY HOSPITAL AND ICU 103, Makwana Complex, Veer Savarkar Marg, Virar (E)	Dr. Mahendra Yadav (M.B.B.S., DNB (Ortho))	15
305	SANJEEVANI MULTI-SPECIALITY HOSPITAL Istiyak Complex, 1st Floor, Sativali Naka, Vasai (E)	Dr. Bal Shankar Jha (M.B.B.S., (M.R.C.P))	25
306	BADAR MULTISPECIALITY HOSPITAL 339, NESCO House, Nawayat Mohalla, Nallasopara (W.)	Dr. Fahim Nasar Mohd. Saleem Imrani (B.U.M.S)	25
307	SADAF HOSPITAL Shop No.04, Wakan Pada, Nr. Bismillha Masjid, Nallasopara (E)	Mohd Tarique Jamshed Khan Dr. Abdul Choudhary (M.B.B.S, (Ortho))	7
308	URBANHEAL HOSPITAL G-1, G-2, G-3, G-4, New Stell CHS.LTD, Opp. Saint Augustine's High School, Vasai Road, (W.)	Dr. Kartik P. Savalia (M.B.B.S., M.D (Obst. & Gynac.))	15
309	APPASHETH THORAT MULTISPECIALITY HOSPITAL & CRITICARE CENTER 1st Floor, Kanekar Mansion, Near Vitthal Mandir, Waliv, Vasai (E)	Dr. Pravin Thorat (B.H.M.S) Dr. Hemant Wagh (M.B.B.S, (D.N.B)	15
310	AYAAN GENERAL HOSPITAL Shop No. 02, Bhagwan Welfare Society, Opp. Mustafa Compound, Pelhar Road, Wakanpada, Nallasopara (E)	Dr. Satyendra G. Pandey (B.A.M.S) Dr. Pushpkant H. Chauhan (M.B.B.S., DNB (Ortho))	16
311	STERLING ORTHOPAEDIC HOSPITAL & IVF CENTER Plot No.1,2,3,4, Besides Yashwant Vihar Complex, Virar-Nallasopara Link Road, Bolinj, Virar (W)	Dr. Sachin Zambare (M.B.B.S., (D.N.B)(Ortho))	20
312	BHARAT HOSPITAL 'Rafiya Apartment, Rafiya Compound, Santosh Bhuvan, Nallasopara (E)	Dr. Nisar Ahmad (B.U.M.S) Dr. Mahendra H. Yadav (M.B.B.S.(DNB)(Ortho))	15



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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
313	"GREEN LIFE MULTISPECIALITY HOSPITAL" 'Shop No. 7,8,9 & 10, Akansha Shopping Center, Near Narmada Marble, Station Road, Nallasopara (E)'	Simab Musheer Dr. Sunilkumar Vishwakarma (M.B.B.S.(DNB)(Ortho))	15
314	"ASHTAVINAYAK MATERNITY & GENERAL HOSPITAL" 'Shop No. 17-23, 1st Floor, Vrundavan Shopping Centre, Above HDFC Bank, Evershine City, Vasai (E)'	Dr. Sonali Gaidhankar (MBBS., (M.S., (Obs & Gyn.))	15
315	DR. HEMANT D. PATIL CLINIC AND HOSPITAL A-001,002, Chaudhari Homes, Bazar Peth, Vasai (W)	Dr. Saket Hemant Patil (M.B.B.S, (D.G.O))	5
316	DR. GHARAT'S ENT HOSPITAL AND HEARING AID CENTRE 116/B, Vishawkarma Paradise, Phase-1, Ambadi Road, Vasai (W)	Dr. Chetan G. Gharat (M.B.B.S., (M.S.(ENT))	1
317	CREETI CARE MULTISPECIALITY HOSPITAL 1ST Floor, Bayabai Shopping Centre (Snehal Apartment), Agashi Road, Virar (W)	Dr. Linus Ignatius Rodrigues (M.B.B.S., (M.D.)) And Dr. Gaurav Narottam Patil (B.A.M.S)	17
318	SANJIVANI DAY CARE CENTRE Shop No. 04 And 5, Vedant Bhavan, Chandansar, Virar (E)	Dr. Ramdas Gade (B.H.M.S) Dr. Jaydeep Jadhav (M.B.B.S)	3
319	DR. SHUKLA'S EYE CARE HOSPITAL Shop No.108, Jivdani Nivas Building, First Floor Gala Nagar, Above Vimal Medical Store, Nallasopara (E)	Dr. Fenali Y. Shukla (M.B.B.S., D.N.B)	2
320	MEDIPRIME MULTISPECIALITY HOSPITAL D.L. Shelter, Ground & Second Floor, Beside Gokhivare Talav, Above Bassein Catholic Bank, Vasai (E)	Dr. Nitin Bhila Ahire (M.B.B.S, Dip. Anaesthesiology)	30
321	KRIPA NURSING HOME Kripa Foundation, Near Urdu School, Papdy Post Office, Vasai (W)	Dr. RANI BADLANI (M.B.B.S.(DNB))	10
322	AVANNAH HOSPITAL Friendship Corner, Ground Floor, Dindayal Nagar, Vasai Road (W.)	Dr. Manisha Rohra (M.B.B.S., DNB) And Dr. Hemant Wagh (MBBS., DNB)	15
323	ATHARVA HOSPITAL Room No. 1167/2, Naik Pada, Near Ganesh Mandir, Waliv, Vasai (E.)	Dr. Ashokkumar Bajaranglal Jangid (M.D. (Ayurveda)) And Jayendra Bahadur Abhay Narayan Singh	9





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Sr.No	Hospital Name & Address	Doctor's Name & Contact No.	Bed
324	ROYAL HOSPITAL Flat No. 101,102,103,104, 1st floor, Sumangal Apartment, Naringi Road, Behind KK Bakery, Virar (E)	Dr. MAHENDRA HARIDAS YADAV (M.B.B.S.(DNB)(Ortho))	20
325	SIDDHI HOSPITAL Sai Sakshi Building, 1st floor, Opp. Ashreya Hotel, Manvelpada, Naka, Virar (E)	Agnelo Peter D'souza And Dr. Rajesh M. Trimukhe (MBBS, M.D(Anaes))	12
326	SOPARA MATERNITY AND GENERAL HOSPITAL 368, Hawabi Palace, Near Hanuman Mandir, Gass Road, Nallasopara (W)	Dr. Rakesh Ravindra More (B.A.M.S) Dr. Bhushan Babarao Wankhede (M.B.B.S)	10
327	ANUSAYA CHILDREN HOSPITAL Shop No. A-12, Ground Floor, Datta Krishna Heights, Near Pizza Hats, Global City Road, Virar (W)	Dr. Kishan Dattarao Kale (M.D.(Pediatrician))	15
328	CHIDANAND CHILDRENS AND GENERAL HOSPITAL Shop No. 06/53/14,10,11 Ground Floor, Vedant Bhavan, Chandansaar Road, Kopari, Virar (E)	Madhu Jha Dr. Mehendra Yadav (M.B.B.S., D.N.B(Ortho))	35
329	SIDDHAAI MUTISPECIALITY HOSPITAL Kishor Kunj Building, Behind Old Viva College, Virar (W)	Dr. Jagrut Thakur (M.B.B.S)	30

Source: VVCMC Website

## Annexure IV

### Initiative by VVCMC for conservation of Habitat and biodiversity

**प्रसाद जोशी**

वसई, ता. ९ (वातमोदार) :

वसई विरार शहर महापालिकेने दुसऱ्या टप्प्यातील पक्षीगणना पूर्ण केल्यानंतर वसई-विरारमध्ये मोठ्या प्रमाणात पक्षिवैभव असल्याचे समोर आले आहे. यात सातासमुद्रापार असलेल्या स्थलांतरित पक्ष्यांसह स्थानिक अशा एकूण १७२ पक्ष्यांच्या प्रजातींची नोंद करण्यात आली आहे. त्यामुळे त्यांचा अधिवास असणाऱ्या जागा सुरक्षित राहाव्यात, यासाठी महापालिका प्रशासनाकडून पावले उचलण्यात येणार आहेत.

आशियाई पाणपक्षी गणनेचा उपक्रम नुकताच वसई-विरार महापालिकेकडून राबवण्यात आला होता. यात पालिकेचे उपायुक्त डॉ. सागर घोलप, बीएनएचएस आणि नेस्ट या दोन पक्षीमित्र संघटनेच्या माध्यमातून नंदकिशोर दुधे यांच्यासह अनेक स्वयंसेवकांनी सहभाग घेतला होता. एकीकडे शहरीकरणाने पक्षांचा अधिवास धोक्यात येत असताना महापालिकेने मिठागर, मोकळ्या जागा, डोंगराळ भाग यासह पाणथळ अशा एकूण २२ ठिकाणी पक्षीनिरीक्षण केले.

यावेळी परदेशातून स्थलांतरित होणारे पक्षांसह पूर्वापार अधिवास असणारे पक्षी आदींची पाहणी करण्यात आली. त्यामुळे वसई विरार शहराला लाभलेले पक्षिवैभव समोर आले आहे.

**महापालिका क्षेत्रात पक्ष्यांचा अधिवास**

शोधण्यासाठी टप्प्याटप्प्याने मोहीम हाती घेतली आहे. त्यात बावीस ठिकाणे निश्चित केली होती. या पाहणीत विविध प्रजातीचे पक्षी आढळून आले. त्यांचे रक्षण करता यावे म्हणून पुढील प्रयत्न केले जाणार आहेत.

- डॉ. सागर घोलप, उपायुक्त

## १७२ प्रजातीचे वसईत पक्षिवैभव

दुसऱ्या टप्प्यातील गणना पूर्ण

Mumbai, Palghar-Today  
10/02/2023 Page No. 1

Source: Sakal Newspaper

सुकाळ

# जैवविविधतेमुळे पक्ष्यांना नवसंजीवनी

प्रसाद जोशी, वसई

शहरात सिमेंट काँक्रीटकरण झपाट्याने वाढत आहे. त्यामुळे त्याचा जैवविविधतेवर परिणाम होत आहे. जैवविविधता टिकून राहावी, म्हणून वसई-विरार महापालिकेने प्रयत्न सुरू केले आहेत. पर्यावरण अहवाल तयार करण्याचे काम हाती घेण्यात आले आहे. भविष्यात जैवविविधता टिकवण्यासाठी पावले उचलली जाणार आहेत. २२ मे हा जागतिक जैवविविधता दिन साजरा केला जातो.

वसई, विरार शहराला निसर्गरम्य परिसरासह डोंगर व विस्तीर्ण समुद्रकिनारा लाभला आहे. त्यामुळे 'हरित वसई' अशी तालुक्याची ओळख आहे, मात्र हळूहळू सिमेंट काँक्रीटकरणाने जंगल वाढत आहे. त्यामुळे वसई-विरार महापालिकेने वृक्षलगाव करून पक्ष्यांना आकर्षित करणे, त्यांचा अधिवास कायम ठेवणे, जैवविविधतेसाठी विविध उपाययोजनांवर भर देण्यास सुरुवात केली आहे. जैवविविधता ही भूभागाच्या हवामानावर अवलंबून असते. तलाव, नदी, पाणथळ जमिनी, पक्षी, चारा याचे प्रमाण व देखभाल केल्यास जैवविविधतेला बळकटी मिळते. सद्यस्थितीत हवामानात होणारे बदल पाहता जैवविविधता अत्यंत महत्त्वाचा घटक मानला जात आहे. वसई, विरार शहरात फेब्रुवारी

महिन्यात एकूण ३२ ठिकाणी पक्षीनिरीक्षण केले होते. या गणनेत १७२ प्रजाती आढळल्या आहेत, तर पाणवट्यावर वास्तव्यास ६,९२३ पक्षी दिसून आले होते. शहरातील हिस्वागार परिसर आल्हाददायक असल्याने अधिवास व भक्ष्य पाहता विविध राज्य, परदेशातील पक्षी आकर्षिते जात आहेत. महापालिकेने पहिल्यांदाच पक्षीगणना करून जैवविविधतेवर अभ्यास केला आहे. शहरातील विविध भागांत दुर्मिळ पक्षी शोधात येत असल्याचे निदर्शनास आले. सजीवांच्या अधिवासाला धोका निर्माण होऊ नये, यासाठी योजना आखण्यात आली आहे. त्यामुळे शहरात पक्ष्यांना पूरक वातावरण मिळणार आहे. तसेच विविध जातीच्या वृक्षांची लागवड करण्याची मोहीम सुरू असल्याने शहर परिसरात पक्ष्यांचा किलबिलट नागरिकांना सुखवून जाणार आहे.

## पर्यावरणपूरक वातावरणनिर्मितीचा प्रयत्न

जैवविविधतेच्या विनाशामुळे निसर्गावर परिणाम होत असतो. त्यामुळे अधिकधिक पक्षी, वृक्ष व सजीवांना संजीवनी मिळावी व त्यातून वसई-विरार शहरात सुंदर, मनमोहक वातावरण निर्माण व्हावे, यासाठी पावले उचलली जात असल्याने आरोग्याला हितकारक ठरणार आहे.

## कारवाईचे निर्देश

वसई, नालासोपारा, विरार व नाथगाव परिसरात गवताळ भाग सजीवांना फायदेशीर ठरत असते. येथील नैसर्गिक गवत सुरक्षित असावे, म्हणून पालिकेकडून खबरदारी घेण्यात येत आहे. त्याचबरोबर केमिकलसुक्त पाण्यात कोणी गवत उगवून पक्षी, प्राण्यांना धोका निर्माण करत असेल तर त्यांच्यावर कारवाई केली जात असल्याचे उपायुक्त डॉ. सागर घोलप यांनी स्पष्ट केले.

वसई-विरार महापालिकेच्या परिसरात पक्ष्यांचा अधिवास ठिकठिकाणी आढळला आहे. त्यांना सुरक्षा मिळावी, यासाठी प्रयत्न केले जात आहेत. जैवविविधतेसाठी गवत, मोकळी जमीन, पाणथळावर काम केले जात आहे.

- डॉ. सागर घोलप, उपायुक्त



Mumbai, Palghat-Today  
21/05/2023 Page No. 1

Source: Sakal Newspaper



**७ ते २२ जानेवारी काळात गणना • महापालिकेच्या गणनेत २१०० पाणपक्षांची नोंदणी**

## वसईत आढळल्या ७५ पक्षांच्या प्रजाती

**वसई, (वा.) वसई-विरार महापालिकेने** पक्षीमित्रांच्या सहाय्याने केलेल्या गणनेत तालुक्यातील पाणवट्यावर पक्षांच्या तब्बल ७५ जाती आढळून आल्या आहेत. पहिल्याच गणनेत दोन हजार शंभर पक्षांची नोंदणी करण्यात आली आहे.

भारत सरकारने ७ ते २२ जानेवारीदरम्यान आशियाई पाणपक्षी गणना कार्यक्रम राबवण्याचे निर्देश महापालिकेला दिले होते. या कार्यक्रमात स्वयंसेवी संस्था, पक्षीतज्ज्ञ, विद्यार्थी, शिक्षक, जैवविविधता व्यवस्थापन समितीचे सदस्य यांना समाविष्ट करून घेण्याचेही त्यात नमूद केले होते. त्यामुळे सर्वांचा समावेश या कार्यक्रमात करण्यासाठी महापालिकेचे उपायुक्त डॉ. सागर घोलप यांनी इच्छुकांना आवाहन करून त्यांचे ऑनलाईन प्रवेश अर्ज भरून घेतले. त्यानंतर त्यांना बीएनएचएस आणि नेस्ट या दोन पक्षीमित्र संघटनेच्या माध्यमातून नंदकिशोर दुधे आणि सचिन मेन यांच्यामार्फत दोन तासांचे ऑनलाईन प्रशिक्षण देण्यात आले.

**२२ तारखेपर्यंत आणखी दोन टप्प्यात मोजणी**

पहिल्या पक्षीगणनेत ब्लॅक ड्रोंगो (कोतवाल), ब्ल्यू थ्रोट (शंकर), पॉन्ड हेरॉन (वंचक), लांब शेपटीचा खाटीक, ग्रे हेरॉन, व्हाईट ब्रेस्टेड वॉटरहॉन, रंगीत करकोचे, शेकाटे, उघडचोच करकोचे, कानुक बदक, खंड्या, पाणकावळे, बगळे, जांभळी पाणकोबडी, फटाकडी अशा एकूण ७५ पक्षीप्रजाती प्रशिक्षणार्थींना पाहता आल्या. पहिल्याच दिवशी १ पाणवट्यावर एकूण २१०० पक्षांची नोंदणी करण्यात आली. २२ तारखेपर्यंत आणखी दोन टप्प्यात हा कार्यक्रम सुरू राहणार आहे. हा उपक्रम राबवणारी वसई-विरार महापालिका ही एमएमआरडीए रिजिमधील बहुधा पहिलीच महापालिका ठरली आहे.

**१ टीमकडून १ ठिकाणी काम**

प्रशिक्षणाचा दुसरा टप्पा म्हणून वसई तालुक्यातील पाणवट्याची १ ठिकाणे निश्चित करून १ टीम तयार करण्यात आल्या. विवा वेटलॅंड, चिखल डोंगरी, भुईगाव समुद्र किनारा, गोगटे मिठागर, राजोडी वेटलॅंड, गोगटे गणपती मंदिर, निर्मळ तलाव, कळंब पूल, उमराळे तलाव परिसर अशा या ठिकाणी सकाळी ७ वाजता पक्षी निरीक्षण आणि गणनेसाठी १ टिमला नेण्यात आले. नेस्टचे अध्यक्ष सचिन मेन, उपायुक्त महापालिका डॉ. सागर घोलप, नंदकिशोर दुधे (बीएनएचएस) यांच्या मार्गदर्शनाखाली आणि सहभागातून ग्रुप लीडर हार्दिक दयाल, योगेश पटेल, जॉन्सन, रजनीश घाडी, वरुण सातोसे, मयुरेश परब, अमोल लोपीस, निकेतन कासारे, दत्तप्रसाद नाईक यांनी आपल्या टिमला पक्षी कसे शोधावे, त्यांची नावे काय, ते कसे ओळखावेत, त्यांची गणना कशी करावी याची माहिती दिली.

Source: Sakal Newspaper

**लोकमत**

## वसईत करकोचा, खंड्या, जांभळा बगळा

**२१०० पाणपक्षांची नोंदणी**

लोकमत न्यूज नेटवर्क नालासोपारा : वसई-विरार महापालिकेने पक्षीमित्रांच्या सहाय्याने केलेल्या गणनेत तालुक्यातील पाणवट्यावर पक्षांच्या तब्बल ७५ जाती आढळल्या असून, पहिल्याच गणनेत २,१०० पक्षांची नोंदणी करण्यात आली आहे.

या मोहिमेत स्वयंसेवी संस्था, पक्षीतज्ज्ञ, विद्यार्थी, शिक्षक, जैवविविधता व्यवस्थापन समितीचे सदस्य यांनाही समाविष्ट करण्यात आले होते. महापालिकेचे उपायुक्त डॉ. सागर घोलप यांनी इच्छुकांना नऊ ठिकाणी नऊ टीम या प्रशिक्षणाचा दुसरा टप्पा म्हणून वसई तालुक्यातील पाणवट्याची १ ठिकाणे निश्चित करून १ टिम तयार करण्यात आल्या. विवा वेटलॅंड, चिखल डोंगरी, भुईगाव समुद्र किनारा, गोगटे मिठागर, राजोडी वेटलॅंड, गोगटे गणपती मंदिर, निर्मळ तलाव, कळंब पूल, उमराळे तलाव परिसर अशा या ठिकाणी सकाळी ७ वाजता पक्षी निरीक्षण आणि गणनेसाठी १ टिमला नेण्यात आले.

आवाहन करून त्यांचे ऑनलाईन प्रवेश अर्ज भरून घेतले. त्यानंतर त्यांना बीएनएचएस आणि नेस्ट या दोन पक्षीमित्र संघटनेच्या माध्यमातून नंदकिशोर दुधे आणि सचिन मेन यांच्यामार्फत दोन तासांचे ऑनलाईन प्रशिक्षण देण्यात आले.

नेस्टचे अध्यक्ष सचिन मेन, महापालिका उपायुक्त डॉ. सागर घोलप, बीएनएचएसचे नंदकिशोर दुधे यांच्या मार्गदर्शनाखाली ग्रुप लीडर हार्दिक दयाल, योगेश पटेल, जॉन्सन, रजनीश घाडी, वरुण सातोसे, मयुरेश परब, अमोल लोपीस, निकेतन कासारे, दत्तप्रसाद नाईक हे या मोहिमेत सहभागी झाले होते.

पहिल्या पक्षीगणनेत ब्लॅक ड्रोंगो (कोतवाल), ब्ल्यू थ्रोट (शंकर), पॉन्ड हेरॉन (वंचक), तंबूस पाठीचा खाटीक, ग्रे हेरॉन, व्हाईट ब्रेस्टेड वॉटरहॉन, रंगीत करकोचे, शेकाटे, उघडचोच करकोचे, कानुक बदक, खंड्या, पाणकावळे, जांभळी पाणकोबडी, लाल मनोली (मुनिया), जांभळा बगळा अशा एकूण ७५ पक्षी प्रजाती प्रशिक्षणार्थींना पाहता आल्या. पहिल्याच दिवशी १ पाणवट्यावर एकूण २,१०० पक्षांची नोंदणी करण्यात आली.

**जांभळा बगळा**  
**कोतवाल**  
**तांबूस पाठीचा खाटीक**  
**लाल मनोली (मुनिया)**  
**शंकर**

Hello Vasai  
Page No. 1 Jan 12, 2023  
Powered by: erelego.com

Source: Lokmat Newspaper

# वसई, विरारमध्ये पक्षीगणना सुरू

पहिल्या टप्प्यात दोन  
हजार पक्ष्यांची नोंद  
लोकसत्ता वार्ताहर



## शिकार करणाऱ्यांवर आवर घाला

**वसई :** वसई, विरार शहरात महापालिकेच्या पर्यावरण विभागाकडून पाणथळ जागेवर येणाऱ्या पक्ष्यांची गणना करण्यास सुरुवात केली आहे. शनिवारी या गणनेचा पहिला टप्पा पार पडला असून यामध्ये दोन हजारहून अधिक पक्ष्यांची नोंद करण्यात आली आहे.

आशियाई पाणपक्षी गणना २०२३ या उपक्रमाअंतर्गत ही गणना करण्याचे काम पालिकेने हाती घेतले आहे. ७, १४ व २१ जानेवारी अशा तीन टप्प्यांत ही गणना केली जात असून यात पालिकेचे अधिकारी, पक्षीतज्ज्ञ, पक्षी अभ्यासक, महसूल विभाग, वन विभागाचे अधिकारी-कर्मचारी, स्वयंसेवी संस्थांचे प्रतिनिधी यांची मदत घेण्यात येत आहे. शनिवारी या पक्षीगणनेचा पहिला टप्पा पार पडला. यामध्ये शहरातील विवा वेटलँड, चिखलडोंगरी, भुईगाव समुद्रकिनारा, गोगटे सॉल्ट वसई, राजोडी वेटलँड, गोगटे सॉल्ट नालासोपारा, निर्मळ लेक, कळंब

वसईचा परिसरात विविध प्रजातींच्या पक्ष्यांचा अधिवास आहे. मात्र काही ठिकाणी वन्यजीवांची शिकार करण्यासाठी सापळे लावले जातात. यामुळे पक्ष्यांचा अधिवास हा धोक्यात येत आहे. शिकार थांबून त्यांचे संरक्षण व्हावे व इतर ठिकाणी जर असे प्रकार घडत असतील ते रोखले जावेत यासाठी प्रयत्न करणे गरजेचे असल्याचे नेस्ट संस्थेचे पक्षी निरीक्षक सचिन मेन यांनी सांगितले आहे.

पुलाजवळ, उमराळे अशा नऊ ठिकाणच्या पाणथळ जागांवर पक्ष्यांची गणना करण्यात आली आहे. गणना ही वैज्ञानिक पद्धतीने व तज्ज्ञांच्या मार्गदर्शनाखाली होत असल्याने पक्ष्यांच्या हालचाली, पक्ष्यांचे राहणीमान, त्यांचे खाद्यपदार्थ अशा

## करकोचा, पाणकावळे, खंड्या

गणनेदरम्यान पाणथळ जागी उघडचोच करकोचा, रंगीत करकोचा, शेकाटे, तुतारी, पाणकावळे, खंड्या, सुरई, शराटी, बगळे, पाणकोंबड्या इत्यादी प्रजातींचे सुमारे दोन हजार १०० इतके पक्षी दिसून आले असल्याची माहिती नेस्ट संस्थेचे पक्षी निरीक्षक सचिन मेन यांनी सांगितले आहे.



पालिकेने शहरातील  
पाणथळ जागेत

पक्षीगणना सुरू केली आहे. पूर्ण नियोजन करूनच ही गणना होत आहे. पालिकेकडून प्रथमच अशा प्रकारची गणना केली जात आहे. - सागर घोष, उपायुक्त, महापालिका पर्यावरण विभाग

विविध बाबी प्रकषिने नोंदविल्या जात आहेत असे पालिकेचे पर्यावरण विभागाचे उपायुक्त सागर घोष यांनी सांगितले आहे. अजूनही पुढील दोन टप्पे बाकी आहेत, त्याचे नियोजन करण्यात आले आहे, असेही घोष यांनी सांगितले आहे.





Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Certificate & Books distribution to the Participants on Asiatic Water Bird Census 2023



Team on Asiatic Water Bird Census 2023

For more details: AWC Count 2023 by VVCMC <<https://ebird.org/tripreport/105107>>





Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



## Annexure V

### Ambient Air Monitoring Results



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

Lab NABL Accredited - Testing - Chemical Field & Proficiency Testing Provider.

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.  
\* Tel.: 020 - 25460202, 25460203, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

#### TEST CERTIFICATE

Page 1 of 2

HS/LAB/NABL/F/7.8.2.1

HS/LAB/NABL/P/7.8.2.1

CLIENT'S NAME & ADDRESS		REPORT NO.	HS/LAB/AA/00306	
Vasai Virar City Municipal Corporation Address:(V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.		REPORT DATE	06/04/2023	
		LAB REFERENCE NO.	HS/LAB/AA/002	
		SAMPLING DATE	31/03&01/04/2023	
		SAMPLE RECEIPT DATE	02/04/2023	
		START DATE OF ANALYSIS	02/04/2023	
		END DATE OF ANALYSIS	05/04/2023	
		SAMPLING REF. / SOP NO.	HS/NABL/AIR/14	
DETAILS OF SAMPLE	SAMPLING DONE BY	SAMPLE CONTAINER & QUANTITY	NATURE	LOCATION
Ambient Air	Horizon Services	Plastic Bottles & Bags	--	Bolinj Naka (Nearby Mahanagar Palika Office) 19°26'40.32"N 72°47'39.10"E

#### RESULTS

SR. NO.	DESCRIPTION	UNIT	RESULTS	NAAQS LIMITS	TEST METHOD REFERENCE
01	DATE OF SAMPLING	DD/MM/YY	31/03&01/04/2023		
02	TIME OF SAMPLING	Hrs.	15:20		
03	TEST LOCATION		Bolinj Naka (Nearby Mahanagar Palika Office) 19°26'40.32"N 72°47'39.10"E		
04	SAMPLING DURATION	Hrs.	24		
05	AMBIENT TEMPERATURE (MAX/MIN)	Deg C	31/23		
06	RELATIVE HUMIDITY	% RH	58		
07	PM <sub>10</sub>	µg/m <sup>3</sup>	115.64	100	IS 5182(part 23),2006
08	PM <sub>2.5</sub>	µg/m <sup>3</sup>	68.95	60	CPCB Guidelines Volume - I Pg. No.15
09	SO <sub>2</sub>	µg/m <sup>3</sup>	8.12	80	IS 5182(part 2),2001, RA 2006
10	NO <sub>2</sub>	µg/m <sup>3</sup>	15.19	80	IS 5182(part 6),2006
11	CO (8 Hrs.)	mg/m <sup>3</sup>	0.573	2.0	IS 5182 (part 10): 1999 (Reaffirmed 2003)

#### REMARKS/OBSERVATIONS:

NAAQS: - National Ambient Air Quality Standards

Monitoring results for PM<sub>10</sub> & PM<sub>2.5</sub> do not satisfy the prescribed standards.

For HORIZON SERVICES

*Manisha Nargolkar*  
MANISHA NARGOLKAR  
(Lab Incharge)

\*\*\*\*End of Test Report\*\*\*\*



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

Lab NABL Accredited - Testing - Chemical Field & Proficiency Testing Provider.

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

• Tel.: 020 - 25460202, 25460203, 25460023, 25460033. • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

**TEST CERTIFICATE**

Page 1 of 2

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS	REPORT NO.	HS/LAB/AA/00307
Vasai Virar City Municipal Corporation Address:(V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	REPORT DATE	06/04/2023
	LAB REFERENCE NO.	HS/LAB/AA/002
	SAMPLING DATE	31&03&01/04/2023
	SAMPLE RECEIPT DATE	02/04/2023
	START DATE OF ANALYSIS	02/04/2023
	END DATE OF ANALYSIS	05/04/2023
	SAMPLING REF. / SOP NO.	HS/NABL/AIR/14

DETAILS OF SAMPLE	SAMPLING DONE BY	SAMPLE CONTAINER & QUANTITY	NATURE	LOCATION
Ambient Air	Horizon Services	Plastic Bottles & Bags	--	Pelhar Police Chowki 19°26'25.71"N 72°52'41.67"E

**RESULTS**

SR. NO.	DESCRIPTION	UNIT	RESULTS	NAAQS LIMITS	TEST METHOD REFERENCE
01	DATE OF SAMPLING	DD/MM/YY	31&03&01/04/2023		
02	TIME OF SAMPLING	Hrs.	16:00		
03	TEST LOCATION		Pelhar Police Chowki 19°26'25.71"N 72°52'41.67"E		
04	SAMPLING DURATION	Hrs.	24		
05	AMBIENT TEMPERATURE (MAX/MIN)	Deg C	31/23		
06	RELATIVE HUMIDITY	% RH	58		
07	PM <sub>10</sub>	µg/m <sup>3</sup>	129.78	100	IS 5182(part 23),2006
08	PM <sub>2.5</sub>	µg/m <sup>3</sup>	73.15	60	CPCB Guidelines Volume – I Pg. No.15
09	SO <sub>2</sub>	µg/m <sup>3</sup>	9.10	80	IS 5182(part 2),2001, RA 2006
10	NO <sub>2</sub>	µg/m <sup>3</sup>	12.10	80	IS 5182(part 6),2006
11	CO (8 Hrs.)	mg/m <sup>3</sup>	0.698	2.0	IS 5182 (part 10): 1999 (Reaffirmed 2003)

**REMARKS/OBSERVATIONS:**

NAAQS: - National Ambient Air Quality Standards

Monitoring results for PM<sub>10</sub> & PM<sub>2.5</sub> do not satisfy the prescribed standards.

For HORIZON SERVICES

*Manisha Nargolkar*

MANISHA NARGOLKAR  
(Lab Incharge)

\*\*\*\*End of Test Report\*\*\*\*



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

Lab NABL Accredited - Testing - Chemical Field & Proficiency Testing Provider.

\*Shree\*, K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**TEST CERTIFICATE**

Page 1 of 2

HS/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS		REPORT NO.	HS/LAB/AA/00308	
Vasai Virar City Municipal Corporation Address:(V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.		REPORT DATE	06/04/2023	
		LAB REFERENCE NO.	HS/LAB/AA/002	
		SAMPLING DATE	31&03&01/04/2023	
		SAMPLE RECEIPT DATE	02/04/2023	
		START DATE OF ANALYSIS	02/04/2023	
		END DATE OF ANALYSIS	05/04/2023	
		SAMPLING REF. / SOP NO.	HS/NABL/AIR/14	
DETAILS OF SAMPLE	SAMPLING DONE BY	SAMPLE CONTAINER & QUANTITY	NATURE	LOCATION
Ambient Air	Horizon Services	Plastic Bottles & Bags	--	Tungareshwar Temple 19°24'59.56"N 72°54'5.93"E

**RESULTS**

SR. NO.	DESCRIPTION	UNIT	RESULTS	NAAQS LIMITS	TEST METHOD REFERENCE
01	DATE OF SAMPLING	DD/MM/YY	31&03&01/04/2023	100	IS 5182(part 23),2006
02	TIME OF SAMPLING	Hrs.	17:10		
03	TEST LOCATION		Tungareshwar Temple 19°24'59.56"N 72°54'5.93"E		
04	SAMPLING DURATION	Hrs.	24		
05	AMBIENT TEMPERATURE (MAX/MIN)	Deg C	31/23		
06	RELATIVE HUMIDITY	% RH	58		
07	PM <sub>10</sub>	µg/m <sup>3</sup>	92.17	60	CPCB Guidelines Volume - I Pg. No.15
08	PM <sub>2.5</sub>	µg/m <sup>3</sup>	52.13	80	IS 5182(part 2),2001, RA 2006
09	SO <sub>2</sub>	µg/m <sup>3</sup>	6.02	80	IS 5182(part 6),2006
10	NO <sub>2</sub>	µg/m <sup>3</sup>	10.19	2.0	IS 5182 (part 10): 1999 (Reaffirmed 2003)
11	CO (8 Hrs.)	mg/m <sup>3</sup>	0.237		

**REMARKS/OBSERVATIONS:**

NAAQS: - National Ambient Air Quality Standards

For HORIZON SERVICES

*Manisha Nargolkar*

MANISHA NARGOLKAR  
(Lab Incharge)

\*\*\*\*End of Test Report\*\*\*\*



## Ambient Noise Monitoring Report

Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
1	77.2	80.4	64.8
2	88.1	88.7	64.3
3	77.7	81.6	56.3
4	70.2	81.4	73.3
5	75.8	77.2	74.5
6	76.1	79.8	63.6
7	84.7	91.2	67.3
8	84.5	79	64.2
9	78.3	79.7	68.4
10	87.4	74.5	73.5
11	80.4	78.5	61
12	79.5	81.5	65.6
13	78.5	78.7	63.1
14	73.7	73.4	56.9
15	88.1	69	66.7
16	88.6	77.7	70.3
17	76.8	83.1	76.1
18	85	82.7	83.8
19	77.8	74.7	72.8
20	82.1	79.4	61
21	81.5	82.5	63.6
22	85.4	76.9	64.8
23	76.5	80.7	55.2
24	89.7	75.1	60.9
25	80.5	82	65.5
26	83.6	78.6	67.9
27	71.9	82.6	75.5
28	91.5	84.8	75.2
29	85.7	77.6	68.7



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
30	81.9	82.3	53.6
31	76.3	83.2	47.2
32	80.3	81.8	44.8
33	84.8	85.6	56.2
34	78.6	86.1	69.7
35	85.6	88.9	59.3
36	77.7	76.7	79.5
37	82.4	80.3	60.4
38	88.4	77.1	62
39	81.5	81.6	62.7
40	76.8	93.8	51.6
41	75.9	84.5	58.5
42	84	77.9	56.9
43	81.5	78.6	59.2
44	85.3	80.8	61.6
45	87.8	77.4	49.7
46	69.3	71.4	56.8
47	81.7	81.5	47.6
48	81.4	78.9	56.9
49	82.1	75.4	60.3
50	75.6	74.5	57.7
51	72.4	76.3	63.7
52	79.6	69.8	66.5
53	80	73.3	78
54	80.7	80.4	84.2
55	81.8	78	85
56	76.9	81.3	79.2
57	79.6	87.2	81.4
58	79.7	85.4	81.1
59	81.6	87.9	74.4
60	81.4	85.7	82
61	81.5	80	77.2





Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
62	81.2	93.6	80.1
63	78.3	90.9	53.5
64	69.2	79.2	52.4
65	80	93	93.5
66	81.3	77	84.6
67	80.1	84.2	90.3
68	77.6	75.7	75.5
69	78.3	82.3	78.8
70	77	82	89.2
71	77.7	88.6	92.1
72	85.4	81.1	85.1
73	75.1	78	82.3
74	85.5	83.4	60.5
75	84.1	81.7	72.9
76	86.2	77.5	77
77	86.7	77.7	71.9
78	82.3	84.6	76.5
79	85.7	79.5	74.2
80	81.4	79.9	79.5
81	82.8	80.9	83.6
82	78.9	83.9	81.8
83	87.5	79.2	86.3
84	85.8	88.9	76.6
85	78.9	84.4	91.6
86	88.9	87.3	82.4
87	87.1	85.1	87.1
88	81.8	79.3	82.8
89	85	79.1	86.9
90	77.2	81.6	92.9
91	81.9	81.9	91.3
92	84	74.2	90.3
93	88.7	85.7	89.6



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
94	79.9	78.9	90
95	84.2	79.3	85.4
96	85.7	84.3	73.3
97	86.9	87.5	70.4
98	84.6	81.6	51.4
99	87.2	90	54.4
100	83.2	83.3	51.5
101	82.4	88.1	55.3
102	85.3	85.9	48.1
103	91.1	88.1	72.1
104	79.6	88.4	52.7
105	89.2	86	65.2
106	78.9	80.4	58
107	81.8	84.3	62.5
108	87.9	83.6	67.8
109	78.7	82.2	70.1
110	85.7	81.1	74.7
111	88.7	80.7	67
112	85.4	84.6	67.1
113	87.6	79.8	61.3
114	81.4	79.1	60.6
115	80.1	76	58.5
116	74.5	96	63.5
117	77.1	83.6	62.6
118	86.4	88.1	53.9
119	76.1	81.6	58.7
120	80.1	81.3	72.1
121	79.5	75.9	80.1
122	81.9	76.4	82.2
123	77.1	78.2	91.8
124	76.6	77.9	86.3
125	77.9	76.3	79.3



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
126	81.2	82.4	85.1
127	79	82.7	76.4
128	79	87.1	76.6
129	84.2	77.1	83
130	81.5	72.7	86.6
131	78	79.1	83.3
132	86.5	78.7	84.6
133	78.6	80.2	78.1
134	77.1	81.2	82.9
135	79.4	75.2	80.8
136	80.9	81.6	79
137	80.9	82.5	71.2
138	82.9	85.1	72.1
139	90	78.6	64.3
140	84.7	74	67.1
141	85.2	79.3	71.8
142	79.8	81.2	67.9
143	90	82.5	72.4
144	84.7	86.3	72.5
145	77.2	73.3	67.3
146	88.1	72.7	57.7
147	80.1	88.8	55.9
148	78.2	76.7	45.4
149	78.5	82.6	55.1
150	90.7	84.9	59.3
151	76.3	86	74.4
152	80.9	79.6	76
153	80	83.3	86.9
154	76.2	77.5	82.6
155	84	84.4	77.8
156	83.2	85.6	75
157	87.3	76.1	77.2



Environmental Status Report, 2022-2023  
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Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
158	85.3	73.3	61.5
159	76.5	78	58.8
160	82.1	85.7	72.6
161	82.5	84.7	73.8
162	91.1	80.9	66
163	83.8	82.9	70.7
164	74.4	78.7	71.6
165	84.5	83.1	66
166	80.1	85.7	66.5
167	84.9	79.1	90
168	77.1	75	73
169	77.7	81.2	45.9
170	83.3	85.6	69.8
171	85.3	86.9	51.5
172	77.5	84.6	80.1
173	73.8	85.8	88.2
174	76.7	81.8	85.8
175	87.6	76.6	90.9
176	93.5	82	91.2
177	90.8	84.7	86.5
178	85.6	86	92.7
179	80.3	83.6	94.6
180	88.2	81.7	92.4
181	83.1	79.8	88.5
182	86.4	83.3	87.2
183	86.9	78.6	88.6
184	83.9	88.2	78.8
185	87.5	79	62.8
186	89.7	82	90.2
187	83.3	80.8	84.9
188	83.8	84.3	80.8
189	84.5	83.6	80



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
190	78	84.4	81.7
191	82.5	84	79.9
192	82.4	80	81.2
193	85.2	86.4	79.3
194	79.7	79	61.8
195	82.2	81.3	62.5
196	80.8	80.5	54.4
197	81.1	89.9	53.9
198	73	83.7	61.8
199	79.2	80.3	62.4
200	82.6	80.7	59.7
201	86.8	79.5	58.6
202	84.9	84.4	64.8
203	78.1	71.4	57.7
204	80.7	90.4	55.4
205	78.2	77.1	62.1
206	80.5	69.6	64.5
207	87.4	89.1	58.1
208	85.7	77.1	66.7
209	81.2	79.3	80.1
210	83	85.5	78.9
211	85.4	91.2	70.4
212	91.3	89	70.4
213	77.6	88.7	55.3
214	83	93.8	65.8
215	78.1	89.6	55.1
216	89.3	84.7	55.3
217	89.8	93.4	54.5
218	84.8	84	55
219	83.9	83.2	59.6
220	79.4	86	77.2
221	78.3	82	67.8





Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
222	80.2	84.3	79.9
223	84.2	89.6	85.8
224	84.9	84.7	65.1
225	77.4	84.5	70.1
226	76.1	82.1	57
227	81.3	85.9	56.2
228	81	82.5	57
229	93.3	83.8	68.3
230	79.2	83.1	70.4
231	82.6	85.3	76.5
232	73.9	83.4	62.4
233	74.9	84	70.1
234	78.3	90.8	78.6
235	82	89.6	65.7
236	80.4	87.8	69
237	79.2	87.2	73.3
238	80.6	84.3	61.4
239	81.7	83	72.4
240	76.3	84.3	59.5
241	77.5	86.8	57.7
242	78	89	57.4
243	78.5	84.6	57.5
244	78.2	91.6	59.3
245	74.4	88.7	58.1
246	75.4	90.7	62.8
247	76.5	83.6	56.6
248	72.8	83	59
249	74.1	81.1	57.9
250	78.5	82.8	57.9
251	77.2	81.2	57.8
252	78.2	77.2	59.2
253	88.9	77.7	58.4



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
254	87.5	77.5	58.1
255	87.7	75.5	58
256	80.6	80.1	58.4
257	91.6	80.4	63.6
258	89	89.5	74
259	97.1	75.2	65.8
260	88.9	78.2	81.6
261	90	78	92.1
262	86.5	85.7	58.3
263	87.6	79.8	78.6
264	82.4	86.6	73.7
265	85.3	80.7	87.1
266	82.9	84	86.7
267	91	83.3	81.5
268	84.1	81.4	79.2
269	87.9	81.1	66.9
270	85.9	80.8	76.7
271	79.3	87.3	82.6
272	89.3	97	75.6
273	74.6	86	70.5
274	78.8	82.3	76.4
275	80.2	81.8	77
276	76.7	84.8	77.2
277	78.4	77.9	80.7
278	85.7	83.3	60.9
279	80.4	86.1	76.2
280	82.2	82.8	51.5
281	83.9	90.8	44.6
282	82.2	84.6	64.3
283	83.7	82.9	73.5
284	77	82.7	83.2
285	79.5	80.9	54.3



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Noise Quality (In dB)			
Sr no.	Locations		
	Bolinj Naka	Pelhar Police Chowki	Vasai Police Station
286	75.9	79.7	77.5
287	94.3	83.5	83.4
288	84.3	88.5	82.5
289	84.8	87.9	77.8
290	83.9	89.2	72.3
291	88.9	84.7	77.7
292	80.6	80.6	71.4
293	84.1	82.5	63.1
294	83.6	84.2	58.4
295	83.3	87.6	55
296	83.5	76.9	46.6
297	84.8	72.4	58.9
298	90.2	86	58.6
299	95	78.1	60.5
300	81.5	86.5	61.6

Note: Noise Monitoring done by IIT, Bombay.



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



## Soil Analysis Report



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

Lab NABL Accredited - Testing - Chemical Field & Proficiency Testing Provider.

\*Shree\*, K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.  
• Tel.: 020 - 25460202, 25460203, 25460033. • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16326
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1412
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Soil Sample	The Client	----	SQ-1- 'A' Ward – Nearby Olanda Police Station

### RESULT OF ANALYSIS

SR. NO	DESCRIPTION	UNIT	RESULT	Standard as per Ministry of Agriculture 2011
01	pH @ 25 °C	---	7.20	< 8.5
02	Texture	---	Sandy Loam	Not Specified
02a	Sand	%	40.00	Not Specified
02b	Silt	%	40.00	Not Specified
02c	Clay	%	20.00	Not Specified
03	Electric Conductance @ 25 °C	mS/cm	1.50	0.15 – 0.65
04	Total Organic Matter	%	0.55	0.5 – 0.75
05	Sodium Adsorption Ratio (SAR)	---	13.10	10-18
06	Water holding Capacity	%	41.40	Not Specified
07	Total Nitrogen(Kjeldahl Method)	kg/ha	68.25	Not Specified
08	Potassium as K <sup>++</sup>	%	0.0030	Not Specified
09	Available Phosphorus as P	kg/ha	4.26	< 15.00

**REMARK:** Electric Conductivity is exceeding the limit as per limits specified by Ministry of Agriculture 2011

For HORIZON SERVICES

*M. N. Jaiswal*  
(LAB INCHARGE)



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

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"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16327
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1412
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Soil Sample	The Client	---	SQ-2- 'B' Ward – Police Check Post Kaner area

**RESULT OF ANALYSIS**

SR. NO	DESCRIPTION	UNIT	RESULT	Standard as per Ministry of Agriculture 2011
01	pH @ 25 °C	---	6.18	< 8.5
02	Texture	---	Sandy Clay	Not Specified
02a	Sand	%	42.00	Not Specified
02b	Silt	%	20.00	Not Specified
02c	Clay	%	38.00	Not Specified
03	Electric Conductance @ 25 °C	mS/cm	0.15	0.15 – 0.65
04	Total Organic Matter	%	0.62	0.5 – 0.75
05	Sodium Adsorption Ratio (SAR)	---	10.20	10-18
06	Water holding Capacity	%	51.20	Not Specified
07	Total Nitrogen(Kjeldahl Method)	kg/ha	61.25	Not Specified
08	Potassium as K <sup>++</sup>	%	0.0024	Not Specified
09	Available Phosphorus as P	kg/ha	3.12	< 15.00

For HORIZON SERVICES

*M. Mangalakar*

(LAB INCHARGE)





Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



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"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

\* Tel.: 020 - 25460202, 25460203, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16328
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1412
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Soil Sample	The Client	---	SQ-3- 'C' Ward – Chandikadevi Temple – Juchandra

**RESULT OF ANALYSIS**

SR. NO	DESCRIPTION	UNIT	RESULT	Standard as per Ministry of Agriculture 2011
01	pH @ 25 °C	---	7.12	< 8.5
02	Texture	---	Sandy Clay	Not Specified
02a	Sand	%	48.00	Not Specified
02b	Silt	%	16.00	Not Specified
02c	Clay	%	36.00	Not Specified
03	Electric Conductance @ 25 °C	mS/cm	0.68	0.15 – 0.65
04	Total Organic Matter	%	0.67	0.5 – 0.75
05	Sodium Adsorption Ratio (SAR)	---	12.80	10-18
06	Water holding Capacity	%	47.00	Not Specified
07	Total Nitrogen(Kjeldahl Method)	kg/ha	56.25	Not Specified
08	Potassium as K <sup>++</sup>	%	0.0031	Not Specified
09	Available Phosphorus as P	kg/ha	5.08	< 15.00

**REMARK:** Electric Conductivity is exceeding the limit as per limits specified by Ministry of Agriculture 2011

For **HORIZON SERVICES**

*M. A. G. K. A.*

(LAB INCHARGE)



## Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



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### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16329
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1412
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Soil Sample	The Client	---	SQ-4- 'D' Ward – Vasai Fort

### RESULT OF ANALYSIS

SR. NO	DESCRIPTION	UNIT	RESULT	Standard as per Ministry of Agriculture 2011
01	pH @ 25 °C	---	7.15	< 8.5
02	Texture	---	Sandy loam	Not Specified
02a	Sand	%	50.00	Not Specified
02b	Silt	%	34.00	Not Specified
02c	Clay	%	16.00	Not Specified
03	Electric Conductance @ 25 °C	mS/cm	0.23	0.15 – 0.65
04	Total Organic Matter	%	0.58	0.5 – 0.75
05	Sodium Adsorption Ratio (SAR)	---	10.30	10-18
06	Water holding Capacity	%	39.00	Not Specified
07	Total Nitrogen(Kjeldahl Method)	kg/ha	51.45	Not Specified
08	Potassium as K <sup>++</sup>	%	0.0033	Not Specified
09	Available Phosphorus as P	kg/ha	3.95	< 15.00

For HORIZON SERVICES

*M. Nagaraj*  
(LAB INCHARGE)



# Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



## Water Analysis Report

### 11.1.6 Ground Water Reports



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

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• Tel.: 020 - 25460202, 25460203, 25460033. • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

#### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16317
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-1- 'A' Ward- Bolinj Naka

#### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.65	6.5-8.5
02	Electrical Conductivity	mS/cm	1.55	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PCo	1.50	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.40	< 1.00
07	Total Suspended Solids		43.00	Not Specified
08	Total Dissolved Solids	mg/lit	1245.00	< 500.00
09	Chlorides as Cl	mg/lit	196.50	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	520.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	65.00	< 200.00
12	Dissolved Oxygen	mg/lit	4.10	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.23	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

REMARK: As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. N. Gopal*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



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"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.  
\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16318
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-2- 'B' Ward- Tiwari nagar Stable

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.25	6.5-8.5
02	Electrical Conductivity	mS/cm	0.80	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	1.00	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.20	< 1.00
07	Total Suspended Solids		30.00	Not Specified
08	Total Dissolved Solids	mg/lit	670.00	< 500.00
09	Chlorides as Cl	mg/lit	124.15	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	360.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	60.00	< 200.00
12	Dissolved Oxygen	mg/lit	4.30	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.20	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. N. Ingole*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



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\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16319
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-3- 'C' Ward- Chandansar Market

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	6.83	6.5-8.5
02	Electrical Conductivity	mS/cm	0.90	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	1.20	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.20	< 1.00
07	Total Suspended Solids		32.00	Not Specified
08	Total Dissolved Solids	mg/lit	796.00	< 500.00
09	Chlorides as Cl	mg/lit	155.75	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	392.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	48.00	< 200.00
12	Dissolved Oxygen	mg/lit	4.00	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.30	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For **HORIZON SERVICES**

*M. Angolkar*

(LAB INCHARGE)





# Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



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\* Tel.: 020 - 25460202, 25460203, 25460033. \* Email : kms@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

## ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16320
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-4- 'D' Ward- Vasant nagar Sector-I

## RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.35	6.5-8.5
02	Electrical Conductivity	mS/cm	1.53	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	1.35	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.40	< 1.00
07	Total Suspended Solids		44.00	Not Specified
08	Total Dissolved Solids	mg/lit	1204.00	< 500.00
09	Chlorides as Cl	mg/lit	187.65	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	506.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	72.50	< 200.00
12	Dissolved Oxygen	mg/lit	3.90	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.28	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

REMARK: As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. Nagaraj*

(LAB INCHARGE)





## Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



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\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16321
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-5- 'E' Ward- Nearby Chakreshwar Talav

### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.66	6.5-8.5
02	Electrical Conductivity	mS/cm	0.29	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	0.85	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	0.80	< 1.00
07	Total Suspended Solids		29.00	Not Specified
08	Total Dissolved Solids	mg/lit	247.00	< 500.00
09	Chlorides as Cl	mg/lit	86.50	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	126.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	68.00	< 200.00
12	Dissolved Oxygen	mg/lit	4.40	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.15	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is chemically potable for drinking purpose, for the parameters tested.

For **HORIZON SERVICES**

(LAB INCHARGE)



## Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



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### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16322
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-6- 'F' Ward- Nearby Pelhar Lake

### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.10	6.5-8.5
02	Electrical Conductivity	mS/cm	0.65	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	0.80	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	0.75	< 1.00
07	Total Suspended Solids		27.00	Not Specified
08	Total Dissolved Solids	mg/lit	536.00	< 500.00
09	Chlorides as Cl	mg/lit	112.45	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	186.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	58.00	< 200.00
12	Dissolved Oxygen	mg/lit	3.90	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.25	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. N. Jaiswal*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

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\*Shree\*, K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.  
\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16322
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-7- 'G' Ward- Waliv Ward Office

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.33	6.5-8.5
02	Electrical Conductivity	mS/cm	0.63	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	0.85	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	0.78	< 1.00
07	Total Suspended Solids		31.00	Not Specified
08	Total Dissolved Solids	mg/lit	584.00	< 500.00
09	Chlorides as Cl	mg/lit	105.45	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	230.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	50.00	< 200.00
12	Dissolved Oxygen	mg/lit	4.12	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.18	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For **HORIZON SERVICES**

*M. N. Angelika*

(LAB INCHARGE)



# Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



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## ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16324
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-8- 'H' Ward- Nearby Diwanman Lake

## RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	8.12	6.5-8.5
02	Electrical Conductivity	mS/cm	3.65	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	2.60	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.95	< 1.00
07	Total Suspended Solids		71.00	Not Specified
08	Total Dissolved Solids	mg/lit	2890.00	< 500.00
09	Chlorides as Cl	mg/lit	426.50	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	880.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	60.00	< 200.00
12	Dissolved Oxygen	mg/lit	2.20	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.38	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. Nagaraj*

(LAB INCHARGE)



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### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16325
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1411
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Ground Water Sample	The Client	---	GW-9- 'I' Ward- Nearby Papdi Talav

### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS AS PER IS10500:2018
01	pH	---	7.75	6.5-8.5
02	Electrical Conductivity	mS/cm	0.99	Not Specified
03	Taste	---	Agreeable	Agreeable
04	Colour	PtCo	1.65	< 5.00
05	Odour	---	Agreeable	Agreeable
06	Turbidity	NTU	1.50	< 1.00
07	Total Suspended Solids		36.00	Not Specified
08	Total Dissolved Solids	mg/lit	852.00	< 500.00
09	Chlorides as Cl	mg/lit	216.50	< 250.00
10	Total Hardness as CaCO <sub>3</sub>	mg/lit	340.00	< 200.00
11	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	76.00	< 200.00
12	Dissolved Oxygen	mg/lit	3.75	Not Specified
13	Arsenic as As	mg/lit	BDL< 0.01	< 0.01
14	Fluoride as F	mg/lit	0.38	< 1.00
15	Mercury as Hg	mg/lit	BDL< 0.01	< 0.001
16	Lead as Pb	mg/lit	BDL< 0.01	< 0.01

**REMARK:** As per IS:10500:2018; above water sample is **chemically unpotable** for drinking purpose, for the parameters tested.

For HORIZON SERVICES

*M. N. Angolkar*

(LAB INCHARGE)





## Environmental Status Report, 2022-2023 Vasai Virar City Municipal Corporation



### 11.1.7 Surface Water Analysis Reports



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#### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16308
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-1- 'A' Ward- Bolinj Lake

#### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.53	6.0-8.5
02	Electrical Conductivity	µS/cm	564.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	1.10	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	1.00	Not Specified
07	Total Suspended Solids	mg/lit	46.00	Not Specified
08	Total Dissolved Solids	mg/lit	488.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	38.90	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	11.20	Not Specified
11	Dissolved Oxygen	mg/lit	3.70	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	206.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	72.00	Not Specified
14	Free Ammonia as N	mg/lit	0.20	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	4.10	Not Specified
16	Sodium Absorption Ratio	---	10.60	< 26.0
17	Total Coliform	CFU/ml	14.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For HORIZON SERVICES

*M. N. G. K. K.*  
(LAB INCHARGE)





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## ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16309
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-2- 'B' Ward- Manvel Pada Talav

## RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.50	6.0-8.5
02	Electrical Conductivity	µS/cm	1130.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	1.20	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	1.12	Not Specified
07	Total Suspended Solids	mg/lit	53.00	Not Specified
08	Total Dissolved Solids	mg/lit	854.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	32.40	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	10.70	Not Specified
11	Dissolved Oxygen	mg/lit	3.90	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	336.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	70.00	Not Specified
14	Free Ammonia as N	mg/lit	0.15	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	4.25	Not Specified
16	Sodium Absorption Ratio	---	11.00	< 26.0
17	Total Coliform	CFU/ml	18.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For **HORIZON SERVICES**

*M. N. Jaiswal*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
Vasai Virar City Municipal Corporation



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\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16310
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-3- 'C' Ward- Kopri Lake

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.46	6.0-8.5
02	Electrical Conductivity	µS/cm	1053.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	1.25	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	1.12	Not Specified
07	Total Suspended Solids	mg/lit	40.00	Not Specified
08	Total Dissolved Solids	mg/lit	796.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	19.40	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	6.80	Not Specified
11	Dissolved Oxygen	mg/lit	4.00	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	236.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	66.00	Not Specified
14	Free Ammonia as N	mg/lit	0.08	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	5.25	Not Specified
16	Sodium Absorption Ratio	---	10.60	< 26.0
17	Total Coliform	CFU/ml	22.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For HORIZON SERVICES

*M. N. Agarwal*



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### ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16312
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-4- 'D' Ward- Achole Talav

### RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.76	6.0-8.5
02	Electrical Conductivity	µS/cm	827.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	1.10	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	1.04	Not Specified
07	Total Suspended Solids	mg/lit	38.00	Not Specified
08	Total Dissolved Solids	mg/lit	708.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	19.50	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	6.80	Not Specified
11	Dissolved Oxygen	mg/lit	4.05	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	328.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	76.00	Not Specified
14	Free Ammonia as N	mg/lit	0.10	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	5.00	Not Specified
16	Sodium Absorption Ratio	---	10.80	< 26.0
17	Total Coliform	CFU/ml	18.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For HORIZON SERVICES

*M. N. Gajjar*

(LAB INCHARGE)



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## ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16313
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-5- 'E' Ward- Chakreshwar Talav

## RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.70	6.0-8.5
02	Electrical Conductivity	μS/cm	798.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	0.90	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	1.00	Not Specified
07	Total Suspended Solids	mg/lit	35.00	Not Specified
08	Total Dissolved Solids	mg/lit	705.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	38.90	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	11.80	Not Specified
11	Dissolved Oxygen	mg/lit	3.60	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	332.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	74.00	Not Specified
14	Free Ammonia as N	mg/lit	0.08	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	4.50	Not Specified
16	Sodium Absorption Ratio	---	12.20	< 26.0
17	Total Coliform	CFU/ml	21.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For HORIZON SERVICES

*M. Nagaraj*  
(LAB INCHARGE)



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\* Tel.: 020 - 25460202, 25460203, 25460023, 25460033. \* Email : kmn@hespl.co.in / md@hespl.co.in \* www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16314
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-6- 'F' Ward- Pelhar Lake

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	6.99	6.0-8.5
02	Electrical Conductivity	µS/cm	154.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	0.60	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	0.60	Not Specified
07	Total Suspended Solids	mg/lit	24.00	Not Specified
08	Total Dissolved Solids	mg/lit	132.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	19.40	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	6.60	Not Specified
11	Dissolved Oxygen	mg/lit	4.14	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	32.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	40.00	Not Specified
14	Free Ammonia as N	mg/lit	NIL	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	2.25	Not Specified
16	Sodium Absorption Ratio	---	9.10	< 26.0
17	Total Coliform	CFU/ml	18.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For **HORIZON SERVICES**

*M. N. Jaiswal*

(LAB INCHARGE)





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## ANALYSIS REPORT

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16315
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-7- 'G' Ward- Waliv Talav

## RESULT OF ANALYSIS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.50	6.0-8.5
02	Electrical Conductivity	µS/cm	519.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	0.80	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	0.85	Not Specified
07	Total Suspended Solids	mg/lit	28.00	Not Specified
08	Total Dissolved Solids	mg/lit	472.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	25.90	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	7.60	Not Specified
11	Dissolved Oxygen	mg/lit	3.95	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	216.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	70.00	Not Specified
14	Free Ammonia as N	mg/lit	0.07	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	4.25	Not Specified
16	Sodium Absorption Ratio	---	10.90	< 26.0
17	Total Coliform	CFU/ml	14.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For **HORIZON SERVICES**

*M. N. Agarkar*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
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• Tel.: 020 - 25460202, 25460203, 25460033. • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16316
Vasai Virar City Municipal Corporation V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-8- 'H' Ward- Manikpur Talav

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.54	6.0-8.5
02	Electrical Conductivity	µS/cm	469.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	0.50	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	0.55	Not Specified
07	Total Suspended Solids	mg/lit	20.00	Not Specified
08	Total Dissolved Solids	mg/lit	390.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	19.40	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	6.60	Not Specified
11	Dissolved Oxygen	mg/lit	4.30	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	50.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	58.00	Not Specified
14	Free Ammonia as N	mg/lit	0.03	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	3.20	Not Specified
16	Sodium Absorption Ratio	---	9.60	< 26.0
17	Total Coliform	CFU/ml	14.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For HORIZON SERVICES

*M. Angolkar*

(LAB INCHARGE)



Environmental Status Report, 2022-2023  
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Lab Approved by MoEF, New Delhi. (Valid till 05/02/2024)

Lab NABL Accredited - Testing - Chemical Field & Proficiency Testing Provider.

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

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**ANALYSIS REPORT**

F/LAB/04/01/17.12.2012

CLIENT'S NAME & ADDRESS	REPORT NO	HS/LAB/WA/16317
Vasai Virar City Municipal Corporation (V.V.C.M.C Head Office) Opp. Virar Police Station, Bazaar ward, Virar East, Maharashtra 401305.	DATED	28/03/2023
	LAB REFERENCE NO	HS/LAB/WA/1410
	DATE OF SAMPLING	20/03/2023
	SAMPLE RECEIPT DATE	23/03/2023
	START DATE OF ANALYSIS	23/03/2023
	END DATE OF ANALYSIS	28/03/2023

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Surface Water Sample	The Client	---	SW-9- 'I' Ward- Papdi Talav

**RESULT OF ANALYSIS**

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS IS: 2296 for Surface Water Quality (Class E)
01	pH	---	7.60	6.0-8.5
02	Electrical Conductivity	µS/cm	616.00	< 2250.0
03	Taste	---	Agreeable	Not Specified
04	Colour	Hazen Unit	0.65	Not Specified
05	Odour	---	Agreeable	Not Specified
06	Turbidity	NTU	0.60	Not Specified
07	Total Suspended Solids	mg/lit	22.00	Not Specified
08	Total Dissolved Solids	mg/lit	574.00	< 2100.00
09	Chemical Oxygen Demand	mg/lit	13.00	Not Specified
10	Biochemical Oxygen Demand @ 27°C for 3 days	mg/lit	4.00	Not Specified
11	Dissolved Oxygen	mg/lit	4.50	Not Specified
12	Total Hardness as CaCO <sub>3</sub>	mg/lit	132.00	Not Specified
13	Total Alkalinity as CaCO <sub>3</sub>	mg/lit	70.00	Not Specified
14	Free Ammonia as N	mg/lit	0.05	Not Specified
15	Nitrates as NO <sub>3</sub>	mg/lit	4.10	Not Specified
16	Sodium Absorption Ratio	---	10.00	< 26.0
17	Total Coliform	CFU/ml	33.00	Not Specified

**REMARK:** As per IS:2296; above water sample is useful for irrigation, industrial cooling and controlled waste disposal purpose.

For **HORIZON SERVICES**

*M. N. Agarkar*

(LAB INCHARGE)