

Performance of Maharashtra Industrial Development Corporation (MIDC)



Dr. Hasitkumar Hirji Nagariya
Dr. Kishor Girish Nawale

Performance of Maharashtra Industrial Development Corporation (MIDC)



India | UAE | Nigeria | Uzbekistan | Montenegro

www.empyrealpublishinghouse.com

Performance of Maharashtra Industrial Development Corporation (MIDC)

By:

Dr. Hasitkumar H. Nagariya

Assistant Professor, Department of BMS, The SIA College of
Higher Education, Dombivili East, Mumbai

Dr. Kishor G. Nawale

Associate Professor, Department of Commerce, Shri Shahu
Mandir Mahavidyalaya, Pune

First Impression: December 2022

Performance of Maharashtra Industrial Development Corporation (MIDC)

ISBN : 978-93-93810-14-4

Rs. 650/- (\$18)

No part of the book may be printed, copied, stored, retrieved, duplicated and reproduced in any form without the written permission of the editor/publisher.

DISCLAIMER

Information contained in this book has been published by Empyreal Publishing House and has been obtained by the authors from sources believed to be reliable and are correct to the best of her knowledge. The author is solely responsible for the contents of the articles compiled in this book. Responsibility of authenticity of the work or the concepts/views presented by the author through this book shall lie with the author and the publisher has no role or claim or any responsibility in this regards. Errors, if any, are purely unintentional and readers are requested to communicate such error to the author to avoid discrepancies in future.

Published by:
Empyreal Publishing House

PREFACE

Maharashtra Industrial Development Corporation is playing a major role in the growth of industrialization in Maharashtra. In fact, it plays role of balanced industrial development in all over Maharashtra. For this purpose, it assists by providing basic facilities to Industries in MIDC area like water supply, roads, streetlights, drainage, plot development, and other infrastructural facilities. It also encourages entrepreneurs in setting up industries at various locations.

Due to formation of MIDC in Maharashtra State, there are number of industrial sectors that came into existence. As a result, the qualified unemployed as well as less qualified people were able to get employment opportunities in various industries. It helps to improve their standard of living. Thus, MIDC with the help of MIDC industrial units helps in providing employment opportunities to large number of people in Maharashtra. Indirectly, it also helps in increasing the market size in terms of production and income of the people and makes possible for Government to increase the national income by imposing tax on production of various kinds of goods and services. In this way Industrial units in MIDC areas also help to make economic development of the nation.

Author strongly felt to study different issues of MIDC such as whether organizational Structure of MIDC is in accordance with provisions of MIDC Act, Role of MIDC in the growth of Industrial Units in Thane MIDC, Level of financial performance of MIDC as well as Understanding the efficiency and effectiveness of the services provided by MIDC. Thus, considering the present position of these MIDC units, there is a need to study both financial and non-financial aspects of MIDC to make it more effective and focused.

The principal objective of writing this book is to present the in-depth information about the working, performance and contribution of MIDC units in the overall industrial development of Maharashtra in general and Thane District's MIDC units in particular

along with issues relating to various services and infrastructure facilities provided by MIDC and to suggest remedies to overcome these issues. Thus the present book is an outcome of study of organizational structure of MIDC, its growth and development, financial aspect with specific indicators, issues with respect to infrastructural services provided by MIDC. Authors have taken every effort to provide the readers with most up-to-date and authentic material of the subject.

ACKNOWLEDGEMENT

It is a matter of great pleasure for us to present this book to esteemed readers which comprehensively covers various qualitative aspects relating to MIDC (Maharashtra Industrial Development Corporation) which is established for systematic expansion and progress in the state of Maharashtra. In fact, it is established for the development of the region through provisions of ready-built- in factory space with the essential amenities and semi-urban services even at the backward and rural areas. Considering this fact into account every effort has been made to provide the readers with most up-to-date and authentic material of the subject.

On this occasion, I express my sincere thanks to Dr. Kishor G. Nawale sir, my guide for his inputs, support & continuous motivation.

My academic and research pursuit has been largely an outcome of my wife – Nisha’s unconditional support and encouragement throughout. Without her by my side, I would not have endured the ebbs and tides of both, my life and my research. My kids Hardini and Rishabh as shown exemplary patience and maturity, I take this opportunity to gratefully acknowledge their love and support in my academic career. I am thankful to my parents (Shri. Hirji Nagariya and Smt. Kanchanben Nagariya) for consistent check on my progress and blessings. I am particularly grateful to my father-in-law and mother-in-law for their unflinching support. I am also thankful to my brother (Pradeep Nagariya) and my sister (Jayshree Jakhariya) and their family members. I am also thankful to all my friends for extending support in whatever way possible.

I take this opportunity to express my sincere thanks to SIA Management and Dr. Padmaja Arvind, Principal, The SIA College of Higher Education, Dombivli, who always inspired and supported me. I would also thank Mrs. Bharati Rao, Librarian, The SIA College of Higher Education, Dombivli, who always inspired and supported me. I am also grateful to Dr. Gangadhar Hugar, Prof. Ramesh Nhawkar, Prof. Mahesh Kandalkar, who re-edited, recommended, and suggested new ideas.

I am also very grateful to our publisher who has rendered all possible assistance in bringing out his book. Above all, I thank Almighty for all the learning opportunities and blessings bestowed on me and pray that my work be of value to both, practitioners and researchers, at large. Suggestions of readers are welcome and shall be acknowledged with gratitude.

Dr. Hasitkumar Hirji Nagariya

Table of Contents

Preface	IV - V
Acknowledgement	VI - VII
Table of Contents	VIII
Title of the chapter	Page No.
Chapter – 1: Introduction	1 – 17
Chapter – 2: Review of Literature	18 – 32
Chapter – 3: Profile of Study Area	33 – 37
Chapter – 4: Performance of MIDC: Overview	38 – 49
Chapter – 5: Analysis and Interpretation of Data	50 – 95
Chapter – 6: Findings, Conclusions and Suggestions	96 – 115
Appendix – 1: Questionnaire for MIDC Officials	116 – 120
Appendix – 2: Questionnaire for Industrial Units	121 – 124
Appendix – 3: Questions for Interview for Maharashtra Pollution Control Board Officials	125
Appendix - 4: Questions for Interview for Association Related to MIDC	126 – 127
Appendix – 5: Questions for Interview for Employees of Industrial Units	128 – 129
Appendix – 6: Questions for Interview for Nearby Residents of MIDC Areas	130
Appendix – 7: List of Industries	131 – 140
Appendix – 8: List of Abbreviations	141
Appendix – 9: Bibliography	142 - 145

CHAPTER - 1

INTRODUCTION

1.0 INTRODUCTION

At the very first, Board of Small-Scale Industries in India had made the proposal in January 1955 conference for the establishment of Industrial Estates. Accordingly, in India the first Industrial Estate was set up in September 1955 at Rajkot.

The key objective of Industrial Estate is to develop, transform, support and promote industrial establishment. Industrial Estate should provide factory accommodation, common service facilities, assistance and services throughout all the stages of establishment and operations. It may develop a sub-contracting relationship among large scale and small-scale industries as well as specialized manufacturing activities. In addition, it also helps to develop the region through provisions of built-in-factory premises with the essential amenities and semi-urban services in backward and rural areas. In fact, it is the main responsibility of this programme of industrial estate. Industrial Estate also promote the development of ancillary industries in localities surrounding major industrial undertakings in both the private and public sector.

Thus, Industrial estate is a well-planned unit with ready-built in factory space which is let out on rent basis or sold to industrialists. This enables small industrialists who have no capital to build their own premises or do not want to do it right in the beginning to acquire factory space at a reasonable rent.

Government of Maharashtra has established Maharashtra Industrial Development Corporation (MIDC) on 1st August 1960 under section 3 of MIDC Act, 1961. It was established to resolve the various issues of industries and also to support industries for the fast and systematic expansion and progress in the state of Maharashtra. For this purpose, Government of Maharashtra acquire the land for industrial areas under the Land Acquisition Act, 1894 (I of 1894) or Chapter VI of the MID Act, 1961 and hands over to the MIDC for further development and disposal. The State Government pays compensation for the private land owner from its own fund. The MIDC converts the said land in suitable plots by preparing a broad layout of each area. Thus, MIDC undertakes different types of development work which consists of developing land, provision of water supply, construction of internal accessible roads in the areas, effluent disposal scheme, fire services, environment management, plantation of trees, electricity and power, etc. MIDC has the authority for levying service charges or tariffs on the owners of the plot or other entities earning profits therefrom.

In addition, MIDC also provides buildings for accommodating utilities like banks, post office, hospitals, telephone/telex exchange and dispensaries, police stations, canteens, fire stations, etc. It has also allotted land for some parks and zones such as Grape Wine Park, Technology Park, Export Promotional Industrial Park, Floriculture Park, Food Grain Park, Specialized food park, Silver zone, Gems and Jewelry Park, etc.

Thus, MIDC has the authority to hold both transferable and non-transferable property, execution any of its activities and let out to entrepreneurs to establish industry in the MIDC area. This enables entrepreneurs who have no capital to build their own premises or do not want to do it right in the beginning to acquire factory space at a reasonable rent. Thus, the key objective of MIDC is to develop support and promote industrial establishment.

1.1 MEANING AND DEFINITIONS

A. Industrial Estates

According to P. C. Alexander “a group of factors, constructed on an economic scale in suitable sites with facilities of transport, water, electricity, post office, bank, canteen, watch and ward and first aid; provided with the special arrangements for technical guidance and common service facilities.”¹ The United Nation has defined the industrial estate as “a planned clustering of enterprises, offering standard factory building erected in advance of demand and variety of

services and facilities to the occupants”². William Bredo, “An industrial estate is a tract of land which is subdivided and developed according to comprehensive plan for the use of the community of industrial enterprises. The plan must make detailed provision for streets and roads, transportation facilities and installation of utilities. The plan may provide for the erection of factory buildings in advance of sale or lease to occupants.”³

B. Micro, Small, Medium and Large Scale Enterprises⁴:

The MSMED (Amendment) Bill has changed the criterion of classification of MSMEs from the existing base of investment in plant and machinery or equipment' to 'annual turnover' of the enterprise.

As per the amendments, any business whose turnover is up to Rs 5 crore would be considered as a 'Micro Enterprise'. Whereas a business whose turnover is more than Rs. 5 crores to Rs. 75 crores would be considered as Small Enterprise and business whose turnover is more than Rs. 75 crores but upto Rs. 250 crores would be deemed as a 'Medium Enterprise' and businesses whose turnover is more than Rs. 250 crore would be considered as 'Large Enterprise'.

C. CORPORATION

Corporation means the Maharashtra Industrial Development Corporation established under section 3 of MIDC Act, 1961.

D. INDUSTRIAL AREA

Industrial area means any area declared to be an industrial area by the State Government by notification in the Official Gazette, which is to be developed and where industries are to be accommodated.

E. INDUSTRIAL ESTATE

Industrial estate means any site selected by the State Government, where the Corporation builds factories and other building and makes them available for any industries or class of industries.

1.2 NATIONAL INDUSTRIAL DEVELOPMENT CORPORATION LIMITED⁵:

The NIDC Limited facilitates consultancy for providing the country's Industrialization requirements aiming at rapid industrialization. The NIDC was established with a motive for supporting the Industrialization in the country. In the present scenario, NIDC is a world-renowned organization worldwide and facilitates on International Standards. The NIDC also offers its services to the various global organizations in the form of international clients like USAID, World Bank, UNICEF and many more in the form of:

1. The National Industrial Development Corporation Limited availability of resources.
2. Varieties of capable employees of striving professionals.
3. Scientifically developed latest computer software and hardware tools.
4. Collaboration with the companies of both national and international scales in form of Research Cells, Development of bodies, National Laboratories, Universities and also the Indian Institute of Technology (IIT).

The vast range of services provided by the National Industrial Development Corporation provides vast range of services which are mentioned below:

- A. Environmental engineering
- B. Management and Development of HR
- C. Social and Industrial Infrastructure
- D. Technical and Quality Audit

- E. Inspection, Expedition and Procurement
- F. Construction and Project Management
- G. Energy Management
- H. Industrial Planning and Management
- I. Project Engineering
- J. Social and Industrial Infrastructure
- K. Enlarged application of software and information technology

1.3 PROCESS OF DEVELOPMENT OF INDUSTRIAL AREAS⁶:

As per the Land Acquisition Act, 1894 (I of 1894) or Chapter VI of the MID Act, 1961, the Government of Maharashtra acquires the land for industrial areas and hands over to the MIDC for further disposal. The State Government pay compensation for the private land from its own fund. The MIDC then converts the land in suitable plots by preparing a layout of each area. The development work includes development of land, provision of water, construction of internal roads, effluent disposal scheme, etc. The aspirant entrepreneurs with the application along with necessary documents can get the plot allotted on a premium as per lease basis for the period of 95 to 98 years. The aspirant entrepreneur is given the possession of the plot by entering a lease agreement. The MIDC also constructs accommodation like flats and sheds and sells them out to the prospective entrepreneurs together with the land there-under on lease basis. In addition, entrepreneurs can take the possession of the sheds and galas by making payment of 20% to 30% of the total cost of shed or gala and the balance paid in suitable installments. The MIDC also constructs industrial houses on an experimental basis. MIDC also allots the plots to industrial workers and to their housing societies and develops residential zones. It has its own many water supply schemes in the state and supply water not only to the industrial units but also to the villages nearby industrial areas. It charges different rates for different types of consumers. The 'A' group of industrial areas is charged with the highest water rate and the group 'D+' group at the lowest water rate.

The MIDC set up a number of effluent disposal schemes in industrial areas in which chemical industries are accommodated to maintain ecological balance. The MIDC collect treated effluent from the individual industrial unit through its collection system and after the approval of the Maharashtra Pollution Control Board, dispose it at the suitable location. Generally, the industrial areas in coastal and other regions are getting this facility from MIDC.

MIDC also provides buildings for accommodating utilities like banks, post office, hospitals, telephone/telex exchange and dispensaries, police stations, canteens, fire stations, some parks and zones such as information grape wine park, technology park, export promotional industrial park, floriculture park, food grain park, specialized food park, silver zone, gems and jewelry park etc.

1.4 OBJECTIVES OF MIDC⁷:

The MIDC is a Government of Maharashtra undertaking established with the following three major objectives:

1. To Decentralize the Industrial Growth nearby Mumbai and Pune Metropolitan regions as well as to achieve balanced industrial development of Maharashtra.
2. To secure and assist rapid growth of Industries by providing basic facilities like water supply, roads, street lights, drainage and other infrastructural facilities.
3. To encourage entrepreneurs in setting up industries at various locations.

1.5 Functions, Role and Powers of Maharashtra Industrial Development Corporation:

A. Functions of Maharashtra Industrial Development Corporation⁸:

Maharashtra Industrial Development Act 1961, MIDC has given specific functions to perform its duties. Especially, MIDC is established to promote the growth of industries and manage its industrial estates along with various other functions connected with industrial growth and progress. Following are the various functions of MIDC as per Maharashtra Industrial Development Act, 1961.

1. To promote and assist the rapid and orderly establishment, growth and development of industries in the State of Maharashtra.
2. To establish and manage industrial estates at places selected by the State Government.
3. To develop industrial areas selected by the State Government for the purpose and make them available for undertakings to establish themselves.
4. To undertake schemes or works either jointly with other corporate bodies or institutions, or with Government or local authorities, or on an agency basis, in furtherance of the purposes for which the Corporation is established and all matters connected therewith.

B. Role of Maharashtra Industrial Development Corporation⁸:

Availability of adequate infrastructure is of vital importance not only in accelerating industrial growth but also in achieving balanced growth. The Government of Maharashtra has created M.I.D.C. as a specialized institution with basic objective to provide industrial infrastructure all over the State which would facilitate smooth and orderly growth of industries. To achieve this objective, M.I.D.C. undertakes following activities:

1. Development of industrial areas by acquiring Land
2. Preparing lay-out of plots of different sizes and allotment of these plots to entrepreneurs on a leasehold basis.
3. Construction of roads, drainage systems, and providing street lights in the industrial areas.
4. Planning, implementing and managing water supply schemes.
5. Setting up common facility centers by providing accommodation for banks, post office, Telecom office, Police Stations, dispensaries and canteen.
6. Establishment of effluent collection and disposal system for chemical zones, and implementing government and semi-government projects.

Thus, these industrial and infrastructural facilities have become instrumental in attracting industries to M.I.D.C. areas.

C. Powers of Maharashtra Industrial Development Corporation⁸:

Maharashtra Industrial Development Act has given following powers to MIDC

1. To acquire and hold such property, both movable and immovable and to lease, sell exchange or transfer any property held by it on specific conditions.
2. To purchase by agreement or to take on lease or under any form of tenancy any land to erect such buildings and to execute such other works.
3. To provide amenities and common facilities in industrial estates and industrial areas and to construct and maintain works and buildings therefore.
4. To make available buildings on hire or sale to industrialists or persons intending to start industrial undertakings.

5. To construct buildings for the housing of the employees of such industries.
6. A) To allot factory sheds or such buildings or parts of buildings including residential tenements to suitable persons in the industrial estates developed by the Corporation.
B) To modify or rescind such allotments, including the right and power to evict the allottees concerned on breach of any terms or conditions of their allotment.
7. To constitute advisory committee to advise the Corporation.
8. To engage suitable consultants or persons having special knowledge or skill to assist the Corporation in the performance of its functions,
9. All permissions, orders, decisions, notices and other documents of the Corporation shall be authenticated by the signature of the Chief Executive Officer of the Corporation or any Officer authorized by the Corporation in this behalf.
10. To levy fees or service charges to cover its expenses or maintenance of roads, drainage, water supply, street lighting and such other services and amenities as provided by it to the plot holders or other persons receiving the benefit of the same.

1.6 Provisions of Finance, Accounts and Audit of Maharashtra Industrial Development Corporation⁸:

1.6.1 Provisions of Finance

Following are various important provisions relating to finance given in the Maharashtra Industrial Development Act, 1961.

1. Application of Corporation Assets

As per the Act, Corporation shall hold all property, fund and other assets in its name and apply it as per the provisions of the Act.

2. About Corporations Funds

- i. Corporation shall maintain its fund and shall credit following different types of monies.
 - a) All monies received by the corporation from the State Government by way of grants, subventions, loans, advances or otherwise;
 - b) All fees, costs and charges received by the Corporation under the Act;
 - c) Monies received from disposal of lands, buildings and other properties movable and immovable and other transactions.
 - d) Monies by way of rents and profits or in any other manner or sources.
- ii. The above accounts of the corporation shall be operated by officers authorized by the regulations made on this behalf.
- iii. Corporation may keep on hand such sum as it thinks fit for its day to day transactions subject to such limits and conditions prescribed in the act.

3. About Grants, Subventions, Loans and Advances to the Corporation.

State Government may after due appropriation made by legislature by law, make such grants, subventions, loans and advances to the Corporation under this act.

4. About Power of the Corporation to Borrow.

The Corporation may borrow money in the open market by issue of guaranteed or unguaranteed bonds, debentures, stocks or borrow money from any scheduled banks or from any other banks or financial institutions approved by the State Government on this behalf.

The maximum amount which the Corporation may at any time have on loan shall be rupees seventy-five crores, unless the State Government with the approval of State Legislative Assembly, by notification in the official Gazette, fixes a higher maximum amount for this purpose.

5. About the Deposits.

The Corporation may accept deposits on such conditions as it deems fit from persons, authorities or institutions, to whom allotment or sale of land, building or sheds is made or is likely to be made in furtherance of the objects of this Act.

6. About Reserve and Other Funds.

The Corporation shall make provision for such reserve and other specially denominated funds as the State Government may, from time to time, direct.

None of the funds shall be unutilised for any purpose other than that for which it was constituted, without the previous approval of the State Government.

7. About Expenditure from Funds.

The Corporation shall have the authority to spend such sums as it thinks fit for the purpose authorized under this Act from out of the general fund of the Corporation or from the reserve and other funds.

The Corporation may contribute such sums as it thinks fit towards expenditure incurred or to be incurred by any local authority or statutory public undertaking in the performance of the statutory functions of such authority or undertaking in relation to any of its industrial estates or industrial areas including expenditure incurred in the acquisition of land.

8. About Budget and Programme of Work.

The Corporation shall prepare and submit an annual financial statement and the programme of work for the succeeding financial year for approval to the State Government on prescribed date of each year.

The annual financial statement shall show the estimated receipts and expenditure during the succeeding financial year in such form and detail as may be prescribed.

A copy of each of the annual financial statement and the programme of work and the supplementary financial statement, if any, shall be placed before each House of the State Legislature as soon as may be after their receipt by the State Government.

1.6.2 Provisions of Accounts and Audit

Following are various provisions of accounts and audit given in the Maharashtra Industrial Development Act, 1961.

The Corporation shall maintain books of account and other books in relation to its business and transactions in such form, and in such manner, as may be prescribed.

The accounts of the Corporation shall be audited by the auditor appointed in accordance with the provisions of sub section (3) of section 19 of the Comptroller and Auditor – General's (Duties, Powers and Conditions of Service) Act, 1971 or by any other auditor appointed by the State Government.

The Corporation shall send a copy thereof together with the copy of the report of the auditor to the State Government as soon as the accounts of the Corporation are audited.

1.7 Administration of Maharashtra Industrial Development Corporation⁸:

The MIDC is a Government of Maharashtra undertaking working in the state of Maharashtra and having its head office in Mumbai and several branch offices such as regional offices, circle offices and divisional offices spread all over the state in order to achieve the objectives of the corporation i.e. to accomplish the balanced industrial growth & development of the Maharashtra.

1. REGIONAL OFFICES

In order to decentralize the administration and management of MIDC, it has 12 regional Offices working under regional officers. They are Amravati, Aurangabad, Kolhapur, Latur, Mahad, Mahape, Nagpur, Nasik, Pune, Ratnagiri, Sangli and Thane. It shows that the Corporation has adequate network for providing infrastructural facilities to industrial units.

In addition, to assisting the general managers of each district industries centers one area manager of the MIDC has been deputed to each such DIC on permanent basis. In this way, the MIDC has made necessary arrangements for providing services at each district to the entrepreneurs so that they are not required to contact the head office in Mumbai for a small plot of land and other minor works. The regional offices help the entrepreneurs to get the required services from other organizations such as MSEB, MSFC, MSSIDC, banks, etc. The regional offices have been established in order to make decentralization of the MIDC activities and easy allotment of plots to the aspirant entrepreneurs.

The followings are the three main functions of regional office:

- A. Allotment of plots to entrepreneurs of the size measuring between 2000 sq. meters and 9999 sq. meters.
- B. Preparation of land acquisition proposal for the region under their purview and submission of the same to the head office for completion of the further procedure.
- C. Granting of extension period to the entrepreneurs for construction of factory on the allotted plot.

2. CIRCLE OFFICES

The MIDC has total seven circle offices in Maharashtra. One each at Amravati, Aurangabad, Mahad (Konkan), Mumbai, Nagpur, Pune and Ranjangaon (Pune). A superintending engineer is the head of each circle office. Circle offices are established for the efficient and effective field work related to the development of MIDC industrial areas and estates in the state. Each Circle Office works as per the guidance and instructions of Engineering and Maintenance Department at Head Office. This office is fully engaged in controlling divisional offices for planning and development of new industrial areas.

3. DIVISIONAL OFFICES

The activities of the divisional offices are controlled by the circle offices and also by engineering & maintenance department at the head office in Mumbai. Each divisional office carries out the actual development work of new industrial area in its jurisdiction. There is also a sub-divisional office for each industrial area.

Thus, the MIDC has set up divisional offices at different places in Maharashtra to achieve its objectives. The increasing need of man power for development of industrial areas is met by setting up divisional offices at different places.

1.8 Span of Control in Maharashtra Industrial Development Corporation⁸:

Administration and management of M.I.D.C. is carried out by various types of offices. At the top Head Office followed by Regional Offices. Head Office controls day-to-day functioning of the Circle Offices and Divisional Offices.

1. SPAN OF CONTROL AT HEAD OFFICE

Head office is the top administrative authority in MIDC headed with Chief Executive

Officer (CEO). There are seven departments at this office. Each department is controlled by one head except two departments, namely, General Administration & Land Survey Department and Architecture & Town Planning Department where two heads as Chief Planner and Chief Architect are working jointly as head. All these seven departments are jointly controlled by the Joint CEO and CEO.

2. SPAN OF CONTROL AT REGIONAL OFFICE

Joint Chief Executive Officer directly control all the regional offices. Regional office has two sections i.e. Area Managing and Land Survey. Allotment of plots, transfer of plots and giving extension to plot-holders etc. is the responsibility of the Area Manager, whereas Scrutinizing of land records, reservation in area of land is the responsibility of the Land Survey section.

3. SPAN OF CONTROL IN CIRCLE OFFICE

M.I.D.C. has four circle offices which controls seventeen divisional offices. Chief Engineer from Engineering and Maintenance Department at Head Office controls all the circle offices. Superintending Engineer is head of circle office. He is associated by various subordinates such as Deputy Engineer and Assistant Engineers etc.

4. SPAN OF CONTROL AT DIVISIONAL OFFICE:

Executive Engineer is the in-charge of each divisional office which is divided into three parts, viz., Electricity and Water, Land Development and Drainage. Under CEO, there are seven heads of the departments and each department consisting of at least about 8 to 10 staff working. Accounts and Finance Department are directly controlling their staff working at Regional Office and Divisional Office.

1.9 THE MANAGERIAL HIERARCHY OF MIDC⁸:

Chairman of MIDC is the highest decision-making authority in MIDC. Vice-Chairman, Chief Executive Officer and Joint Executive Officer are the decision-making authority after chairman. Joint Executive Officer controls the various departments such as General Administration and Land Survey Department, Accounts and Finance Department,

Engineering and Maintenance Department, Architect and Town Planning Department, Legal and Co-ordination Department, Technical Advisor Department, Public Relation Department as well as Regional Offices (Branch Offices). Accounts and Finance Department is working through its various Branch Offices. Engineering and Maintenance Department is working through its various Circle Offices and Divisional Offices.

Thus, MIDC is controlled by a group of people working at various levels of management who are linked together in a formal relationship to accomplish its objectives. The hierarchy linking of all members of the MIDC has been explained in Chart.

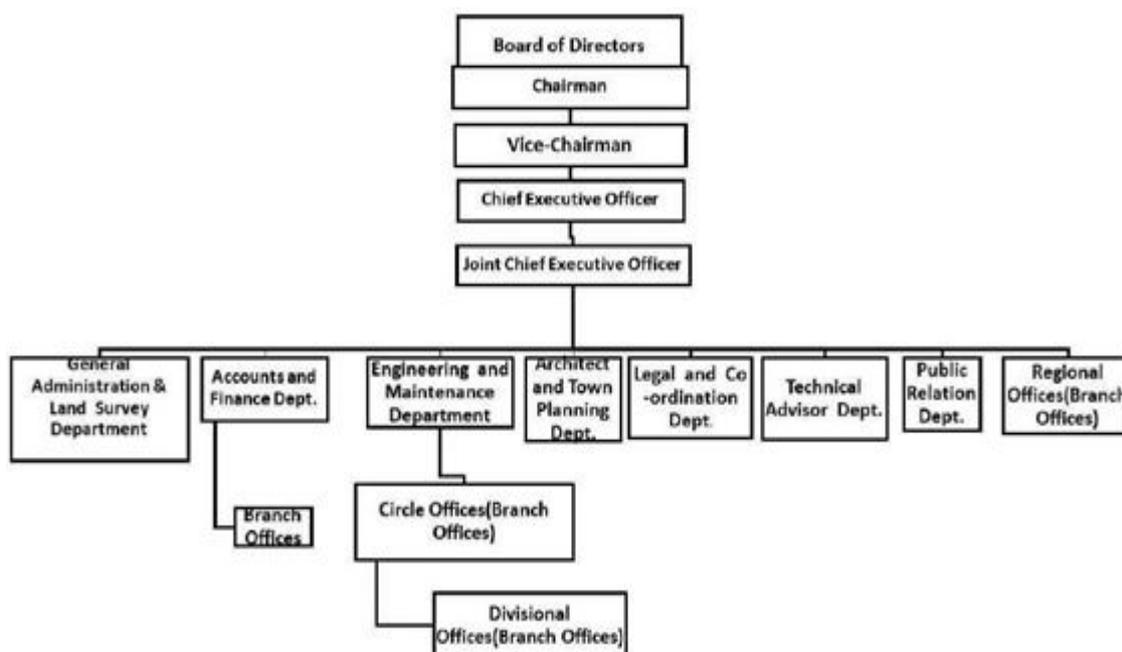


Figure No. 1: Managerial Hierarchy of MIDC

Source: The Maharashtra Industrial Development Act, 1961 (Maharashtra Act No. III of 1962). Director, Government Printing, Stationery and Publications, Maharashtra State, Bombay, (1992) Pg. 6735.

1.10 THE BOARD OF DIRECTORS

The Board of Directors are appointed in accordance with section 4 (h) of the MIDC Act, 1961 by the State Government. The supreme decision-making body and in-charge of overall supervision and control of the affairs of the MIDC is given in the hands of Board of Directors. As per Section 4 of Maharashtra Industrial Development Act 1961, the corporation is managed by 15 members of Board as mentioned in above table which include the chairman, vice-chairman and others. MSEB, SICOM, MSFC and MHADA help MIDC for providing infrastructural facilities. Therefore, the heads of these four organizations are appointed as members of the Board of Directors.

Table No. 1 : Structure of the Board of Directors of MIDC

Sr. No.	Description	No. of Members
1	The Minister of Industries, Government of Maharashtra Ex-officio, who shall also be the Chairman of the Corporation.	1
2	Minister of State for Industries, Ex-officio, who shall also be the Vice-Chairman of the Corporation	1
3	Two official members nominated by the State Government of whom, one shall be the Financial Adviser to the Corporation	2
4	The Chairman of Maharashtra State Electricity Board constituted under the Electricity (Supply) Act, 1948.	1
5	The Managing Director of State Industrial and Investment Corporation of Maharashtra Limited	1
6	The Managing Director of Maharashtra State Financial Corporation.	1
7	One member nominated by the Maharashtra Housing and Area Development Authority established under the MHADA Act, 1976.	1

8	Six members nominated by the State Government, from amongst persons appearing to it to be qualified as having had experience of and having shown capacity in industry, trade or finance, or who are, in the opinion of the State Government, capable of representing the interest of persons engaged or employed therein	6
9	The Chief Corporation Executive Officer of the Corporation, Ex-officio, who shall also be the secretary of the corporation	1
	Total	15

Source: Govt. of Maharashtra (1985) M.I.D. Act 1961, Section 4, Law and Judiciary department, Mumbai, p. 6735

1.11 THE CHIEF EXECUTIVE OFFICER

An IAS Cadre officer is appointed as Chief Executive Officer to execute the policy decisions taken by the Board through various heads of the functional departments at the head office and the branch offices spread all over the state. The important powers of the CEO are summarized below: -

- A. To incur revenue expenses as per budgetary provisions.
- B. To give approval to development expenditure up to Rs.1 crore.
- C. Power to transfer, promote or demote and depute his subordinates.
- D. He can appoint subordinates and incur capital expenditure with the prior permission of his superiors.
- E. He can terminate subordinates with prior permission of his superiors.

The office of the Chief Executive Officer has functional specialization with functional experts who are in charge of the respective departments. The workings of these departments are briefly explained below.

1. GENERAL ADMINISTRATION AND LAND SURVEY DEPARTMENT

This department is divided into two sections as (1) General Administration & (2) Land Survey Department. The General Administration section looks after the personnel function and Land section looks after land acquisition and rehabilitation functions.

The land survey section prepares the proposal of land acquisition with the help of sub-divisional officer of the respective district and the proposal is passed through the Board meeting. Finally, the proposal is submitted to the State Government for actual acquisition of the land.

2. ACCOUNTS AND FINANCE DEPARTMENT

This department is situated at the head office. The responsibility of the department is of accounts and financial matter of the corporation. The chief accounts officer is the in-charge of the department. He is a government employee deputed for this job for a certain period. Other subordinates in the department are appointed as regular employees of the MIDC. Various subordinate offices spread all over the state submit their reports relating to accounting and financial matters and then Accounts and Finance Department compiles final accounts of the MIDC which consist of Income & Expenditure Account and Balance Sheet.

3. ENGINEERING AND MAINTENANCE DEPARTMENT

This department is engaged in land development, water supply, providing electricity, drainage facilities and maintenance of industrial areas. In addition, the field activities of circle offices and divisional offices are also controlled by this department. Thus, all the circle offices, divisional

offices and sub-offices working under the department are engaged in the field work of the corporation and development of industrial areas.

4. ARCHITECT AND TOWN PLANNING DEPARTMENT

This department has two sections such as (1) Architecture and (2) Town Planning. The architecture section and the town planning section is headed by the chief architect and the chief planner respectively. A proposal for planning of the development is forwarded to the department at the time of development of a particular area. The norms for the planning for area development is fixed by the Board of Directors. To understand the physical position of the area to be developed, the land survey is to be conducted on priority basis. The planning should provide 10% for open space, 5% of the total space for amenities, 80% is used for various types of plots and roads and 5% for special reservation which can be used for any purpose in future.

5. LEGAL AND CO-ORDINATION DEPARTMENT

It has two sections performing two different functions, viz., (i) legal matters and (ii) matters relating to lease agreements. These two branches operate side by side in one department. The legal manager is concerned with the compilation of annual reports of the MIDC, minutes of the meetings of the Board of Directors and other meetings and court cases. The co-ordination manager deals with the lease agreements, their conditions. Lease agreement section help the plot holders to obtain loans and other facilities by mortgaging their plots.

6. TECHNICAL ADVISER DEPARTMENT

In this department an I.A.S cadre officer is deputed as Deputy Chief executive by the State Government for a particular period. The department sanctions the appropriate project in relation to the area acquired and gives advice relating to technical factors. The land allotment committee working in this department meets every week at the Thane regional office to make allotment of plots ranging from 2000 sq. meters to 9999 sq. meters. This department functions as advisory committee, the members of which are experts from different fields such as M.S.E.B., Maharashtra Pollution Control Board, etc. The committee is the authority to issue 'no objection certificate' to plot holders. Thus, this department deals with technical work. The staff is working at different circle and divisional offices spread over the entire state.

7. PUBLIC RELATIONS DEPARTMENT

To project and maintain good image of the MIDC in the public in the state, Public Relation Department plays important role by arranging seminars, conferences, etc. In addition, MIDC publishes a periodical named 'Vikas Darpan' for giving overall picture of developmental activities of the MIDC. This department has a well-equipped library at the head office.

1.12 Classification of Industrial Areas⁹

MIDC has classified their industrial areas as per following three ways.

A. The First Method is based on the specific type of product produced in the industrial units in specific area. Thus, it is bifurcated as per the zonal specialization approach. Following are industries classified as per the product wise or specialization wise.

- a. Chemical Zones
- b. Electronic Zones
- c. Petrochemical Industries Zones
- d. Leather Complex
- e. Software Complex.

B. Under the second method, M.I.D.C. has classified its industrial areas as (a) Major Areas, (b) Mini Areas, and (c) Growth Centers.

a) Major Areas

The major industrial area is bigger in size with larger number of industrial units and mostly these areas are near to big cities. These areas consist of industrial plots of various sizes.

b) Mini Areas

Mini industrial areas are smaller in size. Mostly these areas are situated near small towns. The idea to develop mini-industrial areas is to promote balanced industrial development in the State. The Government of India as well as the State Government give benefits such as subsidy, tax holiday for first five years, loans at lower rates of interest, exemption from Excise Duty, Octroi etc. for some years of their initial period.

c) Growth Centers

Growth Centre approach was initiated to promote the growth of small-scale and ancillary industries which would satisfy the needs of medium scale and large-scale industrial units in the nearby areas. Growth center strategy creates job opportunities for the educated unemployed in the rural areas by the development of resource-based like agro-based, forest-based and mineral-based developing industries.

C. The **Third Method** of classification is on the basis of geographical location of industrial area into (A) Developed Areas, and (B) Developing Areas, etc. Thus, as per the policies of the State Government M.I.D.C. has classified as under:

Group 'A' - Developed Areas which consist of Mumbai and Pune Metropolitan Region, that is, MMR and PMR region.

Group 'B' - Fairly Developed Areas covers all district places because they are fairly developed.

Group 'C' - Less Developed Areas.

Group 'D' - Least Developed Area of rural areas of the State Further, the extension of these groups also classified as under:

A) Areas in Metro region.

B) Areas at District places (Semi-Urban)

C) Rural Industrial areas

1.13 Geographical Research Area

As of now, MIDC has 16 regional offices and 289 industrial complexes spread over 66000+ hectares of land all over Maharashtra. It is one of the largest industrial land banks amongst all the industrial development corporations in India.

Author has chosen MIDC units established at Thane District for the study. Thane is considered as the third largest Industrial District for state of Maharashtra. A large number of modern industries are located in this Industrial belt. The district is divided into three main parts. The primary part comes under the direct influence of the Mumbai region which constitutes Ulhasnagar, Kalyan and Thane comprising the presence of a large number of organized Industries. The second part consists of the developing cities of Vasai, Bhiwandi, Palghar and Dahanu. The third part includes the rest of the district constituting the conventional village, traditional colleges and the agro-industries.

1.14 Period of the Study

Author has selected 5 years period from 2010-11 to 2014-15 for the study. Thus, both financial and non-financial information is collected of the said period for analysis and interpretation.

1.15 Universe and Sample Analysed

As said earlier that as of now, MIDC has 16 regional offices and 289 industrial complexes spread over 66000+ hectares of land all over Maharashtra. As on the date 28918 industries produce different types of product under Maharashtra Industrial Development Corporation areas in Maharashtra.

Author has chosen MIDC units established at Thane District for the study. For this purpose, author has used simple convenient sampling method for collection of information. There are total 13 MIDC units established in Thane District. Out of these 13 MIDC units, 5 MIDC units (38.46%) were considered as representative sample MIDC units as per convenience sampling method. These 5 selected MIDC units are 1. Dombivali MIDC, 2. Ambernath MIDC (Ambernath Badlapur Road), 3. Additional Ambernath MIDC (Anand Nagar), 4. Badlapur MIDC and 5. Kalyan Bhiwandi MIDC. As on the date there are 300 officials working at the various capacity in the MIDC offices. Therefore, author has selected 30 MIDC officials who are working as different types of designation. These officials were also selected as per convenience sample method.

As on the date there are more than 4461 industries of small, medium and large size are registered and established their business in the selected MIDC areas. Out of these total industrial units, 2800 industrial units are belonging to Chemical, Engineering, Pharmaceutical and Textile sector industries. Author has selected 280 industries of these sectors on the basis of different size (small, medium and large) and type (sole proprietorship, partnerships, Limited and private Companies) for the study as per convenience sampling method. Author has selected one top official from each industry from the sectors (Chemical Sector, Engineering Sector, Pharmaceutical Sector and Textile Sector) only. Thus, to understand the opinion of these industrialists, author chosen 280 officials of these industries. While selecting these officials, author has selected top officials of the industry i.e. owner of the industry or top officer having power to take important decision on behalf of the industry.

In addition to this, to understand in-depth about the MIDC units, about its functioning and infrastructural facilities and services, author has conducted interviews of other stakeholders also. They are 1) 5 Officials from MPCB, 2) 6 Officials from Industrial Associations of Kalyan Ambernath Manufacturers Association, Badlapur Industries Welfare Association and Additional Ambernath Manufacturers Association, 3) 280 employees from sample Industrial units, and 4) 250 nearby residents of MIDC units. Thus, universe and sample of the study is shown in the below table.

Table No. 2 : Population and sample

Universe	Population	Sample Size (%)
MIDC Units in Thane District	13	5 (38.46%)
MIDC Officials	300	30 (10%)
Officials from Industrial Units	2800	280 (10%)
Employees from Industrial Units	---	280
Officials from MPCB	--	5
Officials from Various Associations	--	6
Nearby Residents	--	250

While selecting sample respondents, author has selected sample on the basis of types of Organisation such as sole proprietorship, partnership firms, private limited companies, etc. Efforts were made to select sample respondents from different types of industrial units such as small, medium and large industries as well as on the basis of turnover. Author has selected samples from four types of industry for the study. These industries are Textile, Chemical,

Engineering and Pharmaceutical industry only. It is assumed that, since the selection of the area is fairly representative in character, the findings would be of great value to the different people intending to organize MIDC units under similar conditions elsewhere.

1.16 SOURCES OF DATA COLLECTION

It is to be noted that industries are expecting large number of problems to be solved by MIDC units. For this purpose, to understand various problems and issues of these industries relating to MIDC, author has used both primary and secondary data sources.

A) SECONDARY DATA

To study the progress and growth in Industries due to MIDC in general and MIDC units in Thane District in particular, its functions, duties of MIDC officials, financial aspects, etc. Author has used secondary data sources. These sources are published data of MIDC website, Office of Commissioner of Maharashtra Industrial Development Corporation, Annual Reports of MIDC, Reference books (MIDC Act, Companies Act, other acts relating to industry), journals published on MIDC and industrial sectors, Reports and periodicals published by MIDC, returns, statistics reports, accounts and other information furnished by MIDC to State Government, Government publication such as government survey report on MIDC, Programs, schemes, actions given in Five Year plans of Government of India, Maharashtra's Industrial policies (Maharashtra Che Audyogik Dhoran since 2000), Central Government policies relating to Industry, Maharashtra Audyogik Vikas Adhiniyam 1961, newspaper articles etc. In addition to this author paid several visits to Savitribai Phule Pune Vidyapeeth's Jaykar Library, Mumbai University Library, Maharashtra Chamber of Commerce etc. to understand the type of study done relating to the topic. These secondary sources have helped to understand the in-depth knowledge about current state of MIDC and assisted in formulating ideas and strategies for adoption of the research methodology and selection of sample for the study.

B) PRIMARY DATA

In addition, the main focus was kept on the primary data. Author has collected the opinion of MIDC officials, industry officials and other officials relating to issues of MIDC as far as its functions, duties, services and infrastructure facilities are concerned. For this purpose, after pilot study, Author has framed questionnaire for MIDC officials, industry officials. It has helped to get answers for many questions. In addition to this author has conducted interview of different officials which include officials of MPCB, employees of industrial units, officials of manufacturing associations and nearby residents of MIDC areas who are involved in different industry related affairs. Thus, this primary data helped author to focus on the issues of MIDC units and also to draw adequate conclusions and suggestions on the same.

1.17 Parameters of the book

Following parameters are considered for the present book

- 1. Financial Parameter:** Analysis of financial position of MIDC units which includes ratio and trend analysis of various financial and revenue items of MIDC units.
- 2. Non-Financial Parameter Which Includes**
 - a) Infrastructural facilities provided by MIDC which include Land acquisition and allotment Policy, Power Infrastructure Facility, Water Supply Facility, Fire Prevention and Protection measures, Safety and Security Measures, Waste Disposal Management, Consultancy etc.
 - b) Number of employees handling administration and management of MIDC, coordination of MIDC with various other bodies such as MPCB, MSFC for getting adequate finance, MSEB for power supply, fire stations etc.

1.18 DATA ANALYSIS AND INTERPRETATION

Since, much of the data are of qualitative in nature, therefore, while analyzing and interpreting the data, author used ratios, percentages, averages and proportions etc. Since the book is based on field level interaction; much time was spent to meet as many sample respondents as possible to develop good understanding of various aspects mentioned in the book. While analyzing the data, it is represented in the form of tables and histograms, pie charts, etc. The data is represented and analyzed as per the order as it appeared in the questionnaire. Thus, the detailed analysis helped the author to draw a clear picture of the present situation of MIDC units and their issues relating to infrastructural facilities and services. In addition, author has also used following statistical tools to draw appropriate conclusions and testing of hypotheses.

A. Chi Square Test

B. Regression analysis and curvilinear estimation

C. Sign Binomial Test

D. Karl Pearson's correlation coefficient method

E. ANNOVA

Thus, Author has analyzed all the responses with suitable statistical tools, and, inferences drawn thereon are given at the end of each table. In the end, the book identifies the factors responsible for issues of MIDC units in the provision of infrastructural facilities and services and offered suggestions to resolve the same.

1.19 CONCLUSION

Maharashtra Industrial Development Corporation is playing a major role in increase in industrial growth. In fact, it plays role of balanced industrial development of Maharashtra. For this purpose, it assists with by providing basic facilities like water supply, roads, street lights, drainage, plot development, and other infrastructural facilities. It also encourages entrepreneurs in setting up industries at various locations. Thus, the chapter gives us idea about various types of industries, its functions, role, and powers along with provisions of finance, accounts and various administrative offices of MIDC. This methodology helped author to focus on various aspects of analysis of MIDC. One of the important facets of the book is the literature review, which has helped the author bring to focus the pertinent issues to be studied. These are detailed in the following chapter.

1.20 REFERENCES

1. Alexander (1963): Industrial Estates in India, Asia Publishing House, Mumbai. and Aurangabad.
2. United Nations Industrial Development Organization (1967), Policies and Programmes for the Establishment of Industrial Estates, International Symposium on Industrial Development, Athens
3. Bredo, William (1962): Industrial Estates: Tools For Industrialization, Asia Publishing House, Mumbai.
4. https://economictimes.indiatimes.com/articleshow/65103340.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
5. National Industrial Development Corporation Limited. (n.d.). Retrieved 2017, from www.mapsofindia.com
6. MIDC, An Outline of Activities, 31 March 1989, Mumbai, p. 3.
7. MIDC, Silver Jubilee Souvenir, Mumbai, 1st August, 1987, p.20.

8. The Maharashtra Industrial Development Act, 1961 (Maharashtra Act No. III of 1962), Director, Government Printing, Stationery and Publications, Maharashtra State, Bombay, (1992) P. 6735
9. MIDC, Annual. Report (1969-70), MIDC, Mumbai, p. 8.

CHAPTER - 2

REVIEW OF LITERATURE

2.0 INTRODUCTION

This Chapter deals with the review of literature. To understand in-depth knowledge about the topic as well as to understand existing problems and issues of industrial units established in MIDC, Author has gone through various articles in newspapers, Journals, Magazines. In addition, Author has also referred thesis available in the library. Author has also reviewed various reports of expert committees appointed by the Government of India, Government of Maharashtra and other authorities. This helped author to understand the topic and existing problems and issues of MIDC. The findings and conclusion of the above are collated for arriving at the scope of the present study.

2.1 REVIEW OF REPORTS OF COMMITTEES / WORKING GROUPS

1. Darade, (2012)¹

The report expressed the views that MIDC is playing an important role in creating an investor friendly environment for the businesses. MIDC has also formulated initiatives for attracting the businesses in the State of Maharashtra. It has introduced a single window clearance facility with digitalized Maha-E-Biz process through Enterprise Resource Planning software. Single window clearance facility helps all existing investors to provide all clearances online. At present, entrepreneurs can see online the status of application and approvals. This is very intelligent step taken by MIDC and shown the great potential.

2. Report of All India Associations of Industries, (2013-14)²

The Report of All India Associations of Industries has suggested following recommendations -

- a. Small scale industry must be subsidized and a certain portion of land in the area of MIDC must be reserved for this sector. Adding to this, there must be provisions for Setting up industry associations, convention centers and exhibitions at the MIDC. This will help to promote as well as support Small Scale Industries.
- b. MIDC is levying development charges calculated on the basis of Ready Reckoner land rates. These rates are as high as 3 times of the prevailing MIDC lease hold rates. This is not appropriate. Therefore, development charges should be levied on the basis of MIDC land rates only.
- c. The industrial areas of MIDC are established in the areas which come under the administration of the local authorities such as Municipal Corporations, Panchayat Samiti, Gram Panchayat, etc. This institution also makes the approval process complex and costly for investors.

2.2 REVIEW OF THESIS

1. Dr. G. Y. Shitole (1996)³

In this Ph.D. Thesis entitled "The Performance Evaluation of Maharashtra Industrial Development Corporation", narrated the financial and physical performance of the MIDC. The study shows that the effort of the MIDC in respect of industrial dispersal and development is successful. The study expects further future scope for the rapid development and dispersal of industries in the state. The study revealed that the efforts of the MIDC for the achievement of its objectives were successful. M.I.D.C. plays as a direct agent of the State Government for the purpose of developing industrial areas and water supply schemes. The study suggested that M.I.D.C. should concentrate more on increasing the sources of funds and reducing the expenditure on various heads. The Thane district was found to be dominant till the middle of 1980's due to fast increase in industrial activities of M.I.D.C.. However, during the later period such dominance of Thane district has reduced. This reduction was due to increase in M.I.D.C. activities in rural parts of the State.

2. Dr. M.A. Lokhande (2000)⁴

Thesis entitled “Industrial Development of Jalna District – Problems and Prospects” examined industrial development of Jalna district. The study shows that due to insufficient infrastructural facilities in Marathwada region, industrially backward districts remained backward for years. The study revealed that industrialization process could not accelerate in MIDC areas and growth centers due to under developed infrastructural facilities. There is a need to concentration of MIDC activities in Aurangabad District resulted in infrastructural disparities in Aurangabad Division. The MIDC should develop adequate number of suitable plots to all types of industries as well as construct suitable sheds in Industrial areas. MIDC should construct its own water supply scheme, pucca roads in the industrial areas. MIDC should establish Mini MIDCs in every Talukas. Author suggested that there is need to provide more incentives to the entrepreneurs for setting up industries in Mini MIDCs.

2.3 REVIEW OF JOURNALS

1. Shitole & Rajan, (2006)⁵

The research paper entitled “Industrial Sickness in Dombivli, Ambarnath and Badlapur MIDC Areas in Thane District” has given various issues relating to sickness of industrial units in the study areas. There is a major issue of power cuts or shortage of power in the study area which affects the efficiency on the working of the industrial unit, delay in delivery of goods and adding to the cost of production of goods. Few sick industrial units have transferred their existing production in to other products. Author strongly felt MIDC must try for helping marketing activity on behalf of industries which will help to reduce sickness of industries. Author suggested that there is a need of the hour that MIDC should provide the conducive environment along with necessary infrastructure so that there can be a higher competitive environment.

2. Deepak. M. Salve, (2011)⁶

The Paper entitled “Industrial Relations - A way to improve productivity -A study of Select Industries of MIDC, Dombivli” expressed that higher growth rate in industries is possible in a climate of harmonious industrial relations. It will contribute to higher investment; improved productivity and efficiency needed for competing in global markets. Healthy labour management relations are very much instrumental in improving the economic conditions of the organizations.

2.4 REVIEW OF MAGAZINES

1. Sampada, (1992)⁷

Sampada is a Marathi monthly magazine had devoted its issue dated November 1992 to M.I.D.C. activities. It has included analytical survey of M.I.D.C. activities on a regional basis. The survey has mentioned various challenges before the Corporation. It has also focused on the deficiencies in the functions of M.I.D.C. especially while providing infrastructural facilities to industries.

2. Small Scale Industries (Nov. 1990)⁸

A National Monthly magazine took review of MIDC activities as well as their contribution in the development of small-scale industries in Maharashtra. The magazine has given various opportunities available to SSI at MIDC industrial areas along with required industrial infrastructural facilities.

3. New Venture Digest (Jan./Feb. 1992)⁹

The magazine explained in detail various MIDC activities and its features. It has also focused on the strategies of MIDC for taking steps in order to stay ahead. The magazine showed that there is a gap between the actual performance of the MIDC and the expectations of the

entrepreneurs. It concluded that MIDC While fulfilling the needs of industrial units in the MIDC areas, the MIDC always faces problems.

4. MEDC Monthly Economic Digest (August 1998)¹⁰

Author examined the physical performance of the MIDC in Maharashtra. The study concluded that the qualities of some of the services provided by the MIDC are not up to the satisfactory level as expected by the entrepreneurs of industrial units in the MIDC areas. The study suggested that the MIDC need to pay adequate attention on improving the quality of its services and also to implement new schemes which would be in tune with the needs of modern challenges of industries.

2.5 REVIEW OF NEWS PAPER ARTICLES

1. Hindustan Times, dated 8th October 2014¹¹, Sanjana Nambiar

Article depicted that Kalyan Ambernath Manufacturer's Association (KAMA) raised the issue of lack of will of MIDC to develop MIDC areas. MIDC authorities have failed to come up with the ways to develop the MIDC Sector.

2. Hindustan Times, dated 16th October 2014¹², Sanjana Nambiar

Article stated that the areas of Dombivli MIDC have been witnessing rampant encroachment. Temples, Vegetable markets, Dance Bars, showrooms and Hotels have acquired the land in MIDC areas illegally. These illegal businesses give bribe to authorities of MIDC. Thus it is affecting the Industrial units of MIDC areas. Paper revealed that if authorities of MIDC don't wake up in time, the Industrial Area in Dombivli will soon disappear, leaving around 1 lakh people unemployed.

3. Loksatta, Dated 21st November 2014¹³, Representative

Article depicted the issue of water bill. It has stated that from MIDC has reduced the water bill rate by Rs.4 to 5. The decision of MIDC will reduce its revenue to some extent. The author expects that MIDC must think about some other sources of revenue as early as possible.

4. Hindustan Times, dated 29th November 2014¹⁴, Sanjana Nambiar

The article depicted that 46 companies of Kalyan MIDC were found violating the Maharashtra Pollution Control Board norms and hence people nearby the area initiated action against them. Nearby people registered several complaints and expect to take strict action against the offending companies.

5. Hindustan Times, dated 30th November 2014¹⁵, Sanjana Nambiar

Article depicts that MIDC authorities are of opinion that they have deployed Security guards and put-up notice boards for not dumping garbage along a Dombivli MIDC road but the Gram panchayats are not willing to co-operate. MIDC and the Gram panchayats have to cooperate each other for balanced regional development.

6. Economic Times, dated 5th December 2014¹⁶, Rohit Chandavarkar

Article expressed that the total number of permissions required for new projects to be set up in MIDC has been brought down to 5 from 14 to cut red tape and ensure faster approvals for new industrial projects. Renewal of factory licenses should happen in 3 days or else it would be considered as deemed approval. This will help Industrial Units to start their operations quickly and at less cost in MIDC area.

7. Loksatta, dated 15th September, 2016¹⁷, Representative, Ambernath

Article has depicted the issue of pollution which result in to the closure of the 66 industries. The notice relating to the same has been given by Maharashtra Pollution Control Board. All these industries were functioning in Kalyan, Ambernath MIDC area. However, it will impact on employment. i.e. due to closure of industries, more than 20000 workers will become unemployed. Therefore, employees were demanding that MIDC has to take some urgent decisions with this regard to protect the industries on urgent basis.

8. Times of India, dated 28th October, 2017¹⁸, Subhash Desai

The article opined about women entrepreneurs. Article suggested that to increase number of women entrepreneurs, MIDC Land has to be reserved for Women Industrialists in MIDC area across the state. In addition, interest rate on loan to women entrepreneurs should be given at 5% subsidized rate and electricity charges should levied at Rs.1-2 per unit. This action will encourage women's participation in mainstream industries for comprehensive economic growth.

9. Hindustan Times, dated 16th November, 2017¹⁹, Sanjana Nambiar

Article focused on the issue of Sewage and Effluent Treatment Plan. Kalyan and Dombivli MIDC residents are facing huge problem of pollution. Therefore, article depicted that there is a need to follow the order of Supreme Court. As per the order, State Government should allot Rs.50 Crore to MIDC to set up the Sewage Network and Effluent Treatment Plant which will help to solve the problem of pollution for the past 20 years for Kalyan and Dombivli MIDC Residents. The article raised the concern about the said plant. For this purpose MIDC along with Civic Authorities have to look into the matter on urgent basis.

10. Gujarat Samachar, Dated 21st November, 2017²⁰, Representative, Mumbai

Article raised the issue of safety and security measures as industrialists are taking care of safety and security measures in their industry. In fact, there is no regular checking of safety measures from industry authorities. This resulted the blast of Compressor in Alafin Company, Phase-II, Dombivli MIDC area, 3 employees got injured, out of which 1 person was serious. Last year also in Probes Company, Dombivli MIDC more than 10 persons died in similar kind of blast. Thus, the article raised the concern about Safety and Security measures of Industrialist in MIDC area and also on MIDC Authorities.

11. Loksatta, dated 10th March 2018²¹, Representative, Dombivli

The article depicted that Lack of proper road facility and lack of regular water supply are major causes for closing down of Industries in MIDC area. Even though Industrialist pay taxes regularly but MIDC do not make any expenses for proper road facility as well as for regular water supply. MIDC need to take steps for providing proper road facility as well as regular water supply for attracting industries as well as smooth functioning of Industrial Units.

12. Loksatta, dated 13th March 2018²², Representative, Badlapur

Article focused on polluted water released into the river. According to the article Badlapur MIDC releases polluted water without processing into the river which impacted on fishes in the river. In fact most of the fishes died as well as health of Buffaloes are also getting affected. Even though residents have made complaint to MIDC and Court have charged hefty penalty previously, the condition is still unchanged. Author raised the urge that MIDC with the help of CETP Board have to process the polluted water before releasing it to the river so that life of animals get saved.

13. Loksatta, dated 2nd May, 2018²³, Representative, Ambernath

Article depicted that many bogus call centers and alcohol preparing units are running illegally in the MIDC areas especially in Ambernath and Badlapur MIDC area. It means that MIDC authorities are not paying attention on the industrial units established in MIDC areas. Therefore, there is an urgent need to take penal action against such businessman.

14. Hindustan Times, dated 31st August, 2018²⁴, Sanjana Nambiar

Article explains about inadequate water supply and low pressure of water supply due to leakages in MIDC areas since last 2 years. It is suggested that there is need of repairing work on urgent basis. In fact, author suggested to replace 35 kilometers pipeline. Thus, leakages are not affordable to MIDC. Provision of water facility is one of the important of service which is needed to be provided by MIDC. Adequate provision of water facility will attract in increase in number of industries in MIDC areas.

15. Loksatta, dated 13th February, 2019²⁵, Representative, Mumbai

Article depicts about the salary to employees of MIDC. It is mentioned that employees of MIDC will receive the benefit of salary from 1st January, 2016 as per 7th pay commission. However, the said benefit has given to only permanent employees. Employees who are working on contractual basis from last 20 to 25 years are excluded from the said benefit even they have made strikes, discussion with government officials. But still government has not taken any concrete decision in this regard.

16. Hindustan Times, Dated 13th May, 2019²⁶, Sandhya Nair

The news was related to safety and security measures in MIDC industrial units. Accident took place in the chemical industry where Three employees including a supervisor died after allegedly inhaling a toxic gas that leaked at Tarapur MIDC in Boisar. Preliminary Investigations found that the workers were not equipped with any safety measures including Masks. The news raised the concern that MIDC Authorities should conduct regular inspection of Industrial Units and take action against those Industrial Units who do not take steps for Safety and Security Measures.

17. Hindustan Times, dated 13th June, 2019²⁷, Padmaja Singh

The news depicted about pollution. Four polluting industries at Talaja's MIDC area have been shut after the directions by National Green Tribunal. There is only 1 CETP at Talaja MIDC which has a capacity to treat 23 MLD but it is lying defunct for the past 5 years. Effluents are released untreated. The work of new CETP to treat 27 MLD effluents is in progress. Thus, it stressed that though MIDC is looking after the CETP, it has not taken measures to stop pollution due to lack of funds. Shutting down of Industries and giving show cause notices to the industries is just an eye-wash. MPCB has not been able to check pollution. The news raised the concern that MPCB and MIDC has to take some concrete steps to check pollution created by industries and also pay attention on the functioning of CETPs.

18. Hindustan Times, dated 3rd July, 2019²⁸, Ram Parmar

The article was relating to drainage system at the MIDC area. Author depicted that around 125 Small, Medium and Large-Scale Industrial Units have been flooded at Boisar MIDC during the incessant rain in the past few days. Heavy blocked rain water has damaged machinery and raw materials of Industrial Units. The industrialist blamed the situation on the incomplete water drainage project undertaken by Boisar MIDC. The work of laying drainage lines is incomplete. Debris, Mud and Musk have been dumped on roads side by the contractor. According to the industrialists, MIDC Authorities should have to make full proof plan in advance to fight with future uncertainties. They must implement the slogan '**Proper Planning prevents poor performance**' for smooth and efficient functioning of Industrial Units in MIDC Area.

19. Loksatta, dated 9th July, 2019²⁹, Representative, Dombivli

The news was relating to continuous power failure. In Dombivli MIDC Phase-I area Industries are facing the problems of Power Failure. Due to continuous power failure, pre-set standards of production have not been achieved and this affects the supply of finished goods to buyers as well as sometimes they cancel the orders due to delay. Generally, during the month of October to May every year, due to different activities such as construction of underground electricity circuits, repairing of faulty electricity lines, digging of roads through JCB, construction of Buildings, short circuit etc. affects power supply. The article mentioned that even MIDC has increased electricity unit rates by 15% to 20%, still there is irregular power supply and continuous power failure, Industrialists are unhappy. Thus, there is an urgent need to conduct meeting of KAMA, MIDC and MSEB authorities to find out concrete remedial strategy for resolving the problem of continuous power failure in MIDC area.

20. Loksatta, Dated 16th July, 2019³⁰, Representative, Dombivli

The news depicted about water pollution. Certain Small Industrialists units in Dombivli MIDC area releases polluted water into Nullahs which creates bad smell and also affect the health of nearby residents, teachers and students' nearby schools. This has led to cough and cold problems among them. Residents' made frequent complaints to MIDC Authorities to take action against these polluted units but still MIDC have not taken any action in this regard. Thus, there is need that MIDC and MPCB Authorities have to look into the matter with immediate effect and ask Industrialist to release polluted water after proper treatment.

21. Hindustan Times, dated 19th July, 2019³¹, Sanjana Nambiar

Article depicts that Chemicals and Textiles effluents discharged from factories in Dombivli MIDC will be segregated before they reach to treatment plants. MIDC has come up with anew effluent collection system at Phase II in Dombivli MIDC for segregation of effluents. MIDC has written to the entire textile and other factories of Phase II asking them to disconnect their existing effluent connection to the CETP and shift them to the newly laideffluent collection system so that it could be sent to The Dombivli Better Environment System Association (DBSEA) CETP. Although the MIDC has served notices to the factories to connect to the new collection system, none of the units has done that. They are still sending untreated effluents to the CETPs. MIDC has to send urgent notices to chemical and textile units and provide some extension for completing the work of building pipeline and also see to it that the same is getting completed within due time limit.

22. Loksatta, dated 26th July, 2019³², Representative, Mumbai

News was relating to water supply at MIDC of Thane district. Article depicted that industrial units Wagle Estate MIDC of Thane get the water supply in 4 to 5 times in a month. However, in this MIDC there are total 600 Industries with 100 Micro and Medium Scale Industries. They have complained so many times to MIDC Authorities but still no action was initiated by MIDC in this regard. This affected on many industrialists to not to run their industrial units on regular basis and it creates multiple problems. MIDC Authorities have to look into this problem with immediate effect and see to it that Industrial Units get uninterrupted and regular water supply for smooth functioning of Industrial Units.

23. Loksatta, Dated 27th July, 2019³³, Representative, Kalyan

Article depicts the issue of Vehicle parking. In Dombivli MIDC area transport vehicles remain parked on the road side during 7pm to 7am. This results into traffic congestion. Therefore there is continuous demand from the industrialists that MIDC should provide separate parking facility for vehicles carrying chemicals as well as Raw material for Industries.

24. Hindustan Times, dated 27th July, 2019³⁴, Sanjana Nambiar

News depicted about the rain water harvesting project in the MIDC areas instead of allowing water in the chamber. The news raised the concern that Dombivli MIDC must adopt rainwater harvesting instead of allowing the water to be released in the chambers. This will help to prevent flooding in these areas during monsoon. The MIDC officials started serving notices to the industries, asking them not to release fiber materials, solid suspended particles and rainwater into the chamber. As per MIDC Officials, the MPCB flying squads are monitoring the system and will initiate legal action against erring industries.

25. Loksatta, dated 1st August, 2019³⁵, Pg.5, Representative, Mumbai -interview with CEO of MIDC-P. Unbalagan

Article gave the interview of CEO of MIDC. The CEO expressed that MIDC Act 2019 have made the provision relating to responsibility of State Industrial Department. Accordingly, it is the responsibility of the said department to establish Industrial Cluster in MIDC Area. In new establishments of MIDC, Reservation of 20% area-Micro, Small and Medium Industrialists, out of this 20% area is reserved for Scheduled Castes and tribes Industrialist, 5% area is reserved for women Industrialist and Women Saving Groups and 2% Land Area is reserved for Ex-

employees of Service (Protection) Department for Self-Employment and for Rehabilitation Purpose. Common Facilitation Center has to be set up under Central and State Government's Cluster Development Programme for smooth working of Industries in MIDC Area. For resolving complaints related to basic Facilities provided to Industries in MIDC Area, there is a provision of inspection of all facilities on weekly basis and issues should be resolved with immediate effect. In future for motivating New Research Based Economy, Skill Development and Entrepreneurial Department along with Innovative Start Up Regulation 2018-Starting of Biological Technology, Artificial Intelligence and Use of Internet, development of Incubators, providing internship to students for developing skills required for entrepreneurs and for liberalizing regulations, MIDC is working in coordination with National Association of Software and Services Companies (NAASCOM). MIDC availing loans at concessional rates for Start Ups till they grow at macro level and provision of investment Rs.100 Crore Venture Capital Funds in Protection areas to help Small Scale Firms to do Self production and selling the same at competitive prices. With the use of latest technology MIDC brings transparency in work and proper authority-responsibility relationship.

26. LokSatta, dated 1st August, 2019³⁶, Representative, Pg.4, Mumbai - Interview with CM of Maharashtra- Devendra Phadnis

Article depicts that Maharashtra Industry Trade and Investment Facilitation Centre (MAITRI) has been set up to provide guidance for setting up Industries, Trade and Investment in Maharashtra.

Table No. 3 : Land Utilization

Industries	Years
A Grade	3 Years
B & C Grade	4 Years
D & D+ Grade and New Industries	5 Years

Registration and issue of No Objection Certificate at One Placethrough Single Window Clearance and "Social Cloud" by State Government. As per amendments in MIDC Act made in 2019, out of total Land Area, 40% of Land Area has to be utilized in above mentioned time limits.

As per latest amendment in MIDC Act, if investors do not start industrial production then government will take back the same plots. MIDC have made innovative amendment in MIDC Act which have to be implemented in proper manner for overall development and growth of MIDC.

27. Times of India, dated 9th August, 2019³⁷, Clara Lewis

News was relating to the order of Supreme Court relating to delay in completing works of sewage and untreated effluents into the Ulhas river. Supreme Court has commented on the delay on work performed by MIDC and the Kulgaon –Badlapur Municipal Council relating to sewage and untreated effluents into the Ulhas river. The Court is of the view that MIDC has not taken any concrete steps for laying down a marine outflow pipeline as per previous order. The secretary is ordered to monitor compliance, set time schedules and ensure the serious problem which has arisen as a result of the untreated effluents.

28. Hindustan Times, dated 15th August, 2019³⁸, Badri Chatterjee

News was relating to untreated industrial waste. It depicts that the National Green Tribunal has ordered the formation of a committee of experts to study the impact of untreated industrial waste from Ulhas River on the environment in terms of contaminating soil, water and air. The Panel will be headed by CPCB and the nodal agency will be MPCB. The Committee shall jointly inspect Dombivli Better Environment Society Association, Dombivli CETP and Ambarnath MIDC CETP and submit a status report on the functional efficiency of CETPs and status of the recipient

environment in terms of soil, water and air. MIDC have to cooperate MPCB in its efforts and also have to take immediate actions on the basis of suggestions provided by MPCB in near future to reduce pollution in MIDC area.

29. Hindustan Times, dated 16th August, 2019³⁹, Padmaja Sinha

Article depicts that the MIDC at Talaja has witnessed many fire incidents in the past few years, but information has not always reached the fire brigade on time. In order to create awareness about fire safety, officials from the MIDC fire unit recently held a training programme for the staff members of the Talaja Chemical hub. During the session, companies in the MIDC area were asked to display contact number of the fire brigade and various other bodies at prominent places as well as industrialists were asked to display the type of chemical used in the factory so that it is easy for fire officials to decide how to douse the fire. MIDC fire station officer have also complained that at the time of fire in Industries, most calls were re-routed from police stations. Instead, officials requested industrialists to contact fire station office directly.

30. Loksatta, dated 18th August, 2019⁴⁰, Representative, Dombivli

The news was relating to theft of materials of industries. Many industries complained regarding theft of Scrap of Industrial Units at night time. Police Station is also not taking any immediate action even after registering the complaints in police station. It resulted that number of theft incidents are increasing rapidly. In such situations, industrialists are demanding that MIDC have to interfere in this matter by conducting meeting with the Police Station of respective area and find out some remedies to tackle the problem of theft in MIDC Area.

31. Gujarat Samachar, dated 1st September, 2019⁴¹, Representative, Mumbai

Article expressed the views on Pollution Board. Central Pollution Board have conducted audit of various Pollution Boards working in various states on different parameters, MPCB have got first rank in country for efficient working. They have analysed State Pollution Boards on the basis of 5 parameters such as supervision of quality of environment, enforcement and regulatory functions, data management and public outreach, advisory for decision making and research and development, training. It was found by the committee that MPCB interacts regularly with Industrialist for solving their pollution related problems and upgrading pollution control system as well as it also brings continuous up gradation in Solid Waste Management and Liquid Waste Management by coordinating with Local Organizations. However, Author opines that even though MPCB ranked first in terms of efficiency, Industrialists, Residents in MIDC area are still facing problems of increasing pollution as well as other pollution related problems. In fact, Central Pollution Board need to cross verify these issues with MIDC authorities, industrialists and residents of MIDC area and suggest MPCB authorities to solve it with immediate effect.

32. Hindustan Times, dated 22nd September, 2019⁴², Padmaja Sinha, Mumbai

News was relating to fine collected from industries who are releasing untreated waste in to nearby water bodies. Due to non-fulfillment of 2017 directive given by National Green Tribunal, the Talaja MIDC last week deposited a fine of Rs.8 Crore to the Raigad Collector for releasing untreated waste into nearby water bodies. MIDC has warned that it will cut the water supply by 50% of those Industrial Units who release toxic effluents in water bodies. Many units in the MIDC have not set up a Common Effluent Treatment Plant owing to which untreated industrial waste is being released into the nearby rivers. Underground water sources have been polluted because of chemical effluents discharged by industries. Even Residents face water crisis as MIDC supplies water to the villages which is near industrial area. MIDC have to ensure that further discharge would be done as per green norms to reduce pollution in MIDC area.

33. Hindustan Times, dated 22nd September, 2019⁴³, Padmaja Sinha, Mumbai

The news was relating to inadequate water supply to industrial undertaking in the MIDC areas. Thane Wagle Estate MIDC area is facing the problem of shortage of water since last 2 years. It resulted into closure of working of many industries on Saturday and Sunday. MIDC authorities

give assurance to resolve complaints of Industrialists but they did not take any concrete action with this regard. MIDC authorities have to look into matter and provide permanent solution for regular water supply to Industrial Units in MIDC area.

34. Hindustan Times, dated 27th September, 2019⁴⁴, Padmaja Sinha, Mumbai

Article was relating to air pollution at Talaja MIDC. Residents of Talaja MIDC have been complaining of air pollution at Talaja for the past five years. Due to long exposure to air pollution it leads to respiratory disorders and asthma among residents. Residents said that the efforts taken by the officials and civic body are not enough to curb pollution. There has been no monitoring of air pollution by Industrial Units and no device has been installed to reduce air pollution. Panvel City Municipal Corporation has deliberately not uploaded the detailed Environment Status Report on its website as the report contains information about increasing air pollution. Therefore, it is expected from the MIDC to coordinate with all agencies as well as MPCB to take steps to reduce air pollution in MIDC area.

35. Loksatta, dated 5th October, 2019⁴⁵, Representative, Dombivli

Article depicts about adequate infrastructural facility provided by MIDC. As per the news, MIDC is not providing adequate and appropriate infrastructural facility to industrialists which must be provided by MIDC. Therefore Industrialist in MIDC are dissatisfied. Due to improper roads, truck drivers, auto drivers and private vehicle drivers are refusing to come in MIDC area therefore MIDC industrialist came together and started maintenance of roads as well as garbage removal work through their own funds. MIDC has to fulfill its responsibilities with due care so that Industrialists can concentrate on the productivity part which help them for faster growth of Industries.

36. Hindustan Times, dated 18th October, 2019⁴⁶, Padmaja Sinha, Mumbai

The news was relating to disposal of untreated effluents into river. MPCB had issued closure notices to 7 Industries of Talaja, MIDC after complaints from residents of MIDC about foul smell and untreated effluents discharged into Kasadi river. These 7 industries were issued notices for noncompliance of directives given by MIDC and MPCB. Residents had complained of dizziness, nausea. The MIDC is upgrading the 3-star CETP to 5 stars. It will reduce the level of pollution to greater extent. MIDC and MPCB have to put strict supervision and control on Industries and to levy penalty for non-implementation of directives.

37. Hindustan Times, dated 20th October, 2019⁴⁷, Badri Chatterjee, Mumbai

Article states that the Central Government has accepted the MPCB's revised action plan on air pollution for Mumbai and disposed Rs.25 Crore to the State Government for the speedy implementation of the plan. The latest plan formulated by MPCB will reduce emission sources by 30% in next five years by adopting measures such as developing green buffer zone around major commercial, industrial complexes, increase utilization of solar energy for commercial, residential structure, development of green belts, utilization of open spaces as green cover, shutting polluting industries and cement batching plants which violate pollution norms, real time air quality monitoring and compliance checks through online emission monitoring as well as setting up efficient waste management system. MIDC has to provide cooperation in the efforts of MPCB in near future for reducing problems of Industrialists in MIDC area.

38. Hindustan Times, dated 23rd November, 2019⁴⁸, Sanjana Nambiar, Mumbai

News states that MIDC residents complained of headache, irritation in eyes and breathing trouble. The odour is intense during night. The nullahs and drains have turned green and red. The chambers along the khambhalpada road through which effluents flow are overflowing to the roads. MPCB and MIDC authorities overlap their responsibility after they get complaints from the residents. MIDC and MPCB have to cooperate with each other to resolve the complaints as early as possible so that it helps in reducing health issues.

39. Hindustan Times, dated 24th November, 2019⁴⁹, Sanjana Nambiar, Mumbai

Article depicts that the lives of residents and workers of Dombivli industrial region are still at risk, as no measures have been taken to curb the incidents of explosion and fire in the MIDC region. Expert Committee appointed by Government had given recommendation such as list the chemical firms as major accident hazard companies, shift such companies away from residential zone, implementation of buffer zones, carry out tree plantation in residential areas, conversion of chemical manufacturing units into IT parks or other non-chemical manufacturing units, remove illegal construction in MIDC region and take strict action against companies which are manufacturing chemicals without permission. MIDC authorities have to implement the above suggestions so that it helps in reducing future accidents.

40. Hindustan Times, dated 5th December, 2019⁵⁰, Padmaja Sinha, Mumbai

Article states that Taloja, MIDC is likely to curtail the water supply to the industrial units in the area by 50% as penalty against industrial units who have failed to pay Rs.18 Crore towards expenses of setting up of an upgraded five-star common effluent treatment plant as per Supreme Court decision. MIDC and Industries units have to cooperate with each other so that overall growth and development is possible in faster way without any further problems in near future.

41. Times of India, dated 23rd January, 2020⁵¹, Pradeep Gupta, Mumbai

The news was relating to chemical plant blast. Article states that in Badlapur MIDC chemical plant blast, 1 person was killed and 3 persons were hurt. Though there are 4 regulatory authorities such as Special Planning Authority under MIDC, MIDC Fire Department, Labour Department and Directorate of Industrial Safety and Health to enforce guidelines related to Industrial safety and labour norms, violations are rampant. As per 2015 amendment act, under the 'ease of doing business', industrial units employing less than 20 staff do not have to be register with the labour department, which leave many establishments out of its purview. State Officials pointed out that there is a staff crunch in labour department's inspection unit. MIDC have to take initiative to check on the industries violating safety norms and have to implement immediate measures on such units.

42. Hindustan Times, dated 13th February, 2020⁵², Sanjana Nambiar, Mumbai

Article depicted the issue of chemical industries. The roads of Dombivli MIDC turned into red because of chemical effluents. MIDC started a survey of the factories and check violations. The factories should be categorized as dangerous, extremely dangerous. Considering the fact into account, Chief Minister of Maharashtra-Uddhav Thackeray gave suggestions to MIDC authorities to take action in 3 steps mentioned below.

- i) Owners should be given a chance to follow safety norms or shut the units.
- ii) Old drains or pipelines will be repaired at the earliest.
- iii) Chemical units located near residential areas should be shifted.

The idea of shifting of units has been opposed by KAMA members as they claimed it will affect the business and result in loss.

43. Lokasatta, dated 25th February, 2020⁵³, Magnetic Maharashtra Report

Article states the suggestions given by Dr.P. Unbangan, CEO, MIDC which contains few important points for industrial development. They are creating new employment opportunities, financial help to micro, small and medium scale industries, motivate industrialists to develop industries in under developing region, finance for important infrastructural facilities, start commerce and industry department, keep coordination between industries and skill department, support food and medicine industries, give rights of special planning authority to MIDC and establish state export board and world investment board. MIDC have to implement the above suggestions with immediate effect to overcome the upcoming challenges and for rapid industrial development.

44. Hindustan Times, 19th March, 2020⁵⁴, Sanjana Nambiar, Mumbai

The news was relating to fulfillment of safety and security norms. Article depicts that MPCB had issued show cause notice due to non-fulfillment of safety and security norms to 3 companies, closure notice to 23 Companies and directions to follow norms notice to 70 companies. They will be allowed to function once they prove that they have improved their safety and also following environmental norms. MIDC have to collaborate and cooperate the MPCB authorities for their efforts of reduction in pollution.

2.6 CONCLUSION

From the above literature review, it is found that there are multiple issues exist with MIDC areas. In brief they are under developed infrastructure, development of adequate number of suitable plots for different types of industries, frequent power failure, lack of will of MIDC officials and authorities to develop MIDC areas, rampant encroachment in the MIDC areas, illegal businesses going on in the MIDC areas, industries are violating the rules of MPCB. Heavy water pollution, air pollution, issue of dumping garbage, approval issue, safety and security issue especially fire incidences, inadequate drainage facility, etc. research found the unending list. It means that there is no appropriate bifurcation of responsibility among various related authorities such as MIDC, MPCB, MSEB, Local Corporations, Employees Association, Water supply authority and so on. All these issues need to be solved on urgent basis. However, to solve these issues, MIDC has to play a greater role. Considering all the above issues, not much research has been done in the field of Organizational Analysis of Maharashtra Industrial Development Corporation on Select Performance Indicators over the years, its planning and managerial aspects etc.

2.7 REFERENCES

1. Darade. (2012). MIDC, 50 years Special Issue, Magnetic Maharashtra. Aurangabad: MIDC.
2. Report of All India Associations of Industries, 2013-14
3. Dr. G.Y. Shitole. (1996). The Performance Evaluation of Maharashtra Industrial Development Corporation (PhD thesis). Shivaji University, Kolhapur
4. Dr. M.A. Lokhande (2000), Industrial Development of Jalna District – Problems and Prospects (PhD thesis), Dr B.A.M.U., Aurangabad
5. Shitole, D. Y., & Rajan, L. (2005). Industrial Sickness in Dombivli, Ambarnath and Badlapur-MIDC areas in Thane District. Dr. V. N. Bedekar Memorial Research Volume, 127-133.
6. Dr. Salve Deepak Mahadev. (2011). Industrial Relations-A Way to improve productivity A Study of select industries of MIDC, Dombivli. National Conference on Corporate Social Responsibility-Issues and Challenges, ISBN NO.978-81-8424-681-0, 351-361.
7. Sampada (Marathi Monthly) November 1992. Ed. Sathe, M.G., Maratha Chamber of Commerce & Industry, Pune.
8. Small Scale Industries, National Monthly for Small Scale Industries, Nov. 1990, Edited by Bhojan Krishnan, Eastern Grade Press, Mumbai
9. New Venture Digest (January/February, 1992), Ed. Ranjit Hira, Volume III, Issue I, New Venture Digest Publication, Nashik.
10. Special Supplement, MEDC Monthly Economic Digest, Aug. 1998, Mumbai
11. Sanjana Nambiar. (2014, October 8). Authorities ignoring Dombivli MIDC: Experts. Hindustan Times, p.5.

12. Sanjana Nambiar.(2014, October 16). Dombilvi MIDC witnessing rampantencroachment. Hindustan Times, p.5.
13. Representative. (2014, November 21). MIDC Residential and Industrial Division got Relief-Water Bill Rate will reduce by Rs.4 to Rs.5. Loksatta, p.3.
14. Sanjana Nambiar. (2014, November 29). Pollution Board pulls up 46 Companies for Flouting Norms. Hindustan Times, p.3.
15. Sanjana Nambiar. (2014, November 30). MIDC Residents to protest againstDumping. Hindustan Times, p.5.
16. Rohit Chandavarkar. (2014, December 5). Maha Industrialists never had it so good. Economic Times, p.8.
17. Representative. (2016, September 15). 20 Thousand Employees are in problem. Loksatta, p.3.
18. Subnash Desai. (2017, October 28). MIDC land to be reserved for Business Women. Times of India. p.1.
19. Sanjana Nambiar. (2017, November 16). Civic Bodies prepare plan for river revamp. Hindustan Times, p.4.
20. Representative. (2017, November 21). Blast in Company in Dombivli MIDC-3 Injured 1, Serious 21. Gujarat Samachar, p.4.
21. Representative. (2018, March, 10). Bad Position of Roads of MIDC-Industrialistsuffer due to Water Problem. .Loksatta, p.3.
22. Representative, (2018, March, 13). Badlapur MIDC releases polluted water in theRiver. Loksatta. p.3.
23. Representative. (2018, May 2). MIDC become platform for illegal activities. Loksatta, p.3.
24. Sanjana Nambiar. (2018, August 31). Inadequate water supply in MIDC. HindustanTimes, p.4.
25. Representative. (2019, February 13). Seventh Pay Scale started for MIDC Employees. Loksatta, p.3.
26. Sandhya Nair. (2019, May 13). 3 Employees died due to Toxic Gas Leakage. Hindustan Times, p.4.
27. Padmaja Singh. (2019, June 13). Four Polluting Factories at Taloja MIDC Closedown. Hindustan Times, p.4.
28. Ram Parmar, (2019, July, 3). 125 Industrial Units flooded at Boisar MIDC. Hindustan Times, p.4.
29. Representative. (2019, July, 9). Hide and Seek of Electricity in Industrial Estate. Loksatta, p.3.
30. Representative. (2019, July, 16). Release of Chemical Water into Nullah. Loksatta,p.3.
31. Sanjana Nambiar. (2019, July, 19). Segregation of Effluents will curb pollution. Hindustan Times, p.4.

32. Representative. (2019, July,26) Water Shortage in Wagle Industrial Estate. Loksatta, p.3.
33. Representative. (2019, July,27) If chemical carrying Vehicle parked on roads than action will be taken. Loksatta, p.3.
34. Sanjana Nambiar. (2019, July, 27). Rain Water Harvesting prevents flooding in MIDC. Hindustan Times, p.4.
35. Representative. (2019, August,1) Work related with Industrial Stability. Loksatta,p.3.
36. Representative. (2019, August, 1). Timely Plan for New Industries. Loksatta, p.1.
37. Clara Lewis. (2019, August 9). SC Slams MIDC and Civic Body for 'Poor Efforts' to clean Ulhas River. Times of India. p.1.
38. Badri Chatterjee. (2019, August 15). Form Panel to study impact of Ulhas river's untreated waste on environment, says NGT. Hindustan Times, p.4.
39. Padmaja Sinha. (2019, August 16). Fire? Call us, not cops: Fire Brigade to Taloja MIDC Staff. Hindustan Times, p.4.
40. Representative. (2019, August,18) Theft of Materials at MIDC. Loksatta, p.3.
41. Representative. (2019, September 1). MPCB ranked first in terms of efficiency. Gujarat Samachar, p.4.
42. Padmaja Sinha. (2019, September 22). MIDC pays Rs.8-Cr fine for polluting water bodies. Hindustan Times, p.4.
43. Padmaja Sinha. (2019, September 22). Holidays to Industries due to water shortage. Hindustan Times, p.4.
44. Padmaja Sinha. (2019, September 27). Residents of Taloja demand cleaner air, plan drive on. Hindustan Times, p.4.
45. Representative. (2019, October,5) Dissatisfied Dombivli MIDC Industrialist started maintenance of roads as well as garbage removal work. Loksatta, p.5.
46. Padmaja Sinha. (2019, October 18). 7 Polluting Industries get closure notice. Hindustan Times, p.7.
47. Badri Chatterjee. (2019, October 20). Rejected twice, air pollution plan for city finally gets nod. Hindustan Times, p.7.
48. Sanjana Nambiar. (2019, November, 23). Effluents spill on roads at Dombivli MIDC, residents face health issues. Hindustan Times, p.6.
49. Sanjana Nambiar. (2019, November, 24). 6 blasts take place at Dombivli MIDC every year. Hindustan Times, p.5.
50. Padmaja Sinha. (2019, December 5). MIDC to curtail water supply to Taloja Firms. Hindustan Times, p.6.
51. Pradeep Gupta. (2020, January 23). 1 Killed ,3 hurt in blast at MIDC Chemical Plant. Times of India. p.1.
52. Sanjana Nambiar. (2020, February, 13). Dombivli Factories under Scanner. Hindustan Times, p.5.

53. Representative. (2020, February, 25). Boosting Industry Friendly Environment. Loksatta, p.3.
54. Sanjana Nambiar. (2020, March, 19). Withdraw Notice, allow us to operate:Dombivli Industries tell authorities. Hindustan Times, p.5.

CHAPTER - 3
PROFILE OF STUDY AREA

3.0 INTRODUCTION

In this chapter, for a better understanding of the study area, it is felt essential to bring out the qualitative and quantitative profile of the area, background, some key characteristics of the study area, its features and in general its economy to understand the background of the district. The review of literature relating to Maharashtra Industrial Development Corporation has given a general idea of their functioning and problems as well as the challenges faced by them. In addition, a detailed profile of the study area as well as its location becomes necessary. Thus, the location of the study area and its physical, demographic and socioeconomic characteristics are given in this chapter.

3.1 THANE DISTRICT SCENARIO¹

1. General Characteristics of Thane District

Thane is considered as the third largest Industrial District of the state of Maharashtra. A large number of modern industries are located in this Industrial belt. The district is divided into three main parts. The primary part comes under the direct influence of the Mumbai region which constitutes Ulhasnagar, Kalyan and Thane. This region comprises the presence of large number of organized Industries. The second part consists of developing cities such as Vasai, Bhiwandi, Palghar and Dahanu. The third part includes the rest of the district constituting the conventional village, traditional college and the agro-based industries.

2. Location and Geographical Area of Thane District:

Thane District lies at the north-west of Maharashtra State adjoining the Arabian Sea. It is the northern-most district of Konkan region. It extends between 72°45' and 73°48' east longitude and 18°42' and 20°20' north latitude. Nagar Haveli, Dadra and Gujarat state are adjoining the Union territories of Northern limits. Ahmednagar and Nashik is at the East and West side whereas Pune is situated at the South-East side of Thane District. Mumbai Metropolitan is situated at the South – West side and Raigad District is situated at the south side. The total geographical area of the district is 9558 Sq. KMS which is 3.11% of the total Maharashtra area.

3. TOPOGRAPHY

The District is known for both natural and artificial physical features. They are classified into three parts given below:

- A. Sahyadri mountain ranges are spread at the Eastern part of the district and thick forest area is situated at its north side.
- B. Rice farming is done at the flat surface area of the Central region of the district.
- C. Vegetables, Fruits and high quality of grass are cultivated in the coastal part as well as at the surrounding region up to 15 to 20 kms.
- D. Availability of Minerals: The district does not have any major mineral or mining. The district's mining activities like quarrying of stones and sand happens near the urban areas in Kalyan, Bhiwandi and Thane Tehsils. Near Gokhivara at Vasai Tehsil, reddish late rite clay deposits are found. Bricks, tiles and cheap red glazed wares are made by using clay.
- E. Forest: Out of the total geographical area, 37.10% area is covered by forest in the district which occupies near about 3463 Sq. Kms. Most of the forest is spread in Shahapur, Murbad, Vasai, Dahanu, Palghar, Jawhar, Wada and the remaining talukas covers the area of only 19.49%.

4. Administrative Set Up

The State is divided into six regional divisions for the sake of administrative convenience. Thane District is included in the Konkan region division. It has 15 Tehsils. They are Ambernath, Bhiwandi, Dahanu, Jawhar, Kalyan, Murbad, Mokhada, Palghar, Shahapur, Talasari, Thane,

Ulhasnagar, Vasai, Vikramgad, and Wada. The Collector is the Administrative Chief at the district level. The Chief Executive Officer of Zila Parishad at district level and Block Development Officer at Block level is vested with rural development administrative charges. Urban development work responsibility is assumed with Municipal Councils.

The below table shows Thane District Scenario on the basis of various parameters such as Geographical, Administrative Units, Population, Forest Area, Livestock & Poultry, Modes of Transport, Ways of Communication, Types of Public Health Facility, Types of Banks as well as various kinds of Education Facility.

Table No. 4: Thane District Scenario

Sr. No.	Particular	Year	Unit	Statistic
1. (A)	Geographical			
	i) Latitude	2010-11	Degree	18.42° - 20.20°
	ii) Longitude	2010-11	Degree	72.45° - 73.48°
	iii) Geographical Area	2010-11	Sq. Kms	9558
(B)	Administrative Units			
	i) Sub divisions		Nos.	6
	ii) Tehsils		Nos.	15
	iii) Sub – Tehsils			0
	iv) Patwari Circle		Nos.	588
	v) Panchayat Samiti		Nos.	13
	vi) Nagar Nigam (Mahapalika)		Nos.	7
	vii) Nagar Palika		Nos.	5
	viii) Gram Panchayat		Nos.	924
	ix) Revenue village		Nos.	1748
	x) Assembly Area			24
2	Population			
(A)	Sex – wise			
	i) Male	2001	‘000’	4378
	ii) Female	2001	‘000’	3754
(B)	Rural Population	2001	‘000’	2229
3	Agriculture			
(A)	Land utilization			
	i) Total Area	2010-11	ThousandHectares	934
	ii) Forest cover	2010-11	ThousandHectares	346
	iii) Non-Agriculture Land	2010-11	ThousandHectares	58
	iv) Cultivable Barren land	2010-11	ThousandHectares	55
4	Forest			
	(i) Forest	2010-11	ThousandHectares	346
5	Livestock & Poultry			
A	Cattle			
	i) Cows	2007	Nos.	454372
	ii) Buffaloes	2007	Nos.	192700
B	Other Livestock			
	i) Goats	2007	Nos.	203433
	ii) Pigs	2007	Nos.	192700
	iii) Dogs & Bitches/Horse	2007	Nos.	76022
C	Railways			
	i) Length of rail line	2010-11	Kms.	545

D	Roads			
	(a) National Highway	2010-11	Kms.	467
	(b) State Highway	2010-11	Kms.	3349
	(c) Main District Highway	2010-11	Kms.	2205
	(d) Other district & Rural Roads.	2010-11	Kms.	3398
	(e) Rural road/Agriculture Marketing Board Road	2010-11	Kms.	8782
E	Communication			
	(a) Telephone connection	2010-11	Nos.	60639
	(b) Post offices	2010-11	Nos.	412
	(c) Telephone centre	2010-11	Nos.	7
	(d) Density of Telephone	2010-11	Nos./1000persons	606
	(e) PCO Rural	2010-11	Nos	1710 Approx.
	(f) PCO STD	2010-11	Nos	1820 Approx.
	(g) Mobile	2010-11	'000'	813 Approx.
F	Public Health			
	(a) Allopathic Hospital	2010-11	Nos	44
	(b) Beds in Allopathic hospitals	2010-11	Nos	9525
	(c) Ayurvedic Hospital	2010-11	Nos	1
	(d) Beds in Ayurvedic hospitals	2010-11	Nos	0
	(e) Unani hospitals	2010-11	Nos	0
	(f) Community Health Centre	2010-11	Nos	113
	(g) Primary health centres.	2010-11	Nos	125
	(h) Dispensaries	2010-11	Nos	44
	(i) Sub Health Centres.	2010-11	Nos	532
G	Banking Commercial Banks/ Branches			
	(a) Commercial Banks			709
	(b) Rural Bank			20
	(c) Co – Operative banks			83
H	Education			
	(a) Primary			1866
	(c) Secondary & senior secondary school			1866
	(d) Colleges (Degree)			96
	(e) Technical University			0

Source: Brief Industrial Profile of Thane District, 2012 Mumbai: MSME Development Institute.

The above table explains the overall geographical profile and its various contents, geographical features of the Thane District. Thane District has total 07 Municipal Corporations functioning at the urban cities. The district has total 924 gram panchayats functioning at the village level. District is connected with railways and roads along with water transport. It is connected with 467 kms national highways, 3349 kms state highways and 2205 kms district highways. In addition, it is also connected with adequate telephone lines and has huge number of bank branches spread all over the district.

3.2 CONCLUSION

Considering the geographical features of Thane District, the district has lot of potential for growth and development of Industries in particular and thereby rapid growth of MIDC areas in general.

However, considering the connectivity of Thane District, it has less number of industrial units functioning as on the date. Therefore, there is a need that MIDC have to take steps to increase more number of Industrial Units which will promote more number of employment opportunities. The next chapter explains Overview of MIDC of Thane district in detail.

3.3 REFERENCES

1. Brief Industrial Profile of Thane District. Mumbai: MSME Development Institute, 2012.

CHAPTER - 4

PERFORMANCE OF MIDC: OVERVIEW

4.0 INTRODUCTION

This chapter deals with the performance of MIDC over the years. The analysis of financial performance of MIDC from the available secondary data at the level of Maharashtra. The financial (quantitative) performance indicators selected for the analysis are: land acquired and developed, plots allotted and vacant, growth of industrial units in MIDC areas, number of industrial units as per micro, small, medium and large scale, employment generated due to MIDC, investment, classification of industries, financial performance of MIDC, growth of revenues of MIDC, etc. Further, averages, ratios and compositions of these indicators are used for analysis. The findings and conclusion of this chapter are collated for arriving at the scope of the present study.

4.1 PRESENT INDUSTRIAL STRUCTURES AND FACILITIES AVAILABLE IN STUDY AREA (THANE DISTRICT)

Author has chosen MIDC units established at Thane District for the study. There are total 13 MIDC units established in Thane District. Thane is well known for industrially advanced district in Maharashtra. It is also known as big tribal population district. Maximum tribal population is found in the various parts of Talukas/ Blocks of Wada, Jawhar, Palgar, Mokhada, Talasari, etc. On the other side, it is also industrially developed tehsils like Vasai, Kalyan, Bhiwandi, Thane and Ulhasnagar. It is said that due to establishment of MIDC areas in the district, many tehsil became urbanised. There are also industrially backward tehsils in the districts, they are Dahanu, Jawhar, Talasari, Wada, Mokhada, etc. As far as public infrastructure of Thane district is concerned, it has supported as well as available various infrastructure facilities such as Electricity, Railway, Tele-Communication, Industrial Estates, etc. Highway are available in the district which support the base of overall industrial development.

Thane district has 2 Co-operative Industrial Estates, 13 MIDC areas and has Industrial Growth Centers in Jawahar and Wada blocks. Major Large-Scale Industrial units are established in various tehsils such as Thane, Dombivli, Shahad, Kalwa, Kalyan, Badlapur, and Ambernath. Considering the backwardness of many tehsils in Thane district, the

Department of Industries provides incentives for industries in backward areas of Wada, Jawhar, Mokhada, Talasari and others. As on the date, there are various types of industrial units doing their production in the district. Major industries amongst them are Pharmaceutical, Fertilizers, Chemical, Insecticides, Artificial fibre, Edible items, Paints, Automobiles, Plastic and Plastic goods and others. Thane district is very near to Mumbai, hence the indigenous and International market facility is also available for products.

4.2 FINANCIAL/ QUANTITATIVE / ANALYSIS OF DATA:

4.2.1 Land Acquired and Developed by MIDC in Thane District¹:

Table No. 5: Land acquired and developed by MIDC in Thane District

Sr. No.	Name of the Industrial Area	Land Acquired (in hector)	Land Developed (in hector)	% of Land developed
1.	Thane	252.36	252.36	100.00%
2.	Tarapur	1028.54	1028.54	100.00%
3.	Dombivli	357.27	357.27	100.00%
4.	Mira	7.82	7.82	100.00%
5.	Ambernath (Ambernath Badlapur Rd.)	228.49	228.49	100.00%
6.	Addl. Ambernath Anand Nagar)	507.47	504.47	99.41%
7.	Addl. Ambernath Village (Pale & Bohonoli)	506.64	503.22	99.32%
8.	Badlapur	101.1	99.8	98.71%
9	Kalyan Bhiwandi (Bhiwandi)	48.16	48.16	100.00%
10	Addl. Kalyan Bhiwandi (Bhiwandi)	44.27	44.27	100.00%

11	Murbad	130.71	130.71	100.00%
12	Addl. Murbad (Khudavali)	138.85	134.86	97.13%
13	T.T.C.	2333.27	2333.27	100.00%
Total		5684.95	5673.24	99.58% (Avg.)

Source: Brief Industrial Profile of Thane District 2012 and 2015 Mumbai: MSME Development Institute.

As per the policy of the MIDC Act, Maharashtra Government acquires land and gives it to MIDC for further development for industrial purposes. Thus, land acquired and developed by the MIDC in the Thane district is presented above.

The above table indicates that MIDC of Thane district had acquired total 5684.94 hectorland for development of industrial areas. Out of which it had developed 5673.24 hectorland for industrial purpose. Thus 99.58% acquired land was developed by Thane district MIDC. It can be seen that T.T.C. MIDC area shows largest land acquired and developed area in Thane District.

4.2.2 Rates prevailing in MIDC Areas for Industrial Units

Prevailing rates means the rate at which any industrialist will have to pay per square meter for the purchase/ hire purchase or lease of MIDC plot for industrial unit. The rate prevailing in various MIDC areas of Thane district is presented in the following table.

Table No. 6: Rates of MIDC for Industrial Units

Sr. No.	Name of the Industrial Area	Prevailing Rates per Sqm (In Rs.)
1.	Thane	13570/-
2.	Tarapur	2355/-
3.	Dombivli	10180/-
4.	Mira	6650/-
5.	Ambernath (Ambernath Badlapur Rd.)	2660/-
6.	Addl. Ambernath Anand Nagar)	2695/-
7.	Addl. Ambernath Village (Pale & Bohonoli)	2660/-
8.	Badlapur	2660/-
9	Kalyan Bhiwandi (Bhiwandi)	1995/-
10	Addl. Kalyan Bhiwandi (Bhiwandi)	1995/-
11	Murbad	935/-
12	Addl. Murbad (Khudavali)	935/-
13	T.T.C.	15960/-

Source: Brief Industrial Profile of Thane District 2012 and 2015 Mumbai: MSME Development Institute.

The above table indicates that TTC MIDC area has highest prevailing rate or Rs. 15960 followed by Thane MIDC area whose prevailing rate is Rs. 13570. The lowest rate available is at Murbad and additional Murbad MIDC area. Thus, it can be seen that prevailing rates are depend upon the connectivity of the area, marketability of the product, nearness to the city, availability of water, power and employees, etc.

4.2.3 Plots Development and Allotment by MIDC to Industrial Units:

One of the important functions of the MIDC is to convert the land into plots with necessary arrangement of water, power, road facility, etc. to these plots. Then developed plots are allotted to industrial units. The data about plot development, allotment and vacant plots is presented in the table below.

Table No. 7 : Plots developed and allotted for Industrial Units

Sr. No.	Name of the Industrial Area	No. of Plots Developed	No. of Plots allotted	No. of Plots Vacant	% of Plots Vacant
1.	Thane	827	737	90	10.88%
2.	Tarapur	71588	70109	1479	02.70%
3.	Dombivli	21468	19915	1553	07.23%
4.	Mira Bhayander	4647	4647	0	NIL
5.	Ambernath (Ambernath Badlapur Rd.)	291	290	1	00.34%
6.	Addl. Ambernath (AnandNagar)	846	823	23	02.72%
7.	Addl. Ambernath Village(Pale & Bohonoli)	3	3	0	NIL
8.	Badlapur	374	331	43	11.50%
9	Kalyan Bhiwandi(Bhiwandi)	33	33	0	Nil
10	Addl. Kalyan Bhiwandi (Bhiwandi)	2	2	0	Nil
11	Murbad	217	202	15	6.91%
12	Addl. Murbad (Khudavali)	303	300	3	00.99%
13	T.T.C.	3693	3664	29	00.79%
Total		104292	101056	3236	3.38%(Avg.)

Source: Brief Industrial Profile of Thane District 2012 and 2015 Mumbai: MSME Development Institute.

It can be seen from the above table that out of the total 104292 developed plots MIDC had allotted 101056 plots to industrial units for industrial purpose. It means that still 3236 plots are vacant till date. Tarapur (71588) and Dombivli (21468) MIDC areas had highest number of developed plots in Thane district. Considering the vacant plots, Badlapur MIDC area has 43 (11.50%) and Thane MIDC area has 90 (10.88%) vacant plots. Dombivli MIDC area has 1553 vacant plots. It is seen that 3.38 % plots of Thane MIDC area is vacant in Thane district. It indicates that rates prevailing the particular MIDC areas, connectivity, power and water availability and suitability, etc. are the important factors due to which remain plots vacant.

4.2.4 Growth of Industrial Units in Thane MIDC

Table No. 8: Number of Industrial Units in Thane MIDC (2012-2015)

Sr. No.	Name of Industrial Area	No. of units in production	No. of units in production	Absolute Increase /Decrease	% of Increase
		2012	2015		
1	Thane	633	723	90	14.22%
2	Tarapur	1760	3239	1479	84.03%
3	Dombivli	1514	3067	1553	102.58%
4	Mira Bhayander	37	364	327	883.78%
5	Ambernath (Ambernath Badlapur Rd.)	250	290	40	13.79%
6	Addl. Ambernath (Anand Nagar)	717	740	23	3.21%
7	Addl. Ambernath Village (Pale & Bohonoli)	0	87	87	0
8	Badlapur	274	331	57	20.80%
9	Kalyan Bhiwandi (Bhiwandi)	20	33	13	65%
10	Addl. Kalyan Bhiwandi (Bhiwandi)	0	32	32	0
11	Murbad	172	172	0	0

12	Addl. Murbad (Khudavali)	260	289	29	11.15%
13	T.T.C. (Trans Thane Creek)	2812	2841	29	1.03%
	Total	8449	12208	3759	44.49%

Source: Brief Industrial Profile of Thane District, 2012 and 2015 Mumbai: MSME Development Institute.

The efficiency and effectiveness of the MIDC depends upon the number of industrial units in operation as well as functioning. The table below indicates the growth of industrial units from the year 2012 to 2015.

The above table shows overall growth i.e. increase in industrial Units from 2012 to 2015 which shows that number of industrial units in production had increased from 8449 in 2012 to 12208. Thus, there is overall growth/increase of 44.49% in industrial units in Thane MIDC areas. The highest growth is found in Mira Bhayander MIDC area with 327 Industrial Units. Dombivli MIDC area also shows a growth of 102.58% from the year 2012 to 2015. Thus, from the above table, it indicates that there is imbalanced growth of Industrial production units in Thane MIDC areas.

4.2.5 Micro, Small, Medium and Large-Scale Industrial Units in Thane District:

In Thane district, different types of Industrial units exist. The below table bifurcates industrial units exist in Thane district as per micro, small, medium as well as large scale production units. They are also classified into manufacturing and service industrial units.

Table No. 9 : Number of enterprises at Thane MIDC

Sr. No.	Category	Number of enterprises		
		Mfg.	Service	Total
1	Micro	9454	940	10394
		(59.80%)	(58.97%)	(59.72%)
2	Small	5823	629	6452
		(36.83%)	(39.46%)	(37.07%)
3	Medium	91	25	116
		(0.01%)	(1.57%)	(0.01%)
4	Large scale Projects (Production Commenced)	442	-	442
		(3.36%)		(3.20%)
Total		15810	1594	17404
		(100%)	(100%)	(100%)

Source: Brief Industrial Profile of Thane District, 2012 Mumbai: MSME Development Institute

The above table shows that out of total 15810 manufacturing industrial units in Thane District, Micro Units are in maximum i.e. 9454 (59.80%) number followed by small industrial units. It is seen that Medium Units are in minimum in number i.e. 91 (0.01%). In service units, highest number of units are of Micro Units i.e. 940 (58.97%), whereas Medium Units found are in lowest number i.e. 25 (1.57%). Thus overall, it can be seen that there exist total 17404 number of enterprises in Thane District. From the above table it is seen that there are very less number of medium and large size industrial units in Thane District. Author strongly felt that number of medium and large scale industries must be increased in more numbers which will promote employment and faster growth and development of the area.

4.2.6 Employment Generation in Micro, Small, Medium and Large-Scale Units in Thane District:

Creation and generation of employment opportunity is one of the important economic aspect. The development of the country depends upon the increase in production as well as generation of employment. The below table presents the number of employments generated by industrial units of Thane District.

Table No. 10 : Employment generation at Thane MIDC

Sr. No.	Category	Employment generation		
		Mfg.	Service	Total
1	Micro	98239 (31.54%)	9777 (26.04%)	108016 (30.95%)
2	Small	115846 (37.20%)	19481 (51.89%)	135327 (38.78%)
3	Medium	9041 (0.03%)	8194 (22.07%)	17235 (0.05%)
4	Large scale Projects (Production Commenced)	88322 (31.23%)	-	88322 (25.32%)
	Total	311448 (100%)	37452 (100%)	348990 (100%)

Source: Brief Industrial Profile of Thane District, 2012 Mumbai: MSME Development Institute

The above table indicate that small units had provided 38.78% employment opportunities than as compared to other category of units. Small units have provided highest employment in both i.e. manufacturing as well as service sector units. It can also be seen that Medium Scale Industries are providing very less number of employment opportunities as compared to other types of units.

4.2.7 Investment (in P&M) by Micro, Small, Medium and Large Scale Units in the Thane District:

Investment made by different types manufacturing and service units of Thane District in plant and machinery is presented in the following table.

Table No. 11 : Investment (P&M) (Rs. In lakh & Crores) at Thane MIDC

Sr. No.	Category	Investment (P&M) (Rs. In Crores)		
		Mfg.	Service	Total
1	Micro	710.95	93.29	804.25 (5.15%)
2	Small	6476.35	230.79	6707.14 (42.95%)
3	Medium	632.76	84.14	716.90 (4.59%)
4	Large scale Projects (Production Commenced)	7387	--	7387 (47.31%)
	Total	15207.06	408.22	15615.29 (100%)

Source: Brief Industrial Profile of Thane District, 2012 Mumbai: MSME Development Institute

The above table shows that large scale projects require huge amount of investment in plant and machinery. Large scale projects in thane district had incurred Rs. 7387 Crore in plant and machinery.

Whereas, lowest investment is seen in medium projects i.e. Rs. 632.76 crores and Rs. 84.14 crores in manufacturing and service sector respectively.

4.2.8 Classification According to production of Industrial units of Thane MIDC Areas.

Different types of industrial units are producing different types of products in Thane MIDC Areas. The below table presents classification according to type of production.

Table No. 12 : Classification of industries according to Production

Industries	Number of Industries	Percentage
Automobiles	1465	12%
Chemical	3662	30%
Defence	610	5%
Engineering	1220	10%
Food Processing	366	3%
Gems and Jewellery	244	2%
Information Technology	366	3%
Pharmaceuticals	2440	20%
Textiles	1835	15%
Total	12, 208	100%

Source: R&D (Reference & Directory)-MIDC & Assent R&D, Pune, 2015

The above table indicates that there are maximum 3662 (30%) number of Chemical Units producing chemical products in Thane District. Whereas Pharmaceutical units and Textile units are found in 2440 (20%) and 1835 (15%) respectively out of the total industrial units in Thane district.

However, above table shows that Gems and Jewellery Units are in minimum number. Automobiles, Pharmaceuticals, Textiles and Engineering Units are ranging from 10%-20% of the total MIDC Units.

4.3 Financial Performance of Maharashtra Industrial Development Corporation³

Financial soundness is one of the important aspect for every organisation to run efficiently and effectively. Financial soundness promotes any business at faster rate. Financial performance means analysis of financial statements in the form of increase /decrease or expansion / contraction etc. Financial statement includes both positional statement i.e. Balance Sheet and Revenue Statement i.e. Income and Expenditure Account. Author has analysed / highlighted important items of Balance Sheet and Income and Expenditure Statement.

4.3.1 Financial Positional Performance of MIDC

Financial position includes various items of Balance Sheet. In this analysis author has focused on trend of various items by considering year 2010-11 as the base year. Thus, financial data is compared with the base year. Comparison is done with the help of percentages, averages, etc.

Deposits: MIDC collects deposits for lease of plots and buildings. It includes deposits for developed parts, developing parts, development of central government growth centres, Technicians sheds, Flatted factory buildings, Industrial housing, work sheds, office complex, flatted factory buildings under electronic estates, Suvarna Laghu Udyog yojana, IT parks, other buildings and infrastructure as well as interest earned on deposit held on behalf of government etc. It can be seen from the above table that deposits for lease of plots and buildings have increased from Rs. 9326.93 crores in the year 2010-11 to Rs. 16631.78 crores in the year 2014-15. It shows overall growth of 78% from the base year. The overall trend shows that deposit is increasing steadily i.e. 121%, 138%, 158% and 178% respectively in the years 2011-12, 12-13, 13-14 and 14-15. It shows that MIDC progresses at steady rate.

Deposits received from Government for schemes undertaken for and on behalf of the government includes Deposits for District Industries Center and Film City. Deposits received for schemes entrusted by bodies other than government such as Municipal Council of various

cities, various Cooperative Housing Societies, Industrial Estates, Railway Project, ONGC, MPCB, Navoday Vidyalyaya, National Highway Authority,

various corporate bodies as well as individuals. MIDC also collects deposits for assistance to educated unemployed. The above table shows that Deposits for schemes entrusted by government shows increasing trend i.e. from 100% to 241%. Deposits for schemes for assistance to educated unemployed remains constant over 2010-11 to 2014-15.

Miscellaneous Deposits includes amounts received from Government for Water Supply Schemes, Functional Estates, Drainage Scheme, Depreciation and Replacement Fund, Environmental Protection Charges, Penalty Charges for Effluent, Fire Protection Fees. The above table indicates increasing trend. It has increased from Rs. 5203 crores to Rs. 7775 crores during the period from 2010-11 to 2014-15. Thus, it shows overall increase of 49% over the base year.

Table No. 13 : Growth of Financial Position of MIDC (Rs. in Crores)

Particulars	10-11	11-12	12-13	13-14	14-15
LIABILITIES					
Loans-I) Issue of Bonds	Nil	Nil	Nil	Nil	Nil
Deposits for lease of plots and Buildings	9326.93 (100%)	11269.7 3 (121%)	12844.3 3 (138%)	14737.34 (158%)	16631.78 (178%)
Deposits for Schemes entrusted by					
Government	0.22 (100%)	0.26 (118%)	0.56 (255%)	0.55 (250%)	0.53 (241%)
Deposits for Schemes entrusted by					
Other Bodies	38.68 (100%)	40.26 (104%)	57.62 (149%)	92.27 (239%)	80.08 (207%)
Deposit for Schemes for assistance to educated unemployed	5.63 (100%)	5.63 (100%)	5.63 (100%)	5.63 (100%)	5.63 (100%)
Miscellaneous and Other Deposit	5203 (100%)	5748.96 (111%)	6269.93 (121%)	6836 (132%)	7775 (149%)
Sundry Creditors	103.81 (100%)	94.62 (91%)	102.76 (99%)	141.18 (136%)	100.48 (97%)
Reserves and Surplus					
i) Sinking Fund	Nil	Nil	Nil	Nil	Nil
ii) Other Surplus	37.28 (100%)	37.54 (101%)	37.54 (101%)	37.96 (102%)	38.22 (103%)
Total(A)	14715.55 (100%)	17917 (122%)	19318.6 3 (131%)	21874.56 (149%)	24201.25 (164%)
ASSETS					
Fixed Assets	657.85 (100%)	690.88 (105%)	746.77 (114%)	803.35 (122%)	870.31 (132%)
Less: Depreciation	195.4 (100%)	211.15 (108%)	228.81 (117%)	247.8 (127%)	247.8 (127%)
Net Fixed Assets	462.45 (100%)	479.73 (104%)	517.96 (112%)	555.55 (120%)	622.51 (135%)
Development of Industrial Areas and Estates	3260.89 (100%)	3448.33 (106%)	3725.06 (114%)	4090.61 (125%)	4837.23 (148%)

Functional estates, Schemes for assistance to educated unemployed, construction of work sheds and flatted factory buildings and industrial housing, growth centers, trade centers etc.	939.99 (100%)	924.43 (98%)	945.67 (101%)	967.79 (103%)	976.82 (104%)
Investments	188.35 (100%)	202.14 (107%)	195.37 (104%)	195.65 (104%)	196.29 (104%)
Current Assets, Loans and Advances	9863.87 (100%)	12142.3 7 (123%)	13934.2 7 (141%)	16064.96 (163%)	16270.29 (165%)
Total(B)	14715.55 (100%)	17917 (121.76 %)	19318.6 3 (131%)	21874.56 (149%)	24201.25 (164%)
Capital Employed	37.21 (100%)	37.41 (101%)	37.67 (101%)	37.88 (102%)	37.96 (102%)

Source: MIDC Annual Report-2012-13, 2013-14 & 2014-15

Fixed Assets: Fixed assets of MIDC includes Tools and Plants, Vehicles such as Motor Cars, Jeeps, Trucks and Motor Cycles, S & M Instruments, Ordinary T & P, Typewriters and Duplicators and Furniture. Depreciation to be worked out at Straight Line Method. Rates of Depreciation on Tools & Plants is 6% to 13%, on Vehicles at 9%, on Scientific and Mathematical Instruments at 9% to 18%, on Typewriters and Duplicators at 9% and on Furniture at 4.5% to 30%. The above table shows that Net Fixed Assets has increased from Rs. 462.45 crores to Rs. 622.51 crores during the period under study. It shows steady increasing trend from 100% (base) to 104%, 112%, 120% and 135% respectively in the financial year 2011-12, 12-13, 13-14 and 14-15.

Development of Industrial Areas and Estate includes development of Technician's Shed, Flatted Factory Buildings, Information Technology Parks, Sheds under Suvarna Laghu Udyog, Industrial Housing, Work Sheds, Drainage Schemes, JVC Waste Management Plant, Common Effluent Treatment Plant, W. S. Schemes- Localised, Office Complex, Udyog Bhavan, Common Hazardous Waste Treatment Storage and Disposal, Helipad at Cuff Parade, other Buildings and Infrastructure, Group Captive Power Plant, Development of Special Economic Zone and Project of Gas Grid Network in Maharashtra. The above table shows steady increasing trend of this development of industrial areas and estates.

Schemes for assistance to educated unemployed, construction of work sheds and flatted factory buildings and industrial housing, growth centers, trade centers etc. includes assistance provided by MIDC for educated unemployed, Growth Centers of Central Government as well as Trade Centers, Functional Estates and construction of work sheds and investment on flatted factory buildings and industrial housing. The above table shows stagnant progress in this item. It shows increase by 101% ,103% and 104% in 2012-13, 13-14 and 14-15 respectively. It means that MIDC has not developed or improved or incurred capital expenditure on this item. However, research strongly opines that MIDC should incur capital expenditure on this item of balance sheet.

Investments of MIDC Includes Investment in Rural Electrification, Debentures or Shares of Electric Co-operative Society as well as Other Investments. The above table indicates that there is no increasing trend in the investment. In fact, it shows stagnant situation. It means that MIDC has not made investment in the year 2012-13 to 2014-15.

Current Assets, Loans and Advances segment includes Stock in hand, Cash includes Term Deposits, Cash at Bank, Cash in Hand and Cash in Transit, Remittances, Sinking Fund and Advances includes Due from State Government, on Account Advance Payment to Government, Miscellaneous Advances, advances to corporation employees and also amount recoverable along with Preliminary Expenses in connection with issue of Loan Bonds which consist of Discount on Loan Bonds and other expenditure. The above table shows that Current Assets, Loans and advances of MIDC have increased by 123%, 141%, 163% and 165% respectively in the year 2011-12, 12-13, 13-14 and 14-15.

4.3.2 Performance of Revenue Position of MIDC

Table No. 14: Growth of Revenue Items of MIDC (Rs. in Crores)

Particulars	10-11	11-12	12-13	13-14	14-15
Income					
Interest	31.93 (100%)	44.31 (139%)	63.05 (197%)	60.91 (191%)	72.90 (228%)
Water Charges	156.25 (100%)	190.71 (122%)	159.16 (102%)	247.11 (158%)	93.96 (60%)
Service Charges	62.48 (100%)	74.27 (119%)	76.79 (123%)	82.46 (132%)	67 (107%)
Other Income	36.28 (100%)	34.18 (94%)	45.72 (126%)	78.91 (218%)	80.82 (223%)
Total	286.94 (100%)	343.47 (120%)	344.72 (120%)	469.39 (164%)	314.67 (110%)
Expenditure					
Administrative Expenditure	82.95 (100%)	76.45 (92%)	91.05 (110%)	97.80 (118%)	113.66 (137%)
Less: Capitalized	76.3 (100%)	70.91 (93%)	84.76 (111%)	90.87 (119%)	98.52 (129%)
Net	6.65 (100%)	5.54 (83%)	6.29 (95%)	6.93 (104%)	15.14 (228%)
Interest	5.57 (100%)	6.71 (120%)	6.5 (117%)	5.99 (108%)	7.58 (136%)
Depreciation	12.34 (100%)	13.08 (106%)	13.79 (112%)	14.91 (121%)	17.18 (139%)
Maintenance	261.36 (100%)	317.56 (122%)	316.68 (121%)	438.63 (168%)	272.66 (104%)
Other Expenses	0.87 (100%)	0.33 (38%)	1.19 (137%)	2.77 (318%)	2.11 (243%)
Total	286.94 (100%)	343.47 (120%)	344.72 (120%)	469.23 (164%)	314.67 (110%)
Excess of Income over Expenditure	0.15 (100%)	0.25 (167%)	0.27 (180%)	0.16 (107%)	0.25 (167%)
Net excess of income over expenditure	0.15 (100%)	0.25 (167%)	0.27 (180%)	0.16 (107%)	0.25 (167%)

Source: MIDC Annual Report-2012-13, 2013-14 & 2014-15

Revenue position means the items revenue nature shown at the Income and Expenditure Account. The table given below indicates the trend of various items of income and expenditure

of MIDC of the financial year 2010-11 to 2014-15. Author has taken year 2010-11 as the base year for analysis and comparison purpose.

Water Charges: MIDC provides water to the Industrial units and incur expenditure towards its establishment charges, maintenance and repairing charges as well as Royalty. Receipt from Water Charges shows increasing trend except in the year 2012-13 and 2014-15 in which it has decreased as compared to the previous years. It means that industrial units or other bodies who are consuming water of MIDC are not paying their water charges regularly. Author observed that various local bodies are not paying their water charges as per the due date. Therefore, MIDC needs to take strict action against those.

Service Charges include Drainage Surcharge, Fire Charges, Charges against Roads and Power Facility, Consultancy Charges. The above table indicates that Service Charges increases by 119%, 123% and 132% in 2011-12, 12-13 and 13-14 respectively. In the year 2014-15, it had decreased by 107%.

Other Income includes Interest Income, Delayed Payment charges and other miscellaneous receipts. The above table shows that Other Income of MIDC is decreases by 94% in 2011-12 and then increases by 126%, 218% and 223% in 2012-13, 13-14 and 14-15 respectively as compared to base year. Thus, overall, it shows increasing trend due to rapid growth and development of MIDC.

Administrative Expenditure includes establishment expenses, Contingencies expenses and excludes the amount transferred as supervisory overheads to operation expenditure and 25% of balance transferred to Development expenditure. The above table shows that Administrative expenditure decreased by 83% in 2011-12, further increased by 95%, 104% and 228% in the years 2012-13 and 13-14 and 14-15 respectively.

Maintenance includes maintenance and repairs of pipelines, residential buildings, industrial areas, drainage system, fire station, tools and plants of CETP. From the above table it indicates that expenditure on maintenance does not show specific trend. It has increased 122% in 2011-12 then decreased by 121% in 2012-13 and further increased by 168% and decreased by 104% in the year 2013-14 and 2014-15.

Surplus is the difference between the total income over total expenditure of MIDC. It is also found from the above table that there is not constant or increasing trend in surplus received by MIDC. Surplus shows increasing trend in the year 2011-12 and 2012-13 by 167% and 180% respectively. In the year 2013-14 and 2014-15 surplus shows decreasing trend. Thus, there is need to control on unnecessary revenue expenditure and maintenance expenditure at one side and also see to increase various other sources of revenue income avenues for the overall growth and development of MIDC.

4.4 CONCLUSION

From the above chapter i.e. Overview of MIDC, Author understood the present state of affairs of MIDC of Thane District. It includes presents industrial structure; industry related facilities available in Thane District etc. In addition, Author has also thrown light upon quantitative and financial data which include land acquired and developed by MIDC, present rates prevailed in MIDC areas, vacant plots, existence of different types of industries in the MIDC areas of Thane District. The chapter concluded with the financial analysis of MIDC financial statements. The study found that, number of industrial units have increased due to MIDC. This has supported as well as provided various facilities to different types of industries of Micro, Small, Medium and Large- Scale Units. It has also resulted into creation of job opportunities in Thane District. In the next chapter, Author has analysed primary data collected with help of questionnaire and interview from officials of Industrial units, MIDC officials and also from near-by residents of MIDC areas.

4.5 REFERENCES

1. (2012). Brief Industrial Profile of Thane District. Mumbai: MSME Development Institute.
2. R & D (Reference & Directory)-MIDC & Assent R & D, Pune, 2015 3.MIDC Annual Report-2012-13, 2013-14 & 2014-15

CHAPTER - 5

**ANALYSIS AND INTERPRETATION OF
DATA**

5.0 INTRODUCTION

Managing committee of MIDC is vested with executive powers to carry out the affairs of MIDC, yet knowledgeable and experienced officials are needed to perform the day-to-day routine work and activities. MIDC officials are the connecting link between the industrialists and other stakeholders such as Maharashtra Pollution Control Board, officials of industrial welfare associations, employees of industrial units, residents of nearby MIDC area, etc. Whatever decisions the managing committee of MIDC takes, their efforts may go in vain in the absence of an efficient and honest MIDC officials. Hence, this chapter deals with the opinion of MIDC officials regarding activities run by MIDC and the problems faced and experienced by them while providing various services and facilities. This chapter also covers the expectations of the MIDC officials, industrialists, supporting boards and nearby residents. Thus, author has made an attempt to know the views and practical difficulties faced by MIDC while providing services and facilities. For this purpose, author has prepared 2 questionnaires for important elements of MIDC. They are 1) MIDC Officials and 2) Officials of Industrialists. In addition to this Author has also used interview method for collection of Primary data from official of various authorities such as Officials of Maharashtra Pollution Control Board, Officials of Badlapur Industries Welfare Association, Additional Ambernath Manufacturers Association, Employees of Industrial Units as well as people of nearby residence. The field survey results given in this chapter follow a logical pattern. The Author opines that the analysis of the aggregate data will provide a lucid view of the total sample.

5.1 Analysis and Interpretation of Responses collected from MIDC Officials:

There are total 13 MIDC Units in Thane District. Out of these, author has selected randomly 5 MIDC units for the study. From the selected MIDC Units author has conducted interview of 30 MIDC Officials for the study. Thus, 6 officials from each MIDC unit were selected for study.

5.1.1 Level of MIDC Officials Selected for the Study

There are 3 levels of MIDC officials serving in MIDC offices. The below table shows the classification of sample respondents selected for the study.

Table No.15: Level of Management of MIDC Officials

Sr. No	Level of MIDC Officials	Frequency	%
1	Top Level	15	50
2	Middle Level	9	30
3	Lower Level	6	20
	Total	30	100

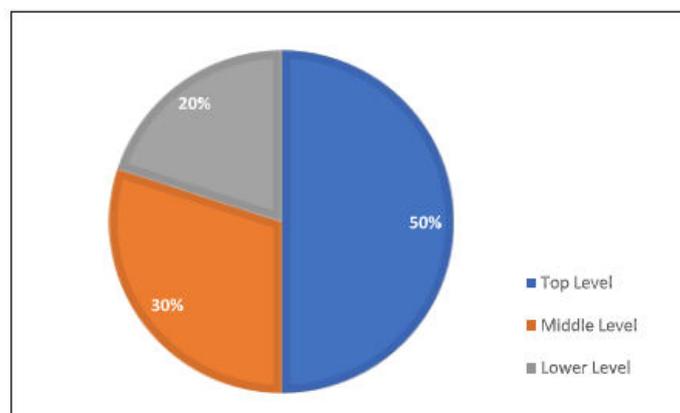


Figure No.2: Level of Management of MIDC Officials

To understand the views of different levels of employees of MIDC, author selected 30 MIDC officials from all the three levels. The above table indicates that out of the selected sample MIDC officials 15(50%) officials are from top level management, 9(30%) from middle level management and 6(20%) MIDC Officials selected were from lower-level management. Author have selected more samples from top level management whereas less samples from lower level management.

5.1.2 Satisfaction level of MIDC officials towards the Infrastructural facilities provided by MIDC to Industrial Units

MIDC provides various Infrastructural facilities to industrial units located in MIDC area. Author has collected views of sample respondents about their satisfaction level relating to various services and facilities provided by MIDC.

Out of total 30(100%) sample respondents, only 12(40%) respondents expressed complete satisfaction towards the work and facility of construction of safe roads and street lights. Whereas, 50 per cent MIDC official respondents are not at all satisfied about the constructed road as well as street lighting; very few (10%) have expressed partial satisfaction on the construction of road work and street lighting. It indicates that construction of road work in the MIDC area is not up to the mark. Due to low quality of construction of roads, use of roads by heavy vehicles and heavy rain roads require repairing every year. Author also observed that most of the roads in MIDC areas are in bad condition, heavy loaded trucks are standing at the road side which are creating traffic problems. Thus, there is a need to take immediate action with respect to construction and repairing work of internal roads of MIDC area.

12(40%) sample MIDC officials proposed satisfaction, whereas 20 percent officials said that they are partially satisfied towards provision of water facility. Author observed that only few MIDC areas it provides adequate water supply. In many MIDC areas there found shortage of water as required by industries. Industrial units receive water once in five days of a week.

Only 40 percent MIDC officials are satisfied towards the facility and provision of Common Facility Centres such as Canteen, Bank, Post Office, Police Station, Telecom Office etc. According to them, MIDC has provided space to all these centers but there is issue of hygiene in canteen facility in the MIDC areas. There is an existence of Police Stations in the MIDC areas but it is found that there are loopholes with respect to safety measures of people and industrial units. Author is of the opinion that there is an urgent need for increasing supply of all these facilities by MIDC in collaboration with various Government and Private Bodies to ensure smooth functioning of industrial units of Thane MIDC.

Table No.16: Infrastructural Facilities provided by MIDC

Sr. No.	Facilities	Completely Satisfied	Partially Satisfied	Not Satisfied	Total
1	Construction of Roads and Street Lights	12 (40%)	3 (10%)	15 (50%)	30 (100%)
2	Provision of Water Supply	12 (40%)	6 (20%)	12 (40%)	30 (100%)
3	Provision of Common facility Centres such as Canteen, Bank, Post Office, Police Station, Telecom Office etc.	12 (40%)	3 (10%)	15 (50%)	30 (100%)
4	Provision of adequate effluent collection system	8 (26.67%)	4 (13.33%)	18 (60%)	30 (100%)

5	Provision of SewageLine System	8 (27%)	6 (20%)	16 (53%)	30 (100%)
6	Provision of Sewage Treatment Plant	3 (10%)	3 (10%)	24 (80%)	30 (100%)
7	Provision of adequate Electricity/Power facility	12 (40%)	6 (20%)	12 (40%)	30 (100%)
8	Provision of Fire Station availability	9 (30%)	3 (10%)	18 (60%)	30 (100%)
9	Implementation of Tree Plantation Scheme	6 (20%)	18 (60%)	6 (20%)	30 (100%)
10	Provision of recreational and Health Facilities	3 (10%)	3 (10%)	24 (80%)	30 (100%)
11	Education facilities such as Schools /Nursery at MIDC area	06 (20%)	9 (30%)	15 (50%)	30 (100%)

18(60%) respondents have given negative opinion on provision of adequate effluent collection system. Whereas, 13.33 per cent officials are partially satisfied on this effluent collection system. It indicates that MIDC has provided effluent collection system at MIDC areas but the existing system is not adequate. Author observed that many effluent collection systems are not maintained properly. Systems are not functioning and treating water with all precautions as well as in many places water is overflowing in these collection systems. Thus, MIDC has to take urgent steps to maintain effluent collection system which will reduce the pollution level in the MIDC areas.

16(53%) respondent MIDC officials have proposed unfavourable opinion about proper and adequate sewage line system. 20 per cent respondent expressed partial satisfaction. Author observed that MIDC has constructed sewage line system at most of the areas but it is observed that MIDC is not maintaining it regularly. Most of sewage lines are in blocked position. Therefore regular maintenance of sewage line system is highly necessary.

24 (80%) respondents have provided negative/unfavourable response for Sewage Treatment Plant facility provided by MIDC. Author observed that these sewage treatment plants are not maintained regularly. Machineries on the plants are not functioning. Due to this, water goes to river or other water bodies without treatment. It results in bad impact on the environment and nearby residents of MIDC areas. Officials said that there is no particular adequate regular manpower (employees) on these plants. Thus, there is an urgent need to take immediate measures by MIDC in collaboration with MPCB Authorities.

40 percent officials are of the opinion that MIDC provides adequate electricity and power to MIDC units; whereas same number of respondents expressed negativity about provision of adequate electricity and power to MIDC units. According to them, there is always issue of continuous power supply. This affect is seen many times on the production of industries. According to them, this problem arises generally in rainy and summer season.

According to 18 (60%) respondents, MIDC do not have active fire station in nearby areas of industrial units. Author observed that Fire stations are there in every MIDC areas but there is no adequate manpower as well as buses at the fire station units. It means that the existing fire station system in the MIDC areas are not in a position to control fire mishap at the earliest. They take the help of other stations to control fire. In addition, fire station officials are not conducting the work of fire audit on regular basis. At the starting of the industry, every industry gets the audit done from these officials, but afterwards there no audit of these industrial units by fire

station officials su-motto. It results in to risky condition for employees working in these risky units as well as chances of accidents and loss suffered by it will be maximum to the nearby residents. So, MIDC authority needs to deal the issue with collaboration with fire station officials.

Only 20% sample respondents are completely satisfied with implementation of Tree Plantation Scheme by MIDC which shows that MIDC is not implementing tree plantation drive in the MIDC areas regularly. Author observed that there are very less trees in the MIDC areas. However, it is expected to organise tree plantation programme in the MIDC areas and should maintain or provide water to all planted trees. MIDC can also make it mandatory for each industrial unit to participate in Tree Plantation Scheme.

Out of total 30 respondents, 24 (80%) respondents are of the opinion that they are not satisfied with the recreational and health facilities at the MIDC area. MIDC has not incurred expenditure on recreational and health facility at most of the MIDC areas. However, Author is of the opinion that as maximum number of highly risky industrial units are situated in MIDC, so MIDC with support of state government must take measures for increasing recreational and health facilities in MIDC areas.

15(50%) respondents are unsatisfied with the existing education Facilities such as Schools/Nursery at MIDC Areas. Whatever existing educational facilities available are provided by local bodies such as municipal corporations or Zilla Parishads. Employees are sending their children at far away places for education.

5.1.3 Development and Allotment Process of MIDC Plots

Once the land is acquired by the State Government, it is handed over to MIDC for further development i.e. conversion of land into suitable plots and provision of necessary services as per the norms and rules of MIDC and allot the developed plots to prospective industrialist. The following table shows the opinion of MIDC official relating to speed of development and allotment process.

The table shows that out of the total sample respondents, 15(50%) officials of MIDC respondents opined that the process of development and allotment of MIDC plots to Industrial Units is slow; 12 (40%) MIDC officials have responded that MIDC takes rapid action once the state government hands over the land to MIDC. Thus, it indicates that there is delay in the process of handing over of plots from the state government to MIDC, development of land by MIDC as well as provision of required facilities and services and finally allotment of developed plot to ultimate entrepreneur.

Table No.17: Speed of Development and Allotment of MIDC plots

Particulars	No. of Officials
Rapidly	12 (40%)
Slow	15 (50%)
Very Slow	03 (10%)
Total	30 (100%)

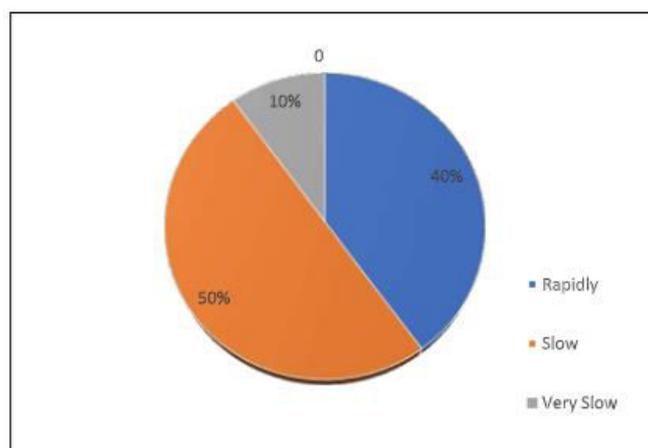


Figure No. 3: Speed of Development and Allotment of MIDC plots

Entrepreneur has to go through lengthy documentary procedure even though government has announced the single window system of clearance procedure which also includes the permission of various agencies like MPCB, fire station, local bodies, etc. who are involved in the process of development and allotment. MIDC has to take steps to reduce documentary procedure.

5.1.4 MIDC’s Expenditure on Maintenance of Roads, Drainage, Water Facility etc. out of its Receipts

Generally whatever fees and service charges that are collected by MIDC from industrial units are spend on maintenance of roads, drainage and water facilities etc. Maintenance of existing services or facilities is the mandatory responsibility of MIDC. The below table presents percentage of collected receipts from industrial units to expenditure on the said services /facilities.

Table No.18: Percentage of Revenue spent on services / facilities

Range	No. of Officials
30% to 50%	Nil
50% to 70%	24 (80%)
70% to 90%	06 (20%)
90% and above	Nil
Total	30(100%)

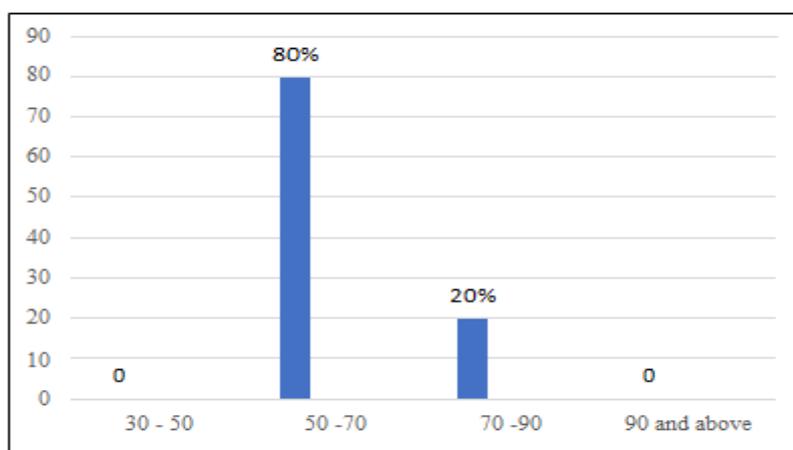


Figure No.4: Revenue spend on expenses of infrastructural facilities

The above table indicates that as per the opinion of majority (80%) sample MIDC official that on an average MIDC spend 50% to 70% of the collected revenue on the services/ facilities; very few i.e. 6 (20%) officials said that MIDC spends 70% to 90% of their revenue on providing necessary facilities and services. Thus, it indicates that MIDC is not utilizing entire revenue collected under the specific heading.

It has to increase this percentage limit to at least 90% and above so that Industrial Units in MIDC area will get proper and adequate facilities for the overall rapid growth and development of Industries.

5.1.5 Action taken by MIDC on Industrialist in case of outstanding fees

In case of outstanding fees from Industrial Units, MIDC issues notices of 15 days, 30 days and 45 days by extending time limit for payment of fees along with interest. If Industrialist does not pay even as per the extended time limit then MIDC officials cut down water connection of that unit. However, on the request of industrial units along with application with undertaking that unit will pay entire fees along with interest. Then officials may start water supply with revised security deposit, DPC charges and disconnection charges.

5.1.6 Opinion of MIDC Officials Relating Towards Reduction of Administrative And Maintenance Expenditure

Administrative Expenses includes establishment and Contingent expenses and excludes the amount transferred as supervisory overheads to operation expenditure. Maintenance includes maintenance and repairing of pipelines, residential buildings, industrial areas, drainage system, fire station, tools and plants, CETP etc. The below table present opinion of MIDC officials towards the reduction of these expenditure.

Table No.19: Opinion to Reduce of Administrative & Maintenance Expenses

Particulars	No. of Officials
Yes	-
No	30(100%)
Total	30(100%)

The above table indicates that all the sample MIDC officials are of the opinion that administrative and maintenance expenses should not be curtailed by the MIDC as these expenditures are mandatory as well as essential for the smooth and efficient functioning of MIDC activities.

5.1.7 MIDC Generates Sufficient Revenue to Compensate Increasing Expenses

MIDC generate Revenue from Water Charges, Service Charges and Other Income which includes Interest Income, Delayed Payment charges and other miscellaneous receipts, etc. To understand the opinion of MIDC officials relating to adequacy of revenue generation towards revenue expenses, officials gave opinion as per the below table.

Table No.20: Sufficient revenue to compensate increasing expenses.

Particulars	No. of Officials
Yes	-
No	30(100%)
Total	30(100%)

Table No. 20 shows that 30(100%) sample MIDC Officials are of the opinion that MIDC is not generating sufficient revenue to compensate increasing revenue expenses. It means that MIDC has to either increase the rates of fees or depend on state government for contribution towards deficit.

Author strongly felt that MIDC should generate their own internal sources of revenue instead of depending on state government. This will help MIDC to receive extra revenue and industrial units will get adequate and additional facilities and services.

5.1.8 Source of Borrowings by MIDC

MIDC borrows from various sources such as Open Market Operations, Bank Loan as well as from many other Institutions depending upon the nature of its requirement. The table below depicts the various sources of borrowings of MIDC.

Table No.21: Borrowing Sources of MIDC

Particulars	No. of Officials
Open Market Operations	18(60%)
Bank Loan	6(20%)
Borrow from other Institution	6(20%)
Total	30(100%)

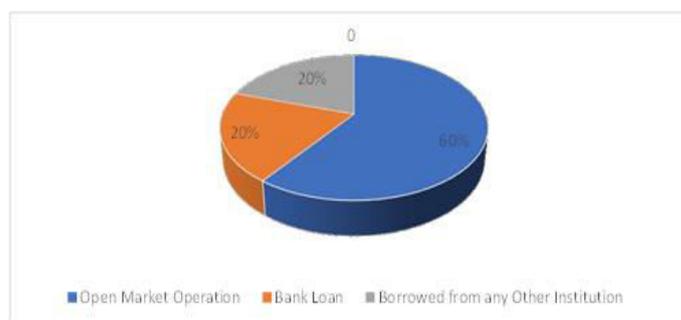


Figure No.5: Borrowing Sources of MIDC

18(60%) sample MIDC Officials opined that in case of financial crisis, generally MIDC makes fund available through Open Market Operations i.e. by issue of Bonds, Debentures, Stocks etc; 6(20%) MIDC Officials said that sometime MIDC takes Bank Loans by way of borrowings from other Institution as per need and urgency of MIDC.

Author is of the view that MIDC should borrow funds at a cheaper rate through open market operations as compared to existing increasing interest rates of bank loan. It will help MIDC to reduce cost of finance and thereby increase their profitability in near future.

5.1.9 Preparation of Financial Budget for different types of activities:

MIDC prepares the financial budget for different types of activities before starting of the financial year. This budget has to be approved from MIDC top authorities. Accordingly, MIDC officials has to adhere the budget while making expenditure on various services and facilities.

Table No.22: Preparation of activity-wise Financial Budget

Particulars	No. of Officials
Yes	27(90%)
No	03(10%)
Total	30(100%)

It is clear from the above table that 27(90%) sample MIDC officials said that preparation of budget for each activity is mandatory but according to them there is no system to propose expenditure for new innovative activities and services. It means that preparation of budget is just a formality.

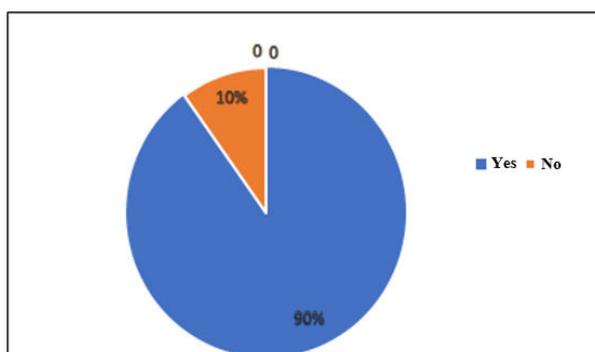


Figure No.6: Response towards Activity wise Financial Budget

5.1.10 Allotted Plots By MIDC to Industrialist Not Functioning; Hence Closed Down Their Business:

Sample respondent MIDC officials could not give answer about percentage of allotted plots by MIDC are not functioning. However, few of them said that out of the total industrial units, on an average 10% industrial units have closed down without vacating the plot to MIDC. According to them, there are industries in every MIDC areas which are not functioning due to the various reasons such as Government has banned production due to creation of heavy pollution, Chemical based production industry, financial crunch, issue of marketability of their products, mishaps occurred in the industry, sickness, etc.

Respondents are of the opinion that these industrialists have kept their allotted plots and industry ideal and not returned to MIDC. Industrialists who have closed business have not even paid MIDC dues. MIDC issues continuous notices to such Industrial Units. Even after repetitive notices they do not vacate their plots. Thus, it indicates that there is no control or supervision of MIDC officials on such types of closed business.

Author is of view that MIDC has to take strict actions against such Industrialists so that same plots can be made available to other Industrialists.

5.1.11 Availability of sufficient funds with MIDC to develop its area

MIDC collects funds from various sources and spends on various infrastructural facilities as well as maintenance of these facilities. The table below indicates the responses of sample respondents about availability of sufficient funds.

Table No.23: Funds availability with MIDC

Particulars	No. of Officials
Sufficient	06(20%)
Insufficient	24(80%)
Total	30(100%)

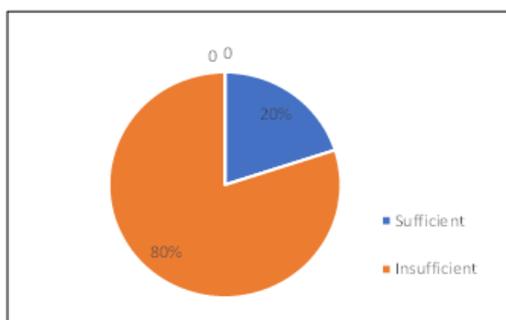


Figure No.7: Funds availability with MIDC

Table No. 23 depicts that out of total 30(100%) respondents, majority i.e. 24(80%) officials are of the opinion that the funds available with MIDC for developmental activities are insufficient; whereas very few 6(20%) opined that MIDC has sufficient fund to develop MIDC activities. Thus, it indicates that MIDC has insufficient funds to develop MIDC areas.

Author observed that MIDC areas has poor quality of facilities such as sewage treatment plant, less number of employees to maintain, poor quality of roads, inadequate water supply etc.

5.1.12 Adequate Number of Employees in MIDC

MIDC is not dependent on the State Government for revenue expenditure. It is allowed to create the required number of additional posts of employees with the approval of Board of Directors. The table below shows the opinion of MIDC officials.

Table No.24: Sufficient Number of Employees in MIDC

Particulars	No. of Officials
Sufficient	09(30%)
Insufficient	21(70%)
Total	30(100%)

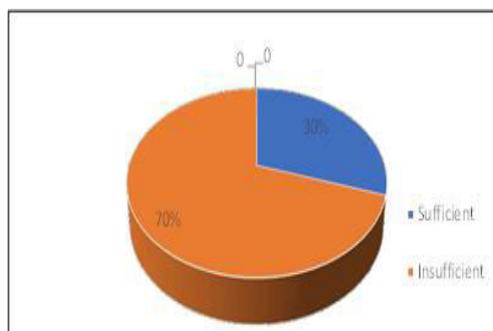


Figure No.8: Sufficient Number of Employees in MIDC

Table No.24 indicates that 21(70%) officials opined that with the increasing number of Industrial Units in MIDC area, there are shortage of employees. No permission to fill employees from the board of directors of MIDC, time consuming procedural requirements for appointment of employees, insufficient funds etc. are the factors for inadequate number of employees in MIDC offices.

Author feels that MIDC should adopt proper HR Planning in their offices through transferring excess staff from the place of abundance to the place of scarcity. It will also help in reducing problem of unemployment to a greater extent.

5.1.13 Opinion About Permission of State Government Towards Major Projects of MIDC (Land Acquisition and Relating)

MIDC have to take permissions and sanctions from state Government for various major proposal. To get sanctioning of the government, MIDC have to follow the procedure laid down. The table below shows the opinion about the speed of sanctioning of major projects of MIDC.

Table No.25: Time to Sanction from Government to MIDC projects

Particulars	No. of Officials
Rapid	12(40%)
Slow	18(60%)
Total	30(100%)

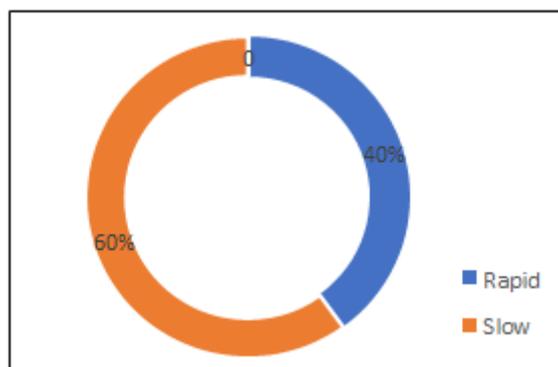


Figure No.9: Sanction Procedure of Government

It is found from 18(60%) MIDC officials that there is delay in sanctioning procedure from government officials and ministers and other political interference; whereas 12(40%) officials were of the opinion that they are getting permissions rapidly.

However, Author observed that there is huge delay in the process of acquisition of land as land holders goes to court of law for their demands, again MIDC officials require time to develop plot to make arrangement of water, power, various safety plans, roads etc. In addition, there is also huge political interruption from local level to state level politicians.

5.1.14 Support of MIDC in Getting Permissions from Different Authorities to Start Industrial Units in MIDC Areas

According to MIDC officials, MIDC supports various Industrial Organizations in getting permissions at various stages of registration procedure.

- i) Obtain Director Identification Number (DIN) online.
- ii) Obtain digital signature certificate online.
- iii) Reserve the company name with the Registrar of Companies (ROC) online.
- iv) Stamp the company documents either at the Superintendent or an authorized bank.
- v) Present the required documents along with the registration fee to the Registrar of Companies to get the certificate of incorporation.
- vi) Make a seal.
- vii) Visit an authorized franchise or agent appointed by National Securities Depository Services Limited (NSDL) or Unit Trust of India (UTI) Investors Services Ltd to obtain a Permanent Account Number (PAN).
- viii) Obtain tax account number for income taxes deducted at source from the Assessing Office in the Mumbai Income Tax Department.
- ix) Register with Office of Inspector, Mumbai Shops and Establishment Act.
- x) Register for VAT before the Sales Tax Officer of the ward in which the company is located.
- xi) Register for profession tax.
- xii) Register with Employees' Provident Fund Organization.
- xiii) Register for Medical Insurance.

Author opines that there should be an arrangement of all permissions at MIDC office only. This will result in the growth of industrial units in MIDC areas at faster rate.

5.1.15 Opinion of MIDC official Towards Coordination with Other Bodies / Institutions:

Generally, MIDC coordinates with different bodies or institutions like MSFC, MSEB, MPCB, Police Department, etc. for getting smooth permissions to industrial units as well as for getting effective and adequate services and facilities from these institutions. Below table depicts the opinion about MIDC officials towards favourable or unfavourable coordination and cooperation.

Table No.26 depicts that out of total 30 sample respondents, 21 (70%) sample MIDC officials said that MSFC is not supporting for adequate finance that is required for industrial units. It means that industries are facing the problem of raising finance.

18(60%) respondents opined that due to shortage of generation of power at the power stations, there is a problem of regular power supply by MSEB. There is mismanagement of MSEB relating to power generation and power distribution which causes the interruption in power supply to MIDC areas.

15(50%) respondents have opined that MPCB supports MIDC for Pollution Control; same number of MIDC officials said that MPCB is not working efficiently to control on pollution control. Author observed that there is shortage of employees at MPCB. There is no planning or management relating to regular visit to industrial units, MIDC areas, etc for checking pollution. There is no coordination of MIDC and MPCB.

Table No.26: Coordination of MIDC with following various bodies /institutions

Sr. No.	Particulars	Yes	No	Total
1	MSFC for getting adequate finance	9(30%)	21(70%)	30(100%)
2	MSEB for regular Power Supply	12(40%)	18(60%)	30(100%)
3	MPCB for Pollution Control	15(50%)	15(50%)	30(100%)
4	Fire Station facility	18(60%)	12(40%)	30(100%)

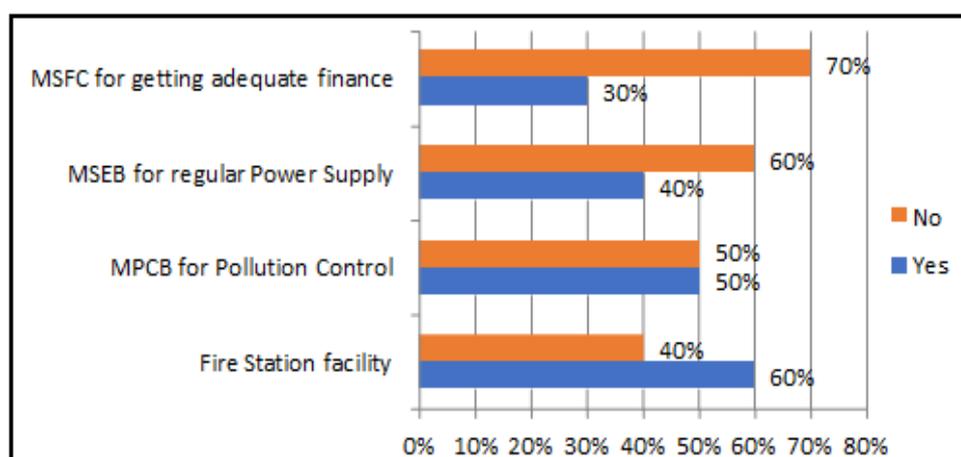


Figure No.10: Perception about coordination of MIDC with various bodies

15(50%) respondents have opined that MPCB supports MIDC for Pollution Control; same number of MIDC officials said that MPCB is not working efficiently to control on pollution control. Author observed that there is shortage of employees at MPCB. There is no planning or management relating to regular visit to industrial units, MIDC areas, etc for checking pollution. There is no coordination of MIDC and MPCB.

18(60%) respondents said that that Fire station Facility is available in their MIDC area; 12(40%) MIDC officials were of the opinion that there are inadequate fire stations with Fire equipment's and shortage of staff. In case of fire, one fire station has to call other firestations buses to control fire in the MIDC industrial units. In addition, due to inadequate staff at fire stations, they are not checking or making audit of fire prevention measures taken by industrial units.

Author strongly feels that there is urgent need to have cent percent coordination at least among above four departments. Only then a drastic change and balanced development and growth of MIDC areas in Maharashtra will take place.

5.1.16 Opinion About Balanced Industrial Development in Maharashtra with the Help of MIDC

One of the important objectives of MIDC is to promote balanced industrial development all over Maharashtra. Below table shows the opinion of MIDC officials about balanced industrial development in Maharashtra.

Table No.27: Contribution of MIDC towards balanced industrial development

Particulars	No. of Officials
Yes	12(40%)
No	18(60%)
Total	30(100 %)

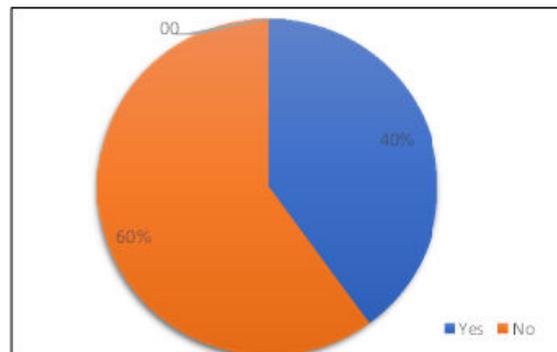


Figure No.11: Contribution of MIDC towards balanced industrial development

Table No.27 depicts that 18(60%) of respondents are of the opinion that MIDC has contributed in the growth of industrial development in Maharashtra but failed for balanced growth all over Maharashtra. It means that, MIDC has established at specific places only especially near big towns and cities. It has failed to develop its areas at rural areas of Maharashtra where there is a need of employment.

Author opined that there is a need to establish MIDC areas at places where adequate land is available but there is no adequacy of water, electricity, power, roads etc.

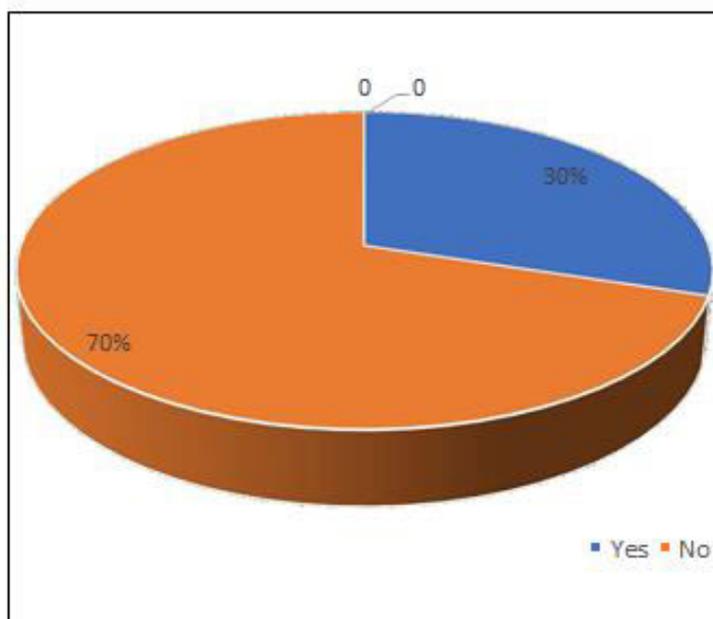
5.1.17 Efforts of MIDC to encourage Entrepreneurs in Setting up Industries at MIDC areas

MIDC have to take continuous innovative measures to encourage entrepreneurs to set up Industries in MIDC area to achieve the objective of balanced growth.

Table No.28 indicates that out of total 30 (100%) sample respondents only 9 (30%) respondents feels that MIDC takes efforts to encourage entrepreneurs to establish their business in the MIDC areas; on the other hand, 21(70%) respondents opined that MIDC do not take any steps of encouragement to public are large or especially new entrepreneurs in setting up industries in MIDC areas.

Table No.28: Perception about encouragement by MIDC

Particulars	No. of Officials
Yes	09(30%)
No	21(70%)
Total	30(100%)

**Figure No.12:** Perception about encouragement by MIDC to entrepreneurs

Author did not find any initiative of MIDC to attract entrepreneurs. They do not conduct any type of workshop or seminar as well as no provision of internship opportunities to college students. Author observed that there is shortage of funds, shortage of manpower at the MIDC which results in to vacant plots.

5.1.18 Provision of Residential facility for Employees of Industrial Units in MIDC areas.

Considering the various important facilities and services which are providing by MIDC and for overall control on the MIDC areas as far as safety and security purposes, Author strongly felt that there is a need that MIDC must construct residential buildings for employees of Industrial Units in MIDC area. The table given gives the opinion about residential facility.

Table No.29: Provision of residential facility for employees of Industrial Units in MIDC areas

Particulars	No. of Officials
Yes	Nil
No	30 (100%)
Total	30 (100%)

Table No.29 depicts that all the sample respondents said that MIDC has not provided or constructed residential building for employees of Industrial Units as there is no provision in the MIDC Act and MIDC don't have sufficient finance to construct such buildings. It means that employees of Industrial Units of MIDC are staying outside the MIDC area after their duty hours. It is very hazardous as far as safety, security and overall control on various facilities and services and facilities provided by MIDC is concerned.

In addition, MIDC officials were of the opinion that MIDC should construct housing building for employees of industrial unit also. This will help these employees to stay near their industrial

unit. This facility will reduce the travelling time of employees of industrial unit, curtail pollution as well as MIDC will also get additional source of revenue. Thus, state government should provide grant for such essential activity. Even MIDC and industrial units may come together to provide the residential facilities to employees of industrial units at subsidized rate.

5.1.19 Major issues /problems about facilities provided by MIDC

When asked to MIDC officials about any two major issues of various facilities and services provided by MIDC, following are various major issues expressed by sample MIDC officials:

1. Construction of Roads And Street Lights

MIDC officials expressed dissatisfaction on the condition of roads in the MIDC areas is worst. MIDC is not maintaining roads regularly. Author observed that there is no regular inspection of roads. Roads are maintained after the protest from nearby residents or industrialists. Thus, there is irregular maintenance of roads. Same is the case of street lights. MIDC officials opined that street lights are checked and changed once or twice a year. There is no regular maintenance of street lights. It indicates that there should be regular maintenance of internal roads and street lights for safety and security point of view.

2. Provision of Water Supply

When asked about water supply by MIDC, officials said that MIDC provides water supply but due to uncontrollable situation, the water supply becomes irregular. In addition, they

told that water treatment plant is not working hence remains closed, result that MIDC provides impure water supply. MIDC officials also told that there is theft of water by nearby hotels and garage industrialists. There is also water shortage in summer season. Due to untreated water poured in to river by industries, the water of rivers and other water bodies became chemical based which caused harm to water creatures and those who drink water of the river. Thus, water pollution is one of the highlighted issue which has been arisen due to MIDC industries. MIDC officials need to check STP plants regularly and should take stringent action against those industries who create water pollution.

3. Issues about common facility centers such as Canteen, Bank, Post Office, Police Station, Telecom Office etc.

MIDC officials are of the opinion that there is shortage of facilities especially canteen, Police station etc. MIDC do not have control on all these facilities. However, industrialists are demanding all these facilities at higher level.

4. Adequate Effluent Collection System

Officials opined that MIDC did not have adequate capacity effluent collection system. Hence effluent is released without treatment into other water bodies or rivers. There is no system of regular check-up of quality of effluents from MIDC official side. Thus, there is urgent need to increase the capacity of effluent collection system considering the expansion of industries.

5. Sewage Line Availability

MIDC officials said that there is open sewage line at many places of MIDC which leads to pollution. It also affects the health of residents and employees of industries. MIDC maintains it but not at regular interval. Thus, there is a need to maintain sewage line regular intervals.

6. Sewage Treatment Plant Availability

There are very less number of sewage treatment plants available in MIDC areas. According to MIDC officials they need the cooperation of Municipal corporation. But, it is observed that these corporations are not cooperating for MIDC sewage treatment plants at MIDC areas. On the other side, officials said that the huge expenditure is required to construct as

Well as maintain the sewage treatment plant. This indicates that there is urgent need to construct these plants without thinking about the heavy expenditure that can be incurred. This step will reduce air and water pollution.

7. Adequate Electricity/Power Availability

Power cut or interrupted power supply to industrial units is the major issue of MIDC areas. In addition, rates of electricity/power to industries are also on higher side. Industries are not getting electricity connection on time. Now a days there is huge gap between demand and supply of electricity and power. MIDC officials are of the opinion that even after many complaints to MSEB, they are not cooperating to MIDC. Thus, it indicates that there is urgent need of cooperation and coordination among and between MIDC, MSEB and industrialists.

8. Fire Station Availability

MIDC officials told that there is less number of fire stations. Even existing fire stations have shortage of fire equipment's and water tanks. The staff in fire station is very less. The existing fire station staff cannot control the fire immediately. They have to take the help of other fire stations staff and their equipments. However, due to less number of staff and equipments and before reaching the help of outside fire stations, a huge loss is incurred to industries. Majority of industries are not doing fire audit regularly.

9. Implementation of Tree Plantation Scheme

Officials said that there is not provision in MIDC Act regarding tree plantation drive in MIDC areas. However, according to them, it is the need of the hour to reduce pollution. Officials told that there is lack of funds and no planning from MIDC level to plant trees. However, Author is of the view that industrialist must be motivated to plant trees in nearby areas. They may be motivated to use CSR fund in tree plantation and drive.

10. Provision of Recreational and Health Facilities

Recreational and health facility is important facility required in MIDC areas. In industries, many times mishaps / accidents occur normally as well as abnormally. So to save the life of employees, health facility is required. However, officials opined that health facility is not available in the MIDC areas.

11. Education Facilities such as Schools/Nursery at MIDC Area

There is no provision to provide educational facilities in the MIDC act. However, considering the number of employees serving in industrial units of MIDC areas, Author strongly feels that MIDC may start at least nursery and schooling education in the MIDC areas. This will support employees to stay in or around MIDC areas. Thus, considering population of employees, MIDC should start nursery and school education.

Thus, from the above observations, Author concludes that MIDC is lacking behind in providing infrastructural services and facilities. In fact, present arrangement of provision of services and facilities are not up to the mark as well as insufficient to cater to the needs of industrial units. Improper road facility, irregular and impure water supply, inadequate effluent collection system, inadequate electricity, less number of fire stations, inadequate provision of recreational and health facilities and no provision of education facilities has been made in MIDC Act are the major issues and problems that are observed.

Author strongly feels that there is a need of proper coordination among MIDC, state government officials, Municipal Corporations, MPCB, MSEB etc. to solve or at least reduce the problems to some extent which will result in the development of Industrial areas at faster rate. There is also a need of strict supervision, inspection and control by MIDC officials on various facilities provided by MIDC. There is also need of appropriate collection of feedback from Industrialists, industrial associations as well as from nearby residents on regular basis. Thus, on

the basis of the feedback, there is ample scope for MIDC to improve and implement the efficient measures to provide satisfactory infrastructural facility.

5.1.20 Opinion about Regular Maintenance of facilities provided by MIDC

MIDC provides various infrastructural facilities to Industrial Units as per MIDC Act. MIDC has to maintain these facilities and services regularly. Following table shows the responses of sample respondents towards frequency of maintenance of these facilities by MIDC.

Table No.30 : Response about regular maintenance of facility

Response	Officials
Regularly Maintained	14 (47%)
Maintained as and when issue/problem arises	10 (33%)
Not maintained regularly	06 (20%)
Total	30 (100%)

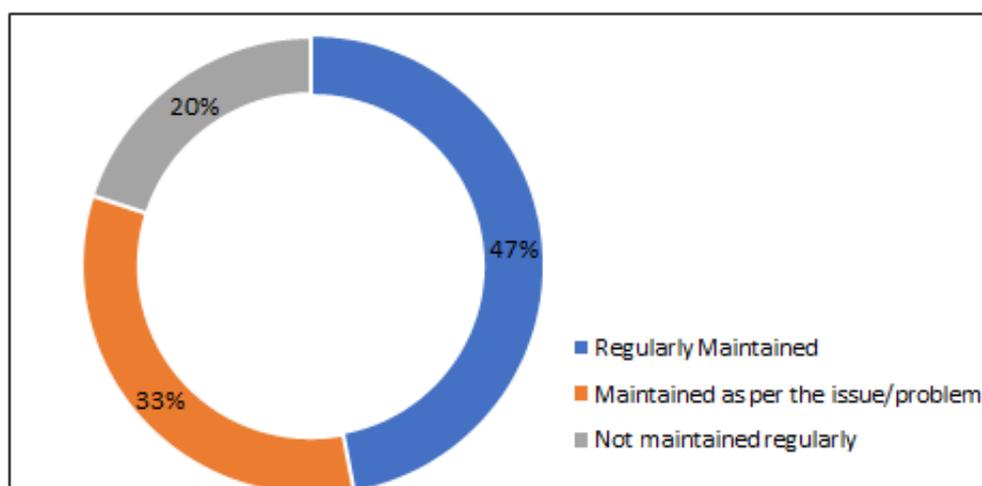


Figure No.13: Regular maintenance of facility by MIDC

Table No. 30 indicates that 14(47%) officials are of the opinion that MIDC maintains facilities regularly; 6(20%) said that MIDC is not maintaining at all most of these services. Whereas 10(33%) officials opined that MIDC looks the matter only when serious issues or problems are raised and such issue is raised by industrialists or residents. Thus, it indicates that majority of MIDC areas are not maintained properly.

Author observed that due to corruption in tenders and quotations, political interference and shortage of regular MIDC staff, etc. regular maintenance of infrastructural facility is becoming difficult and challenging.

5.1.21 Response about Existence of Facilitation Center at MIDC areas

MIDC provides various infrastructural facilities to the industrial units. These Industrial Units face problems with respect to these facilities. Author would like to know whether these Industrial Units can lodge complaints related with infrastructural facility with MIDC or not.

Table No.31: Response about facilitation centre of MIDC

Particulars	No. of Officials
Yes	Nil
No	30 (100%)
Total	30 (100%)

Table No.31 depicts that MIDC areas do not have separate facilitation centre. Industrialist or nearby residents have to give complaints to MIDC office. Author observed that MIDC have to provide facilitation centre for immediate resolution of various issues faced by existing industries of MIDC.

5.1.22 Opinion about increase in number of Industries due to MIDC

For the overall and rapid growth of various kinds of industries, State Government has established MIDC. The below table states the opinion about increase in number of industries due to MIDC.

Table No.32: Growth of Industries due to MIDC

Particulars	No. of Officials
Yes	21(70%)
No	9(30%)
Total	30 (100%)

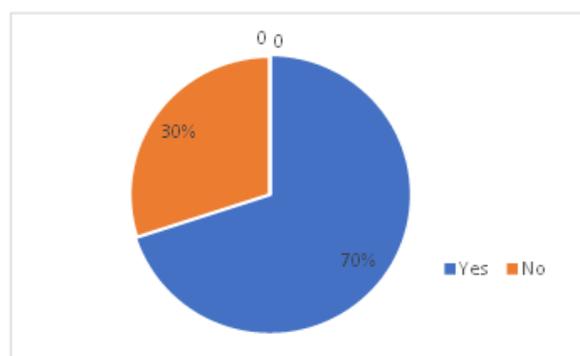


Figure No.14: Response about Growth of Industries due to MIDC

Table No.32 shows that 21(70%) officials are of opinion that due to continuous and deliberate efforts of MIDC, industries in MIDC areas are increasing at rapid pace. Whereas 9(30%) officials said that growth of industries in MIDC area is not only because of the efforts of MIDC alone.

Overall, it indicates that number of industries has increased due to MIDC as MIDC has provided basic facilities at the industrial areas. Thus, without MIDC many of the entrepreneurs could not start or arrange various facilities (i.e., road, water, electricity, power etc) which is required for industry at one place. It is very difficult to arrange all these facilities at one place.

MIDC is a corporation supported by Government of Maharashtra that can arrange and provide all these facilities at one place. MIDC officials also commented that MPCB, MSEB, financial institutions have also played major role due to which number of industries have increased.

5.1.23 Midc's Initiative to Arrange Promotion Programs to Promote Industrialization

To encourage prospective entrepreneurs, MIDC must conduct promotion programs for new entrepreneurs to establish their project in the MIDC areas. Table below shows the media used by MIDC to promote programs.

Table No.33: Response about Promotion Programme of MIDC

Particulars	No. of Officials
Advt.in Television	Nil
Advt.in News papers	30 (100%)
Total	30 (100%)

Table No.33 indicates that all 30(100%) sample respondents told that MIDC gives advertisement in Leading Newspapers regarding its availability of plots for industries.

However, MIDC must use different initiatives such as conduction of workshops, seminars for new entrepreneurs by giving advertisement in television, radio and other social media too.

5.1.24 Important issues of Chemical Industries as per the opinion of MIDC officials

According to MIDC officials, chemical industries are not following safety norms regularly. In fact, they side line / avoid such safety and precautionary issues, the result of which converts in mishap or big accident. Secondly, these chemical industries are creating heavy water and air pollution which affect the health of employees, nearby residents. Hence, they must take utmost care while producing their chemical based production. Author strongly feels that there should be regular check-up of chemical plants by MIDC officials, whether they are taking utmost precautionary measures or not.

5.1.25 Important issues of Engineering Industries

MIDC officials opined that these industries are having two important issues. Firstly, lack of working capital and secondly, frequent breakdown of plant and machinery. Power shortage is also another issue of these industries. Thus, these industries require huge finance for its plant and machinery and for payment to costly raw materials as well as payment to large number of employees.

5.1.26 Important issues of Pharmaceutical Industries

Pharmaceutical industries major issue is lack of training and development facility at the industry which impact on marketability of their products. Secondly, high employee turnover is found. Skilled employees as well as Authors do not stay in the industry for long time on the salary package offered by these pharmaceutical industries. Employee of this sector also looks for better salary package and other perquisites.

5.1.27 Issues from Textile Industries

MIDC officials were of the opinion that textile industries in MIDC areas are facing the problem of shortage of raw materials. Raw material is brought from far distance. Power shortage is also another issue of these industries.

5.1.28 Opinion of MIDC officials towards expectations of Industries from MIDC

According to MIDC officials, following are various expectations of Industrialist from MIDC:

- I. Need of more simplification of land (Plot) allotment procedure.
- II. Regular and pure water supply.
- III. Reduction in water charges and Electricity Rates.
- IV. Provision of adequate Safety and Security Facility.
- V. Proper Roads and Street Light Facility.
- VI. Transportation facility in and around MIDC areas.
- VII. Smooth functioning of Common Effluent Treatment Plant.
- VIII. Increase in number of Sewage Treatment Plant.
- IX. Increase in number of Canteens, Police Stations, Fire Stations and Banks branches in MIDC areas.

5.2 Analysis and Interpretation of Industrialists

As on date near about 2800 small, medium and large size industries are running and operating in Thane District MIDC areas. Therefore, considering this size, Author have selected 280 different

types of industries as sample MIDC industrial units. Considering the different types /classification of industries in this MIDC, author has collected primary data from important industries from four important types. They are Chemical, Engineering, Pharmaceutical and Textile Sector. Thus, for analysis and interpretation of primary data author has collected opinions of these four types of industries only.

5.2.1 Classification of sample industries selected for the study

Different types of industries are established in the Thane MIDC areas who are taking the benefit / services or facilities provided by Thane MIDC. The below table shows different types of industries selected by the author for the study.

Table No.34: Classification of industries selected for the study.

Type of organization	Frequency	Percentage
Sole Proprietorship	110	39.29
Partnership Firm	37	13.21
Private Ltd	133	47.50
Total	280	100

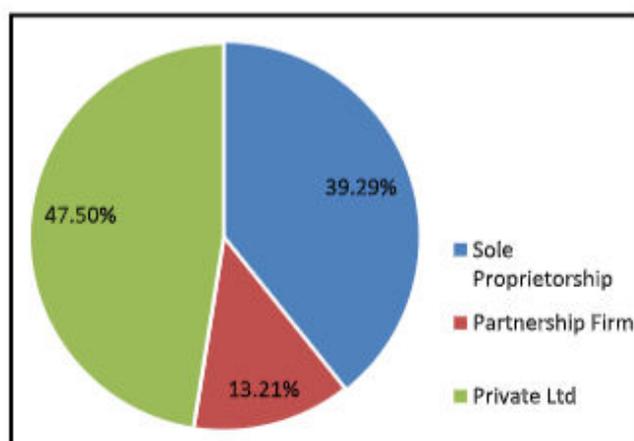


Figure No.15: Industries selected for the study

The above Chart indicates that author has selected 280 industrialists as samplerespondents for the study. Out of these selected industrialists 110 (39.29%) industrialist are sole proprietors, 133 (47.50%) industrialists are private limited companies and 37 (13.21%) industrialists are running partnership businesses.

Thus, selected sample belong to three types of businesses. All these businesses have been established in MIDC areas.

5.2.2 Classification of sample industrialists according to small, medium and large type of enterprises

To get the overall idea about the MIDC areas and provision of various types of services and facilities, there is a need to select different types of industrialists. The table below shows different types of enterprises selected for the study.

Table No.35: Small, Medium and Large enterprises selected for the study

Type of Enterprises	Frequency	Percentage
Small	110	39.28
Medium	119	42.50
Large	51	18.22
Total	280	100.00

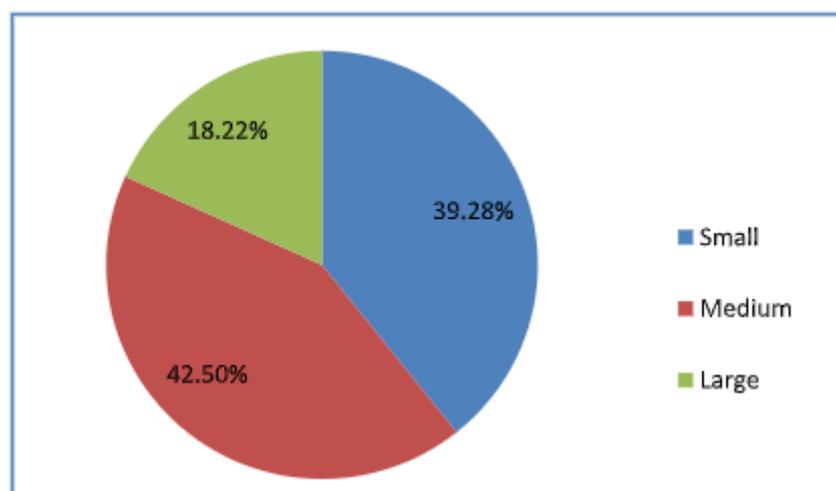


Figure No.16: Enterprises selected for the study

The above Chart indicates that out of 280 sample industrial units, 110 units (39.28%) are from Small Enterprises, 119 (42.50%) units are from Medium Enterprises and 51 (18.22%) units are from Large Enterprises. Thus, author has selected three types of MIDC industrial units for the study.

5.2.3 Classification of Respondents According to Nature of Industry

There are various types of industries established in the Thane MIDC areas producing different kinds of products. Out of these, author has collected data from 4 major sectors of industries. They are Engineering, Chemical, Pharmaceuticals and Textile. The following table reflects the nature of industrialists selected for the study.

Table No.36: Nature of industries selected for the study

Industry	Frequency	Percentage
Engineering	46	16.42
Chemical	105	37.50
Pharmaceuticals	51	18.22
Textile	78	27.86
Total	280	100

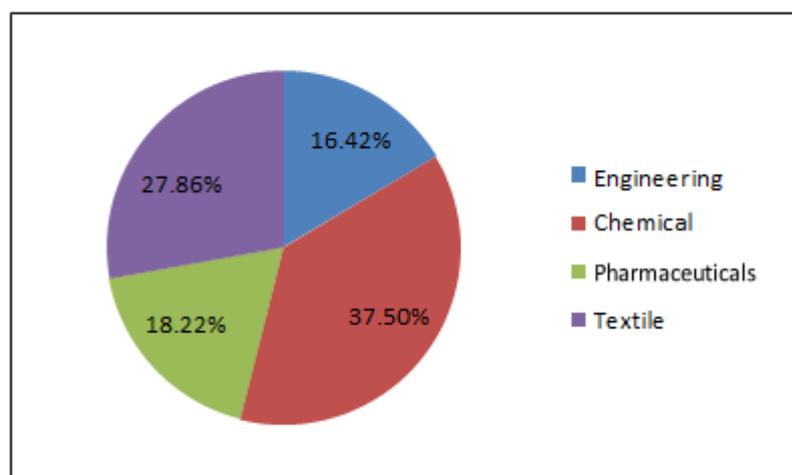


Figure No.17: Nature of industries selected for the study

The above table indicates that out of 280 sample enterprises 46 units (16.42%) were from Engineering, 105 units (37.50%) from chemical, 51 units (18.22%) were from Pharmaceuticals and 78 units (27.86%) from Textile industries. Thus, author has selected only four types of industries for the study.

5.2.4 Classification of the Respondents According to Annual Turnover

Thane MIDC consist of Industrial Units with annual turnover ranges from 25 Lakh to maximum of above Rs.50 Lakh. Author is interested in exploring the industrial units as per their annual turnover. The following table indicates the number of respondents from the industries on the basis of Annual Turnover.

Table No.37: Number of respondents according to annual turnover

Turnover	Frequency	Percentage
Below or equal to Rs. 25 lakhs	12	4.29
Above Rs.25 lakh to Rs.50 lakh	73	26.07
Above Rs.50 lakh	195	69.64
Total	280	100

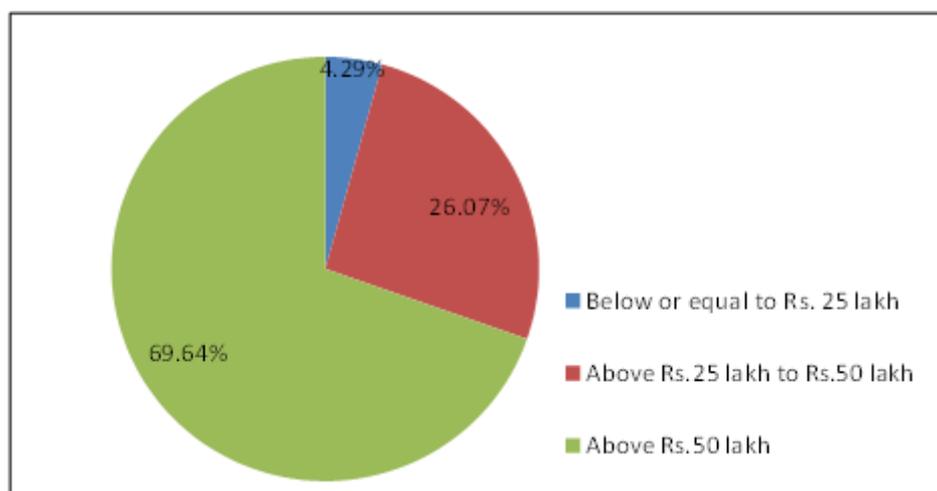


Figure No.18: Number of respondents according to annual turnover

The above table indicates that out of 280 sample industries, 12 (4.35%) units turnover was below Rs.25 lakh, 73(26.07%) units turnover was in the range of Rs. 25 lakhs and above and 195 Units (69.64%) were in the range of above Rs.50 lakh. Thus, it is observed that annual turnover above 50 lakhs are more in numbers selected for the study.

5.2.5 Classification of employees working in sample industries.

The philosophy of MIDC is to prosper all through industrialization. This indirectly support and promote employment opportunities. The below table shows the number of employees working in the industries selected for the study.

Table No.38: Number of employees according to nature of employment

Nature of employment	Number	Percent
Permanent	2279	49.23
Temporary	640	13.83
Contract	1710	36.94
Total	4629	100

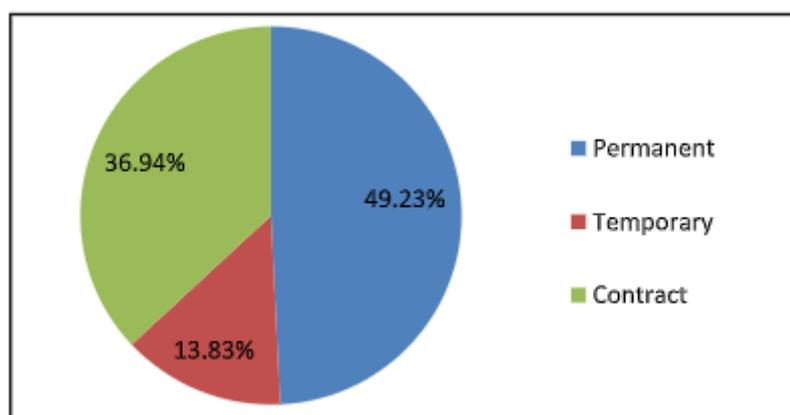


Figure No.19: Number of employees as per their nature of employment

The above chart indicates that, out of the total employees 4629 (100%) working in the sample industries 2279(49.23%) employees employment is in the nature of permanent, 640 (13.83%) are temporary and 1710 (36.94%) are working on contract basis. Thus, it depicts that nature of permanent employees are more as compared to the other nature of employment.

5.2.6 LAND ACQUISITION AND ALLOTMENT POLICY

5.2.6.1 Perception of industrialists about Land Acquisition and Allotment Policy

MIDC plays significant role in the growth and expansion of Industries in Maharashtra. To understand one of the aspect of its provision of infrastructure service i.e. land acquisition and allotment, author would like to know about its various aspects about land acquisition and allotment policy. Author strongly feels that if land acquisition and allotment policy is efficient and at low cost with good speed of allotment work, then there will be increase in industries all over MIDC areas.

Table No.39 indicates that Out of total (280) respondents, 249 (89%) respondents had received land in MIDC area at subsidized rate as it came under SEZ areas; whereas 31 (11%) respondents are outside SEZ area, hence they paid high cost while acquiring plot of land in MIDC areas.

The following table indicates the responses of sample respondents for aspects about Land Acquisition and allotment policy.

Table No.39: Perception of Industrialists about Land acquisition & allotment

Sr. No	Land acquisition and allotment Policy	Yes	No	Total
1	MIDC provides land to industrial units at subsidized rate.	249 (89%)	31 (11%)	280 (100%)
2	Cost of land in MIDC area is less as compared to other land.	249 (89%)	31 (11%)	280 (100%)
3	MIDC's Single Window Clearing process of acquiring land by MIDC is convenient.	255 (91%)	25 (9%)	280 (100%)
4	Illegal Construction is constructed in MIDC area.	263 (94%)	17 (6%)	280 (100%)
5	Industrial units has provided employment for land affected people.	17 (6%)	263 (94%)	280 (100%)
6	MIDC has separate procedure for licensing and permission for acquiring land.	272 (97%)	8 (3%)	280 (100%)

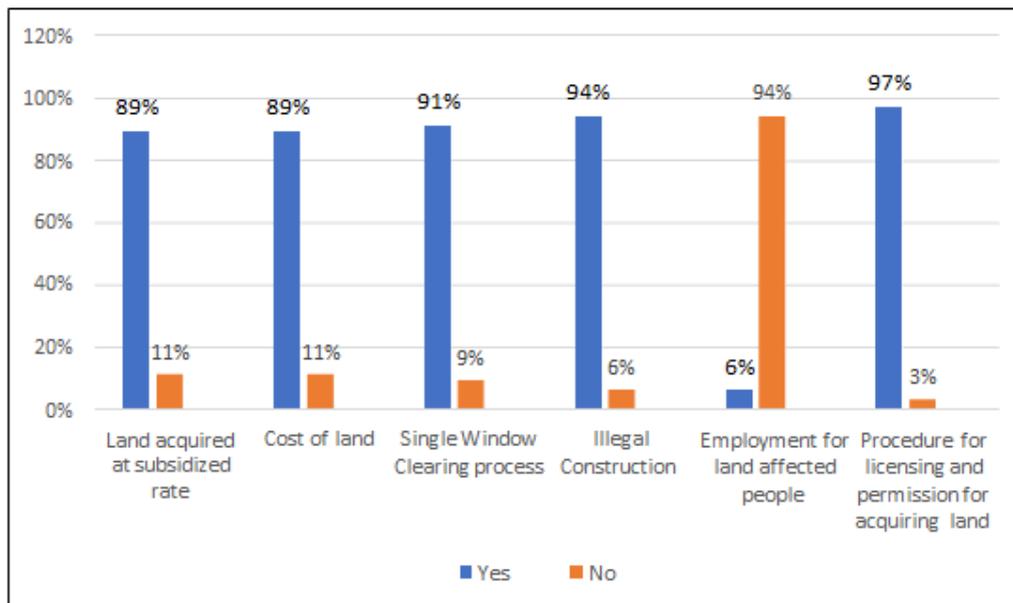


Figure No.20: Perception towards Land acquisition and allotment Policy

249 (89%) sample respondents opined that cost of land leased by MIDC is less as compared to other areas land. Author observed these respondents had leased land at SEZ areas of the MIDC. Whereas 31 (11%) respondents had purchased land higher rate from MIDC as it comes outside the SEZ areas.

It is opined by 255 (91%) sample respondents that single window clearing process of acquiring land from MIDC as well as getting permissions from various boards is convenient and easy. It means that, MIDC has implemented single window clearing system efficiently.

263 (94%) respondents opined that industrialists and other people have constructed their part of premises illegally i.e. they have not taken permission while constructing the part. It means there is no control of MIDC over the sanctioned construction. It is also observed by the author that there is no action by MIDC even industrialists had constructed premises illegally. Author also observed that there are many illegal constructions going on without the permission of MIDC. Thus, such type of illegal construction creates congestion in the MIDC areas.

263 (94%) industrialists opined that they have not given employment to land affected people, because, according to them they did not have either adequate qualification and knowledge which the industry wants. It indicates that most of employees of MIDC are not of nearby residents but they belong to other parts of Maharashtra and majority are from outside Maharashtra. Industrialists also opined that at the very first, they offered employment opportunities to land affected people but these people are not working efficiently and sincerely. They involve local politics in the working environment of the industry.

272 (97%) sample respondents said that the procedure of licensing and permission for land acquisition is simple and speedy at MIDC. The total number of permissions required for new projects to be set up in MIDC has been brought down to 5 from 14 to cut red tape and ensure faster approvals for new industrial project. Thus, it saves time and expenses on licensing and permission for acquiring land.

5.2.6.2 Suggestions to further improve Land Acquisition and Allotment Policy of MIDC:

Most of the sample industrialists had not given any things about this policy. Thus, very few suggestions were given by industrialists mentioned below.

1. Need to provide land to industries at concessional and low rate.
2. MIDC must take immediate action against illegal buildings in MIDC Area.
3. Need to provide employment opportunities to land affected people.

5.2.7 POWER SUPPLY FACILITY INDICATOR

5.2.7.1 Perception of industrialists towards Power Supply facility

Power Supply facility of MIDC includes various components such as concession in power tariffs, uninterrupted power supply, grievance redressal cell, technical survey, energy audit etc. Thus, opinion about industrialists is needed to improve in this facility. below table shows opinion about the power supply facility.

Table No.40 indicates that out of the total sample respondents, 258 (92%) respondents opined that they do not get Power at subsidized rate; whereas 22 (8%) opined that they get power supply at subsidized rate. It is observed that industrial units in SEZ, 100% EOU and new establishments got the benefit of concession or subsidy in power tariffs.

There is an urgent need of up gradation of energy infrastructure as 92 percent units are suffering loss because of the same reason.

Table No.40: Perception of Respondents towards Power Supply facility

Sr. No	Power Supply facility	Yes	No	Total
1	Industrial units in MIDC areas have power supply at subsidized rate.	22 (8%)	258 (92%)	280 (100%)
2	Industrial units receive regular power supply.	6 (2%)	274 (98%)	280 (100%)
3	Quick redressal of complaint of power supply from MIDC.	168 (60%)	112 (40%)	280 (100%)
4	Power theft is taking place in MIDC areas.	165 (59%)	115 (41%)	280 (100%)
5	Loss occurs due to shortage of power.	249 (89%)	31 (11%)	280 (100%)
6	Enough energy for sustaining unit	238 (85%)	42 (15%)	280 (100%)

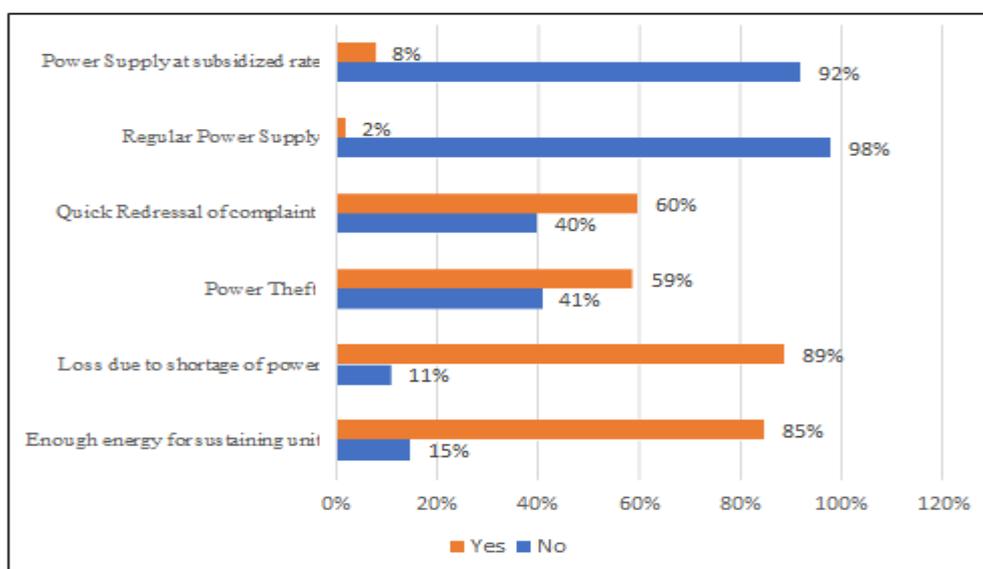


Figure No.21: Perception of Respondents towards Power Supply facility

274 (98%) respondents opined that they did not receive regular power supply. Thus, it shows that industrial units are facing the problem of shortage of power supply. Author observed that shortage of power supply especially in rainy and summer season affects production of most of the industries which result in loss to the industries. As on the date most of the production is carried on machineries. Due to shortage of power supply production gets stuck and employees could not do anything in such situation. However, industrialists have to pay salary to employees. Thus, there is urgent need to regularize power supply.

168 (60%) sample industrialists opined that system of quick redressal of complaint of industry is entertained by MIDC officials and also by MSEB officials; whereas 112 (40%) respondents said that there is no quick redressal of complaint of industry system. They just accept the complaint, but they complete the work very slowly. Author strongly felt that MIDC should have strong coordination between MSEB and industrialist as well as quick facilitation process at the MSEB station.

165 (59%) respondents said that there is a problem of power theft in MIDC areas. It has been increasing day by day. It indicates that there is no strong control and checking of MSEB officials. Such cost of theft is indirectly borne by existing industries i.e. those who pay electricity bill regularly.

249 (89%) respondents said that their industry suffered loss due to shortage of power supply. Thus, during the interruption of power supply, all the activities in the industry stops which result in no production, labour remain idle. The ultimate result of it is the loss to the industry

238 (85%) Industrialists said that their industry does not get enough energy for their sustainable growth and development. It means that there is a need of more power for these industries. MSEB needs to find solution on this issue. It may think for solar energy, wind energy, etc. for generating electricity.

5.2.7.2 Suggestions for further improvement in Power Infrastructure Facilities:

1. There should be immediate resolution to complaints i.e., MSEB must solve various issues relating to power supply on urgent basis.
2. There should be continuous uninterrupted supply of power.
3. There should be strict supervision and checking on theft of power in MIDC areas.

5.2.8 WATER SUPPLY FACILITY INDICATOR

5.2.8.1 Perception of Respondents towards Water Supply facility

MIDC provides water supply facility to the industrial units. Regular and uninterrupted supply of water is the primary necessity for industrial units for its smooth and efficient functioning. The table given below shows responses of sample respondents towards water supply facility provided by MIDC.

It can be seen from the below table that 169 (60%) sample industrial units get adequate water supply; whereas 111 (40%) receives inadequate water supply. Author found that there is shortage of water supply to particular MIDC areas. Thus, there is need to tackle this issue with utmost importance so that these particular MIDC will get a boost to increase number of industries. As on date, there is irregular water supply to industries. This problem is more severe especially in summer season.

Table No.41 : Perception of Respondents towards Water Supply facility

Sr. No.	Infrastructure Facilities	Yes	No	Total
1	MIDC provides adequate water supply to the unit.	169 (60%)	111 (40%)	280 (100%)

2	MIDC provides pure water supply from MIDC.	90 (32%)	190 (68%)	280 (100%)
3	MIDC takes quick action against Water Pollution Complaints.	25 (9%)	255 (91%)	280 (100%)
4	MIDC has alternate source of water in case of shortage of water.	28 (10%)	252 (90%)	280 (100%)

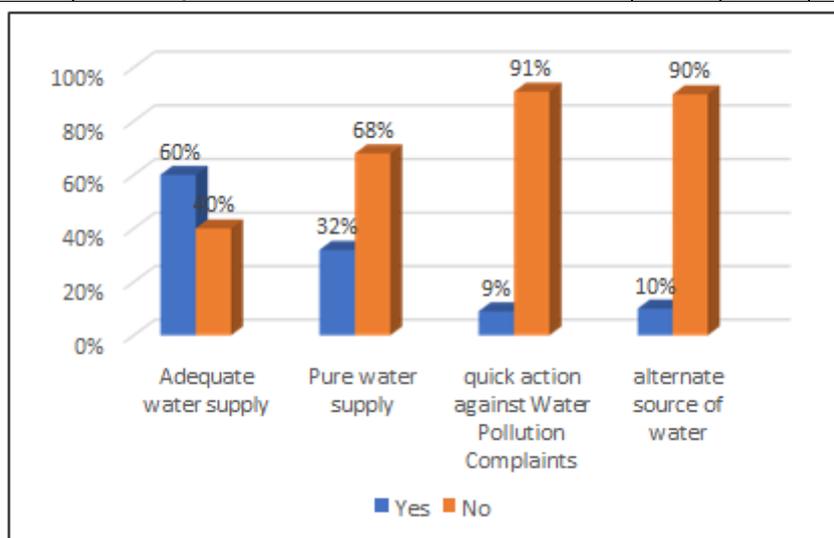


Figure No.22: Perception towards Water Supply facility

190 (68%) industrialists opined that supplied water is not pure. Industries receive untreated water directly i.e. with inappropriate treatment. Author found that water treatment plants are not functioning. There is no maintenance of various machineries used in these plants.

255 (91%) respondents opined that MIDC does not takes quick action against water pollution complaints done by industrialists or nearby residents. It indicates that there is no control and inspection of water pollution from MIDC side. 252 (90%) industrialists are of the opinion that in case of shortage of water MIDC do not have any alternate source of water; whereas 28 (10%) industrialists opined that MIDC makes alternative arrangement in case of shortage of water.

From the above observation, it can be concluded that there is a need to solve the problem of irregular water supply issue with the discussion with MIDC Authorities. Author strongly felt that industrial units in collaboration with MIDC authorities have to set up Rain Water Harvesting Project within their unit at concessional rate.

5.2.8.2 Suggestions to further improve Water Supply Facility

1. MIDC must see that there should be regular and uninterrupted supply of water.
2. There should be immediate resolution and appropriate action regarding complaints of water supply.
3. There should be recycling of waste water project released from Industrial Units.

5.2.9 FIRE PREVENTION MEASURES INDICATOR

5.2.9.1 Perception of Respondents towards Fire Prevention Measures

Under MIDC Act, 1961, the MIDC Fire protection and Life Safety Regulations 2007 can be applied for the development any land in the notified areas of MIDC. The following table depicts the perception of sample respondents towards Fire Prevention Measures provided by MIDC.

76 (27%) sample industrialists are of the opinion that MIDC has satisfactory fire protection measures to safe industrial units; whereas, 204 (73%) industrialists opined that the existing fire protection measures to industrial unit is inadequate. It indicates that there are lacunas in fire prevention and protection measures at fire stations.

168 (60%) industrialists said that MIDC conducts inspection for fire safety frequently; whereas 112 (40%) said that there is no inspection of fire safety frequently. According to them fire station inspected their industry at the initial stage of industry. Thereafter in the long run industry has made many changes in their plants but there is not fire audit or inspection from MIDC or fire station side. Thus, author felt that there should be compulsory fire audit once in a year.

Table No.42: Perception of Respondents towards Fire Prevention Measures

Sr. No	Fire Prevention Measures	Yes	No	Total
1	MIDC has adequate fire protection measures	76 (27%)	204 (73%)	280 (100%)
2	MIDC conducts inspection for fire safety frequently	168 (60%)	112 (40%)	280 (100%)
3	MIDC provides quick help in case of Fire	255 (91%)	25 (9%)	280 (100%)
4	MIDC has technical support for Fire Prevention measures	230 (82%)	50 (18%)	280 (100%)
5	MIDC have fire bridge station near Industries	162 (58%)	118 (42%)	280 (100%)

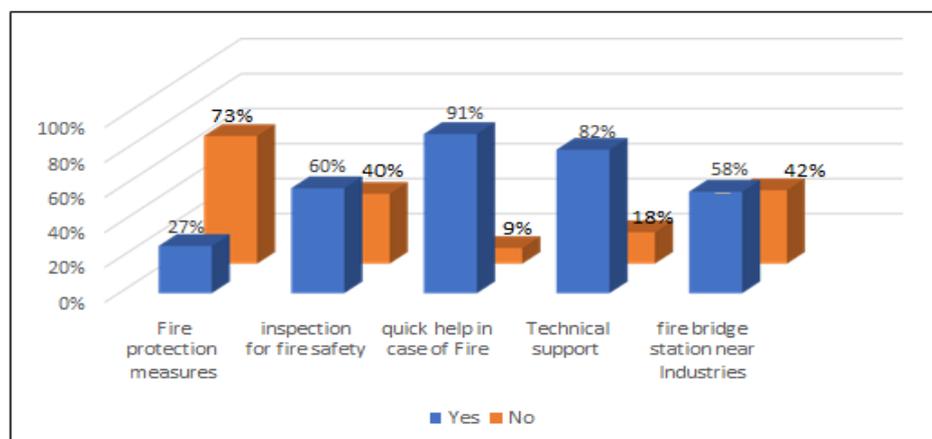


Figure No.23: Perception towards Fire Prevention Measures

255 (91%) industrialists opined that in case of fire in the industry, MIDC provides quick help. Author observed that fire station of the particular MIDC area calls for help to local municipal corporation's fire station or other MIDC areas fire station. However, it takes delay to control on fire. There is less equipment i.e., fire bus, staff etc.

118 (42%) respondents said that fire station is fire station is very far from their industry. This is very dangerous at the time of crisis. Thus, author is of the view that Industrial Units should implement Fire Safety Policy efficiently. It is observed that most of the industries manufacturing process is risky and hazardous, where the chances of occurring accidents are at higher risk. Industrial units need to give training to their employees regarding safety at the time of fire within the industry. Author observed mishaps in various industries, therefore, there is a need that every management of the unit should purchase Group Insurance Policy for their employees to reduce the burden of compensation at the time of mishap.

5.2.9.2 Suggestions to improve Fire Prevention and Protection Measures

1. There should be mandatory inspection as well as audit every year of fire safety measures of each and every industry situated in the MIDC areas.
2. Fire Safety Station must be developed with required equipments.

5.2.10 SAFETY AND SECURITY MEASURES INDICATOR

5.2.10.1 Perception of Respondents towards Safety and Security Measures

Number of industries carries out their production in the plots allotted by MIDC. All these plots are attached to each other. Therefore, there is a need to have adequate control as far as safety and security measures are concerned. In addition, there is also a problem of theft, robbery and pollution at the MIDC areas as well as nearby residents of MIDC areas. Thus, to understand the views of industrialist about the provision of safety and security measures taken by MIDC, the table given below shows the perception of sample respondents towards Safety and Security Measures of MIDC.

It can be seen from the Table that 272 (97%) Industrialist opined that MIDC does not create or take any effort towards environmental education among entrepreneurs. It indicates that MIDC is not cautious about environmental damages. 269 (96%) sample industrialists opined that MIDC has provided space for facilities like Police Station, Post Office, Banks or Telephone Exchange.

Table No.43: Perception about Safety and Security Measures

Sr. No	Safety and Security Measures	Yes	No	Total
1	MIDC creates awareness for environmental education among entrepreneurs	8 (3%)	272 (97%)	280 (100%)
2	MIDC have separate provision of facilities like Police Station, Post Office, Banks or Telephone Exchange	269 (96%)	11 (4%)	280 (100%)
3	MIDC has provided and maintained safe roads for transportation and travelling	104 (37%)	176 (63%)	280 (100%)
4	Common Effluent Treatment carried out by MIDC is satisfactory	126 (45%)	154 (55%)	280 (100%)
5	MIDC conducts Technical Survey for proper environmental infrastructure	112 (40%)	168 (60%)	280 (100%)
6	MIDC has provided any good and clean environment protection	56 (20%)	224 (80%)	280 (100%)

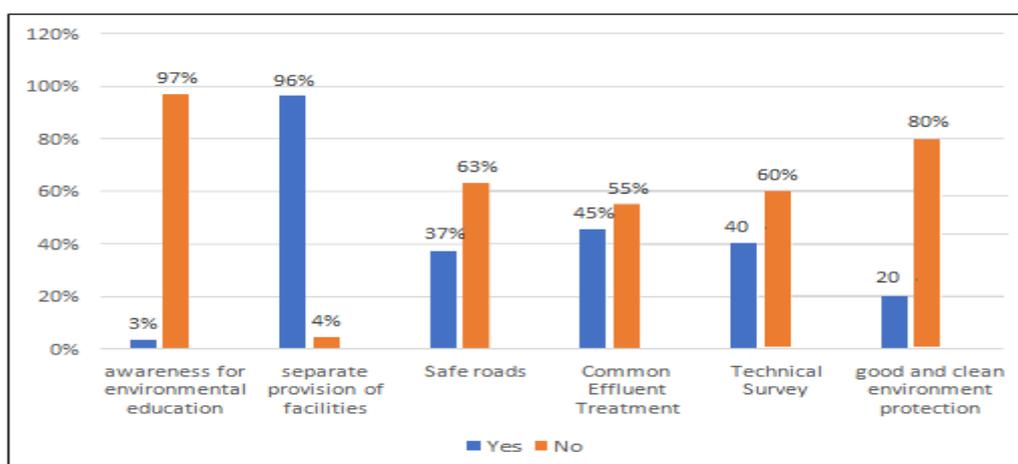


Figure No.24: Perception towards Safety and Security Measures

176 (63%) industrialists are of the opinion that there is not adequate management and construction of safe roads for transportation and travelling of people in MIDC area. Thus, roads in MIDC areas are not safe as there found potholes on the roads. On the other side

104 (37%) sample industrialists opined that the roads in their areas are safe for transportation.

Majority 154 (55%) industrialists are not satisfied with Common Effluent treatment facility provided by MIDC. Whereas 126 (45%) said that Common effluent treatment plants are working effectively. Thus, it indicates that common effluent treatment facility is not working at all the MIDC areas. Polluted water goes to river or other water bodies without treating effluents industries.

Only 112 (40%) respondents gives their positive opinion that MIDC conducts Technical Survey for proper environmental infrastructure. 224 (80%) Industrial Units reveals that MIDC has not provided any good and clean environment protection while allocating land to the Industries.

Author opines that Industrial units have to think about organizing Tree Plantation Programme in collaboration with Industrial Associations. Industrial Associations has to

Conduct regular meetings with MIDC authorities regarding issues of providing safe roads and maintenance of CETP and resolving the same with immediate effect. Management of Industrial units has to cooperate MIDC in conducting Technical Survey for environmental safety periodically to reduce the evil effects of increasing pollution day by day.

Many MIDC units got closure notice from MPCB as they are not in a condition to reduce their rising level of pollution. So healthy industrial units have to conduct awareness programme with regard to Green design and green procurement to industrial units for such units in advance.

5.2.10.2 Suggestions to further improve Safety and Security Measures

1. Increase number facilitation centres of Police Station, Post office, Banks and Telephone Exchange in MIDC areas
2. Provide proper and safe road facility in MIDC area.
3. Helps in reducing water pollution by industrial units in MIDC area.

5.2.11 WASTE DISPOSAL MANAGEMENT INDICATOR

5.2.11.1 Perception of Respondents towards Waste Disposal Management

Author observed that due to continuous and rapid growth of industrial units in Thane MIDC areas, industrial units are also facing the problems of increasing waste and its disposal. MIDC being the parent organisation should take efforts for managing waste, drainage facility, liquid waste management, disposal of waste, etc. The following table shows the perception of sample respondents towards Waste Management.

The Table shows that 244 (87%) respondents said that there is no adequate control of MIDC on waste disposal management of industries. According to them, it is the responsibility of MIDC to control waste disposal of industries. But due to less number of employees in the MIDC, they could not control completely. MIDC takes action only when there is any complaint from industrial units or residents.

Table No.44: Perception of Respondents towards Waste Management

Sr. No.	Waste Management	Yes	No	Total
1	MIDC has adequate control on waste disposal management of Industries.	36 (13%)	244 (87%)	280 (100%)
2	Drainage facility in MIDC area is maintained regularly by MIDC.	28 (10%)	252 (90%)	280 (100%)

3	MIDC has control on liquid waste management of industries.	241 (86%)	39 (14%)	280 (100%)
4	MIDC has Quick Redressal of complaint system for Waste Disposal.	76 (27%)	204 (73%)	280 (100%)
5	MIDC assesses environmental impact of hazardous waste on regular basis.	73 (26%)	207 (74%)	280 (100%)

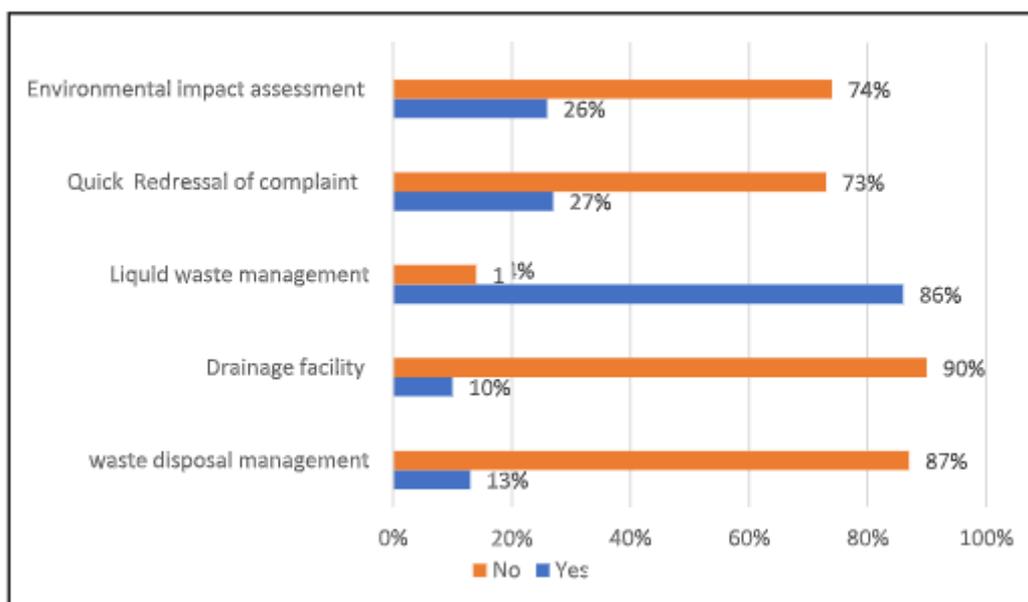


Figure No.25: Perception towards Waste Management

252 (90%) industrial representatives of expressed that they are not satisfied with drainage facility provided by MIDC. According to them, MIDC has constructed drainage lines long years back but MIDC did not maintain it regularly, the result of which it has blocked at many places.

241 (86%) representatives of sample industrial units said that there is no control on liquid waste management by MIDC. However, industrial units are taking care of liquid waste management.

204 (73%) sample respondents opined that MIDC does not maintain waste disposal system on regular basis, but it takes action when industrial units make complaint about it. On the same line, 207 (74%) industrialists opined that there is no such facility at the MIDC to control or conduct environmental impact assessment. Generally, MPCB conducts environmental impact assessment for reducing hazardous waste. However, author felt that industrial units should implement various modern waste management techniques such as converting waste into biogas, fertilizers and recycling and reusing waste water after proper treatment. It will help industrial units to decrease the cost of production and thereby increasing long term profitability.

5.2.11.2 Suggestions to further improve waste Disposal Management

1. Increase number of Sewage Treatment Plant in MIDC areas.
2. MIDC must conduct Workshop for better waste management for Industrial Units

5.2.12 CONSULTANCY INDICATOR

MIDC provides various infrastructural facilities to industrial units established in MIDC areas. However, industrial units are not always satisfied with the infrastructural facilities provided by MIDC. In fact, industrial units or new entrepreneurs need for guidance as well as to resolve complaints raised by industrial units. Thus, to provide guidance or solve complaints, MIDC has to play the role of consultant in many cases.

5.2.12.1 Perception of Respondents towards consultancy by MIDC

The table given below depicts the opinion of sample respondents towards Consultancy Services provided by MIDC.

The below table reveals that 162 (58%) respondents said that MIDC provides consultancy at the time of inquiry. Whereas 118 (42%) respondents expressed there is no such system of counselling or consultancy at the MIDC office. According to them, an industrial unit has to take follow up for getting facilities from MIDC.

Table No.45: Perception of Respondents towards Consultancy

Sr. No.	Consultancy	Yes	No	Total
1	MIDC provides counselling/	162	118	280
	consulting facility	(58%)	(42%)	(100%)
2	Timely information to Industrial	112	168	280
	units	(40%)	(60%)	(100%)
3	Does your unit registered with	222	58	280
	Industrial Manufacturers Association	(79%)	(21%)	(100%)
4	Face Problem due to lack of	199	81	280
	proper consultation service	(58%)	(29%)	(100%)

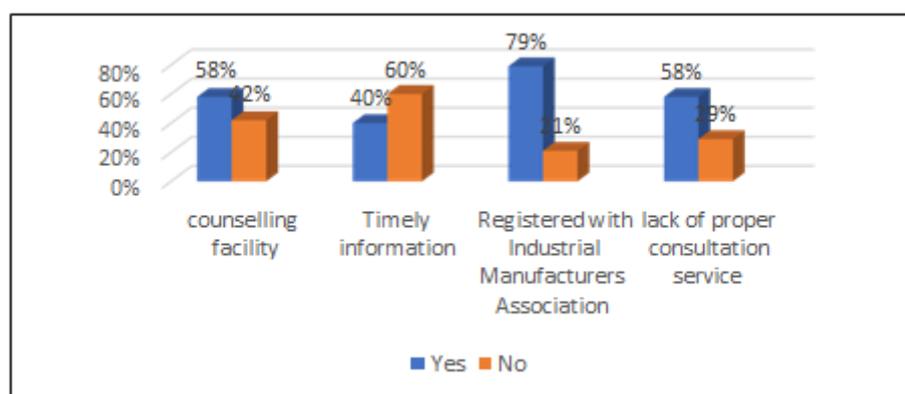


Figure No.26: Perception towards Consultancy

According to 168 (60%) sample respondents, MIDC has facilitation center, it records issues relating to various services which MIDC has to provide, but, officials of MIDC are not taking prompt action on the various issues. They take time for sanctioning of expenditure from the top authority. Thus, according to them, issues or problems are not solved immediately.

222 (79%) respondents have registered themselves with Industrial Manufacturers Association of the respective MIDC area.

58% units face problem due to lack of proper consultation service. It indicates that there is urgent need of efficient consultation services from MIDC.

Author opines that MIDC in collaboration with State Government and various Industrial Associations has to jointly organize Seminars, Workshops as well as conferences for providing knowledge about current trends of business as well as updates for green technology.

5.2.12.2 Suggestions to further improve Consultancy

1. Need to conduct Seminars and workshop for industrial units in MIDC area
2. Develop proper and efficient consultancy services at the MIDC level.

5.2.13 Response of Adequate Number of Employees in MIDC

Positive Growth of any organization depend upon the quantity and quality of employees in an organization. The following table shows the perception of sample respondents about adequacy of employees in MIDC.

The below table indicates that 198 (71%) of respondents expressed that MIDC do not have adequate number of employees. According to them industrial units do not get quick redressal of complaints by MIDC, it delays in repairs or maintenance of infrastructural facilities and immediate help is not rendered at the time of emergency.

Table No.46: Perception about adequate number of employees in MIDC

Particulars	Frequency
Yes	82 (29%)
No	198 (71%)
Total	280 (100%)

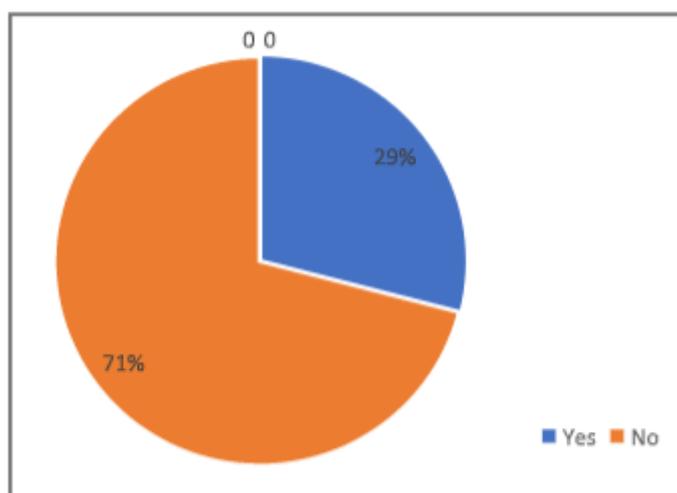


Figure No.27: Response of adequate number of employees in MIDC

It indicates that MIDC have to appoint adequate number of employees for providing better infrastructural facilities which will help to achieve growth and development of Industries in MIDC area.

5.2.14 Coordination of MIDC with various bodies /institutions:

MIDC has to coordinate with MSFC, MSEB and MPCB for successful implementation of its policies. The table given below indicates the responses of sample industrial respondents about coordination of MIDC with various bodies.

Table No.47: Coordination of MIDC with various bodies/institutions

Sr. No.	Particulars	Yes	No	Total
1	MSFC for getting adequate finance	112(40%)	168(60%)	280(100%)
2	MSEB for regular Power Supply	84(30%)	196(70%)	280(100%)
3	MPCB for Pollution Control	112(40%)	168(60%)	280(100%)
4	Fire Station facility	168(60%)	112(40%)	280(100%)

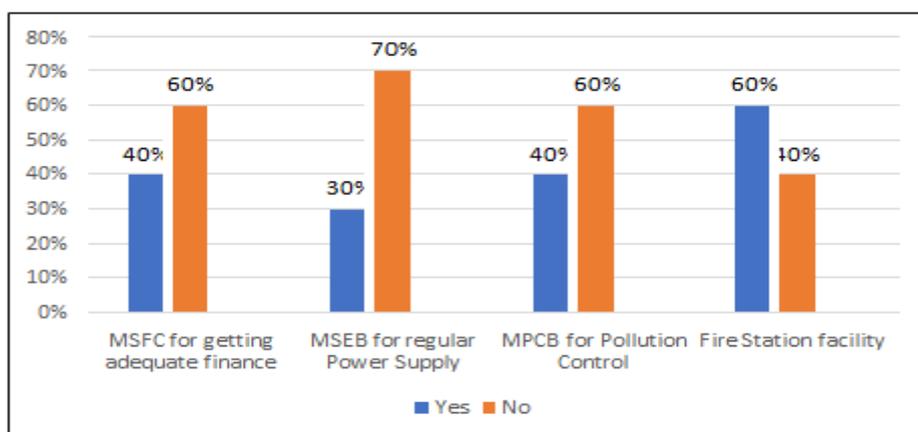


Figure No.28: Perception of coordination of MIDC with various bodies

Table No.49 indicates that out of total 280 respondents, 168 (60%) respondents opined that MSFC is not providing adequate finance to industrial units. For sanctioning finance, it required list of documents which at times is not possible to industrial units to submit to MSFC.

196 (70%) respondents are not satisfied with the regular power supply by MSEB. According to them, there should be adequate coordination between MIDC and MSEB. State government should coordinate with both the organisation for provision of smooth and regular power supply.

112 (40%) respondents are of opinion that MPCB supports MIDC for pollution Control; whereas 168 (60%) respondents opined that there is no coordination between MPCB and MIDC. Both are functioning separately with their own rules and regulations. 168 (60%) respondents are satisfied over the coordination of fire station services and MIDC as industrial units receives help from fire station.

Overall, author opines that MIDC has to increase the coordination with MSFC, MSEB and MPCB so that it helps in balanced development of MIDC in Maharashtra.

5.2.15 Balanced Industrial Development in Maharashtra with the help of MIDC:

MIDC is an authority for developing industries in Maharashtra. While providing permission to Industrial Units MIDC have to check that there should not be imbalanced industrial development in Maharashtra.

Table No.48: Balanced industrial development in Maharashtra

Particulars	No. of Officials
Yes	82 (29%)
No	198 (71%)
Total	280(100%)

The above table indicates perception of sample respondents about contribution of MIDC in the balanced development of industries in Maharashtra. Out of the total respondents, 198 (71%) respondents opined that MIDC is not spread all over Maharashtra equally. Hence, we cannot say that MIDC is contributing towards balanced regional development in Maharashtra. In fact, it is spread or expanded near big cities only.

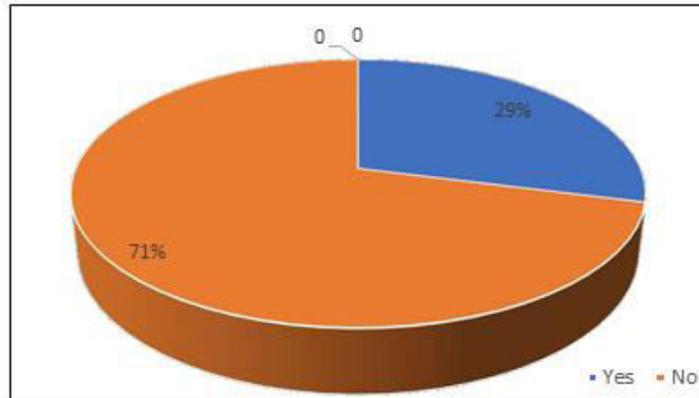


Figure No.29: Balanced development of industries in Maharashtra

It indicates that MIDC has huge scope to spread all over Maharashtra with quality infrastructural services and facilities. Thus, lack of quality services by MIDC leads to imbalanced industrial development in Maharashtra. Author strongly feels that MIDC should concentrate on rural areas for overall development of Maharashtra.

5.2.16 Efforts taken by MIDC to encourage entrepreneurs in setting up Industries:

Author wants to know whether MIDC is taking efforts to encourage new entrepreneurs in setting up industrial units in MIDC areas.

Table No.49: Encouragement by MIDC in setting up industries

Particulars	No. of Officials
Yes	84 (30%)
No	196(70%)
Total	280(100%)

The table given above reflects the perception of sample respondents about encouragement by MIDC in setting up Industries in MIDC area.

The above table indicates that out of total 280 (100%) respondents only 84 (30%) respondents said that that MIDC takes efforts to encourage entrepreneurs; whereas majority 196 (70%) respondents opined that MIDC does not take any steps of encouragement to entrepreneurs in setting up industries in MIDC areas. According to them there is shortage of funds and manpower at the MIDC, hence it becomes difficult for MIDC authorities to organize encouragement programmes such as workshop or seminars.

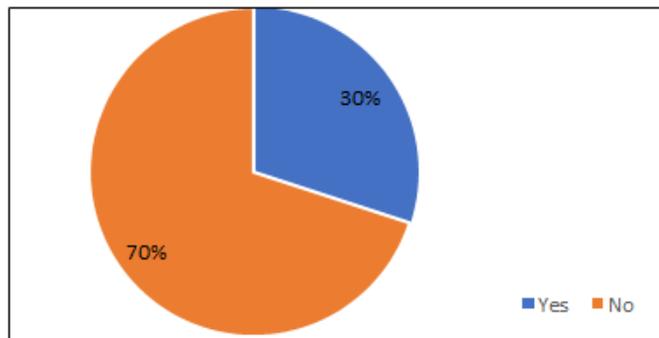


Figure No.30: Encouragement by MIDC in setting up industries

Author opines that MIDC has to increase their efforts of encouraging entrepreneurs to set up industries in MIDC areas. They should conduct meetings and workshops with those who want to

become entrepreneur. These initiatives will lead to efficient utilization of vacant plots which will result in balanced development of MIDC.

5.2.17 Construction of building for the housing of employees of Industrial Units by MIDC

Employees of Industrial Units in MIDC face the problem of residence as they do not get housing facility near MIDC area. The following table indicates the responses of industrial units towards construction of building for the housing of employees of Industrial Units.

Table No.50: Housing building for the employees of Industrial Units by MIDC:

Particulars	No. of Officials
Yes	280(100%)
No	Nil
Total	280 (100%)

The above table indicates that all Respondents are of opinion that MIDC should construct housing building for employees of Industrial Units in MIDC area as it has sufficient land to construct. Respondents told that MIDC has constructed housing building to their employees and not for employees of industrial units. Author feels that MIDC along with Industrial units should construct housing buildings for the employees of industrial units at subsidized rate. Because as on the date, maximum number of employees are coming from faraway places, therefore, housing facility will help them to reach office without delay and also reduce transportation cost thereby increasing the standard of living of employees.

5.2.18 Expectations of industrial units from MIDC:

- I. Regular water supply.
- II. Uninterrupted power supply.
- III. Safe road facility and street light facility.
- IV. Increase number of Common Effluent Treatment Plants and Sewage Treatment Plants.
- V. Improve facility relating to safety and security i.e., fire, theft and accidents.
- VI. Counselling Facility.

5.3 Analysis of Responses from other stakeholders

To understand the views of other closely related stakeholders, Author has conducted Interviews and Discussion with officials of Maharashtra Pollution Control Board, officials of Kalyan Ambarnath Manufacturers Association, Badlapur Industries Welfare Association, Additional Ambarnath Manufacturers Association, Thane Small Scale Industries Association, Employees of Industrial Units and nearby residents of MIDC areas.

5.3.1 Officials of Maharashtra Pollution Control Board

Author had conducted interview of 5 officials of Maharashtra Pollution Control Board, Thane. The detailed analysis and interpretation of interviews is as follows.

1. About coordination and Cooperation of MIDC with MPCB for Controlling Pollution of industrial units of MIDC areas

It is found from the 3 out of 5 MPCB official respondents that MIDC is not coordinating as well as cooperating with MPCB. However, without coordination, MPCB takes its own initiatives to control pollution of industrial units in MIDC areas. It indicates that there is a need of coordination and cooperation among MPCB and MIDC. Both of them should prepare a strategic plan of controlling pollution. There is urgent need to prepare policy document relating to nature and type of production which industry is producing.

2. MPCB's Strict Action against Industrial Units Who Creates More Pollution: MPCB official told that they give notices to such industrial units to take immediate measures to reduce high level of Pollution. However, due to interest involved of different groups of people, MPCB does not take strict action against them. Author observed that level of pollution in MIDC area has increased at a rapid pace which has impacted on the health of employees and nearby residents as well as other natural resources.

3. Efforts taken by MPCB to Control Pollution of MIDC area

To control pollution, MPCB takes following steps:

- a) Since 2013, it was mandatory on the part of industrial units to get certification from MPCB over releasing treated effluents in the water bodies after every 3 months, failing to do so, the industrial unit were charged double rates of water charges. Further, the water connection of the industrial unit was disconnected after 3 months for not presenting requisite certificate in given time.
- b) However, Government has issued resolution on 21st April, 2016, in which power to take action against these polluting industries has been given to Water Resources Department. The water resource department has cancelled the condition of procuring certificate after every 3 months from MPCB. However, MPCB may inform the Water Resource Department about a particular unit polluting water bodies, then Water Resource Department will take action against the said industrial unit.
- c) As per New GR, it is mandatory for the MPCB to submit every month the list of Industrial Units polluting water bodies.
- d) MPCB also began rating Industries under the Five Star Rating Programme with the aim to reduce pollution through increased transparency.

Overall, Author found that due to shortage of employees and less utilization of available funds, MPCB is not providing justice to their efforts.

4. Do industrial units fulfil the Norms Established by MPCB?

MPCB officials said that majority of industries do not fulfil the norms established by MPCB. It indicates that there is a need of audit at least once in a month.

5. Efforts of MPCB to reduce pollution in MIDC areas

- A. MPCB check level of pollution in existing industries on regular basis.
- B. MPCB awards sponsorship to various organizational Institutes and Organizations to work jointly to conserve the environment.
- C. MPCB Celebrate World Earth Day, World Environment Day, Eco friendly Holi, Ganpati Festival, Pollution free Diwali etc.

Author feels that MPCB in collaboration with the local NGOs can effectively control the increasing level of pollution in MIDC area. In addition, MPCB should utilize its major part of fund on pollution reduction activities. It is observed the most of the fund remain unutilized.

Author opines that MIDC has to take strict actions against polluting units or charge heavy penalty if industrial units are not taking any steps to reduce pollution.

Author feels that MPCB and MIDC have to combine their efforts to reduce pollution.

6. Opinion of MPCB officials towards immediate fulfilment of Measures suggested to industrial units.

MPCB officials told that industrial units do not immediately implement the measures suggested by MPCB. Finally, MPCB send closure notices to such units, but still these units don't close

down their units. Author opines that as industrial units are adhering on MIDC authorities for registration procedure as well as other rules and regulations so they do not follow the instructions given by MPCB. Hence MPCB has to coordinate with MIDC for resolving this problem.

7. Conduction of Meetings By MPCB with Mide

All the respondents told that they do not conduct meetings with MIDC at regular intervals. However, Author felt that there is a need to conduct regular meeting by MIDC officials with MPCB officials to control pollution issues.

8. Suggestions given by MPCB Officials

- I. Need to increase Cooperation and coordination with MIDC officials.
- II. MIDC must support MPCB for pollution reduction efforts of MPCB.

5.3.2 Analysis of Interviews Conducted with Officials from Kalyan Ambernath Manufacturers Association, Badlapur Industries Welfare Association, Additional Ambernath Manufacturers Association:

Author had conducted discussions with two employees each from Kalyan Ambernath Manufacturers Association, Badlapur Industries Welfare Association, Additional Ambernath Manufacturers Association. Analysis and interpretation of interviews held with the above officials are presented below.

1. Facilities and Services Needed to be provided Carefully by MIDC

As per suggestions given by the employees of various Industrial associations, below mentioned services must be provided by MIDC:

- a. Regular water supply and power supply.
- b. Safe road facility and street light facility.
- c. Common effluent treatment plant and sewage treatment plant.
- d. Safety and security against fire, theft and accidents.
- e. Counselling facility.

Thus, it indicates that MIDC is providing all the above facilities but still industrial units are dissatisfied with the quality of services provided. Therefore, MIDC has to take necessary steps to improve these facilities with immediate effect for smooth functioning of Industries.

2. Major issues in MIDC as per the opinion of Industrial Associations.

As per the opinion of Industrial Associations, MIDC have to solve as well as concentrate on below mentioned major issues:

- I. Illegal construction of residential and industrial Buildings in the MIDC areas.
- II. Increasing level of Air and Water Pollution.
- III. Closing down of Industrial Units.
- IV. Safety and Security issues.
- V. Regular Water and Power supply at Subsidized Rates.
- VI. Inefficient working of Common Effluent Treatment Plant.
- VII. Use of MIDC plots for illegal business activities.

3. Efforts taken by Association to Control Pollution and other issues of MIDC areas industrial units:

- A. Associations are organising various seminars, training programs, conferences and meetings with different agencies. In this, seminars and workshops are also conducted for creating awareness of pollution problems and laws relating to pollution.
- B. Associations also conducts regularly training programs on industrial safety and health, firefighting etc.
- C. Tree plantation activity every year.
- D. Associations organize Medical check-up Camps, Cancer Check-up Camp, Factory Inspection Camp etc.
- E. They published a very comprehensive Directory, Quarterly Bulletin and issues on latest notifications and changes in any law affecting the industries. Author feels that MIDC has to support these associations so that they jointly solve the various problems regarding infrastructural facilities quickly.

4. Problems of Employees of industrial Units

This includes use of Safety Equipments, effect of pollution on health, problem of traffic congestion, issue of transport facility, improper working conditions, etc.

Author feels that MIDC has to support these associations so that they jointly solve the various problems of employees of industrial units with immediate effect.

5. Opinion about MIDC's cooperation with Associations for Resolving Complaints in Industrial Units

All 6 respondents expressed that MIDC do not cooperate as well as coordinate with Industrial Associations for resolving the complaints of Industrial Units in MIDC areas. According to them this happens due to corruption by MIDC officials with industrialists, inadequate staff at MIDC and lack of transparent mechanisms.

Author opines that MIDC has to cooperate and coordinate with the efforts of Industrial associations so that MIDC can concentrate on more productive decisions in future.

6. Opinion about implementation of suggestions provided by association

Sample respondents replied that Industrialists do not quickly implement the suggestions provided by associations. To solve this issue, sample respondents opined that there should be surprise inspection by MIDC along with Industrial Associations representatives to industrial units and need to check that they are fulfilling all the suggested measures or not. If not, then penalty must be levied on such units.

7. Opinion about Creation of Awareness Campaign for Registering Maximum Number of industrial units in the association

Out of 6 respondents, 4 respondents told that Industrial Associations do not create awareness about registration of new industrial units. However, Industrial Associations provides solid platform to solve issues of industrial units. Association helps to reduce hurdles relating to infrastructure facilities that industries are facing at the inception stage. This was possible only by effective representation of the issues of the industries and creation of proactive forum for members to redress their grievances with various government, semi-government and local bodies.

Thus, it indicates that all Industries in MIDC area need to compulsory register in nearby local Industrial Association. It helps them to solve their problems quickly and at less cost.

8. Association Helps industrial units to Solve Complaints with MIDC authorities

5 respondents told that their association help industrial units in resolving their complaints with MIDC Authorities.

9. Conduction of Meeting by Association with MIDC to Solve Various Problems of industrial units.

All respondents opined that their association do not conduct meetings at regular intervals with MIDC. However, association raise issue of industrial units. Author opines that MIDC officials must conduct meetings with association at regular intervals. This move will help MIDC to understand expectations of industrialists for smooth functioning. Accordingly, they can take action to solve various difficulties of industrial units.

10. Suggestions given by Associations to MIDC

- MIDC must increase coordination and cooperation with association to solve various issues of industrial units.
- MIDC must conduct meeting with associations as per their demand or at regular intervals. This move will help to progress MIDC at faster level.

5.3.3 Analysis and Interpretation of interviews conducted of employees of Industrial Units:

Author has conducted discussion with 280 employees of industrial units established in Thane MIDC areas. The analysis and interpretation of these interviews are presented below.

1. Working Conditions of industrial Units

In MIDC area various types of hazardous and risky industrial units are established. Therefore, to understand the working conditions of their industrial unit, whether satisfactory or risky, author asked this question to employees. Below table shows the satisfaction of employees towards working condition of industrial unit.

Table No.51: Response about Working Condition of Industries

Working Condition	Responses
Satisfactory	210 (75%)
Unsatisfactory	70 (25%)
Total	280 (100%)

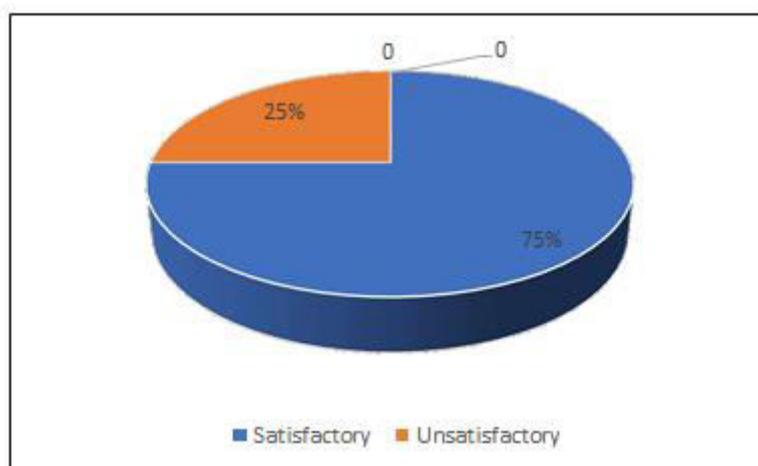
**Figure No.31:** Response about Working Condition of Industries

Table No.51 shows that still 210 (75%) sample respondent employees expressed satisfaction towards working condition in the industry. Whereas, 70 (25%) employees are not satisfied with

the working conditions of industrial unit. It indicates that still there are industries that have not taken care of safety measures in their industries.

Considering this fact into account, author feels that there is a need that MIDC must conduct regular inspection of industrial units and investigate the causes of unsatisfactory working condition and provide suggestions to Industrialist for improvement.

2. Satisfaction towards Various facilities Such as water Facility, Transport Facility and Safety and Security Facility in industrial units

MIDC areas consist of industries as well as Residential zone. MIDC have to take care of water facility, transport facility and safety and security facility etc. The table given below indicates the response of sample respondents about various facilities provided in MIDC area.

Table No.52: Feedback about Infrastructure Facilities

Facility	Satisfactory	Unsatisfactory	Total
1. Water Facility	110(39%)	170 (61%)	280(100%)
2. Transport Facility	70(25%)	210 (75%)	280(100%)
3. Safety and Security Facility	112(40%)	168(60%)	280(100%)

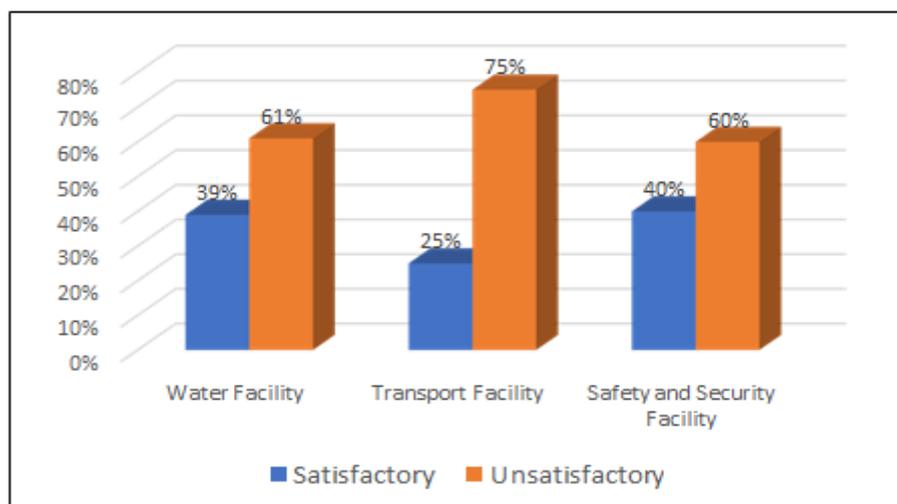


Figure No.32: Feedback about Infrastructure Facilities

The above table indicates that 110(39%) employees are satisfied with the water facility in industrial unit; whereas 170 (61%) sample respondent employees provided dissatisfaction towards water availability in the industry. It indicates that industrial units are facing shortage of water.

210 (75%) employees are dissatisfied with the transport facility. only 70 (25%) employees are satisfied. It indicates that majority of employees are facing the problem of transport. Industrial unit as well MIDC has not made any type of transport arrangement. Most of the employees are using their own vehicle for transport.

Thus, there is a need that MIDC and Industrial Units jointly with the cooperation of Transportation Authorities have to take steps to provide better transportation facilities for employees of Industrial Units.

Majority 68 (60%) employees are dissatisfied with safety and security facility available in Industrial Units; whereas 112 (40%) employees said that industrial units have taken overall precautions relating to safety and security.

3. Opinion of Employees Towards Infrastructural Facility Provided By MIDC

The below table depicts the response of sample respondents about infrastructural facility provided by MIDC.

Table No.53: Feedback about Infrastructural Facility of MIDC

Facility	Satisfactory	Unsatisfactory	Total
1.Waste Management System	56 (20%)	224 (80%)	280(100%)
2.Common Effluent Treatment Plant	70 (25%)	210 (75%)	280(100%)
3.Sewage Treatment Facility	98 (35%)	182 (65%)	280(100%)
4.Pollution Control Measures	112 (40%)	168 (60%)	280(100%)

Table No.53 depicts feedback about various Infrastructural facilities provided by MIDC to industrial units. 224(80%) and 210 (75%) sample employees are dissatisfied with facility of Waste Management System and Common Effluent Treatment Plant facility of MIDC respectively. It indicates that waste management system and common effluent treatment plants are not working efficiently. Both MIDC and industrial units had not taken care about the same.

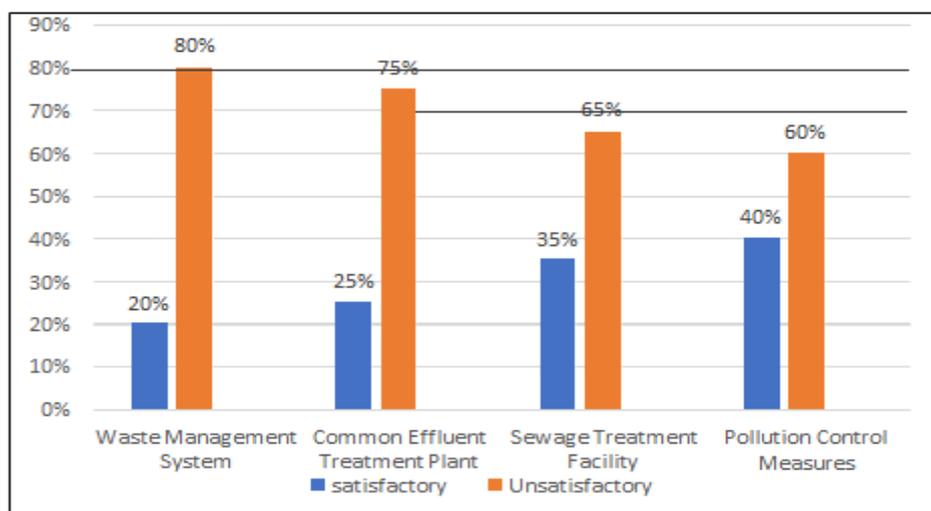


Figure No.33: Feedback about Infrastructural Facility of MIDC

Whereas, 60% to 65% employees have shown their dissatisfaction for Pollution Control Measures and Sewage Treatment Facility provided by MIDC respectively. This indicates that MIDC needs to improve the efficiency of these facilities too.

4. Support of MIDC in Resolving Employees' Complaints with Industrial Units

200 (71%) sample respondent employees said that MIDC do not intervene or support in resolving the complaints of employees with Industrialists. It indicates that MIDC is established for provision of infrastructural facilities only.

5. Financial or Non-Financial Support of MIDC in Case of Accident

All employees told that MIDC do not provides any type of financial or non -financial support to injured or their family members in case of any accidents in industrial units.

Author felt that there is a need that MIDC with the support industrialists have to start certain schemes for helping employees or their family members at the time of any accident in industrial units. Both are responsible for provision of infrastructural facilities. In addition, industrial units in MIDC areas are using explosive chemicals which may cause accidents frequently. This issue needs to be addressed on priority basis.

6. Other Problems Faced by Employees are as under

- A. Low wages, casual labour policy, poor working conditions and exploitation of labour leads to loss of interest in the work.
- B. Unequal treatment to male and female employees by industrialists.
- C. Training and Development Programmes and counselling sessions are not conducted periodically to increase the productivity of industrial workers.
- D. Female employees in Thane MIDC areas are not safe at the time of journey to and from home. Even at the evening also street lights in MIDC areas are not functioning and there is no such availability of public transport. There are many industries where the female employees are required to walk for two to three kilometres for their industrial unit.

Author feels that Industrialists have to solve these above-mentioned problems of employees of Industrial Units in collaboration with MIDC and other Associations.

7. Opinion of Industrial Employees towards Regular Inspection of Industrial Units By MIDC

It is found that out of the total sample employees contacted, 175 employees told that MIDC do not conduct inspection of industrial units at all. Hence, Industrialists also flout certain norms of MIDC Act and exploits employees.

Author opines that MIDC officials should conduct regular inspection of industrial units and check whether industrial unit are using MIDC's various services at adequate level at one side and to keep indirect control and supervision on Industrialists as far as fulfilment of norms given under MIDC Act. It will certainly help MIDC authorities to reduce increasing problems of industries.

8. Suggestions to MIDC

- A. Provide transportation facility in MIDC areas.
- B. MIDC should force industrialists to provide proper working condition at each industrial unit.
- C. Compulsory use of safety and security instruments by employees of Industrial Units
- D. Industrial units must organize training programmes at regular intervals.
- E. Help in resolving complaints of employees on urgent basis.

5.3.4 Analysis and Interpretation of interviews conducted of nearby residents of MIDC Area:

Author have conducted discussion with 250 residents of MIDC Areas. Interpretation of interviews held with them is presented below.

1. Employment Opportunities Received to Land Affected People

Government of Maharashtra acquires land from land owners. Sometime, government may give assurance of employment to children of landholders. To understand the said picture whether MIDC provides employment opportunities to land affected people or not. The following table shows the response of sample respondents about employment opportunities to land affected people.

Table No.54 : Response about Employment to Land affected people by MIDC

Particulars	Response
Yes	50 (20%)

No	200 (80%)
Total	250 (100%)

Table No.54 indicates that 200 (80%) respondents nearby residents said that MIDC has not offered employment to land affected people. Whereas 50 (20%) sample residents said that MIDC offered employment to land affected people.

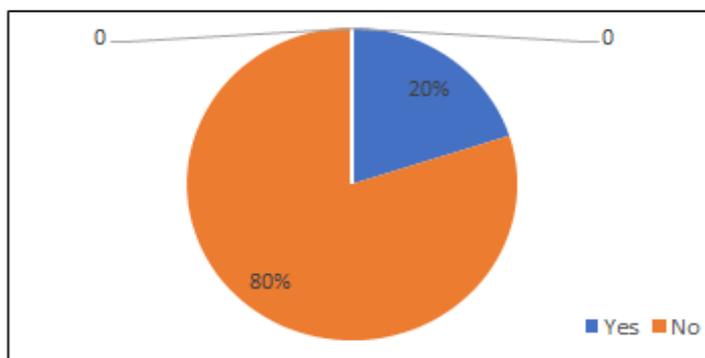


Figure No.34: Response about Employment to Land affected people by MIDC

Author felt that MIDC must provide employment opportunities to Land affected people in the existing Industrial Units or by creating alternative occupational opportunities.

2. Effect of Pollution of industrial Units on the Health of Residents

Industrial units in MIDC areas manufactures different types of products by using different types of chemicals which create both air and water pollution and affects the health of residents at larger scale. The table given below indicates response of sample respondents about health issues due to pollution in MIDC.

Table No.55 : Pollution affecting Health of Residents

Particulars	Response
Yes	225 (90%)
No	25 (10%)
Total	250 (100%)

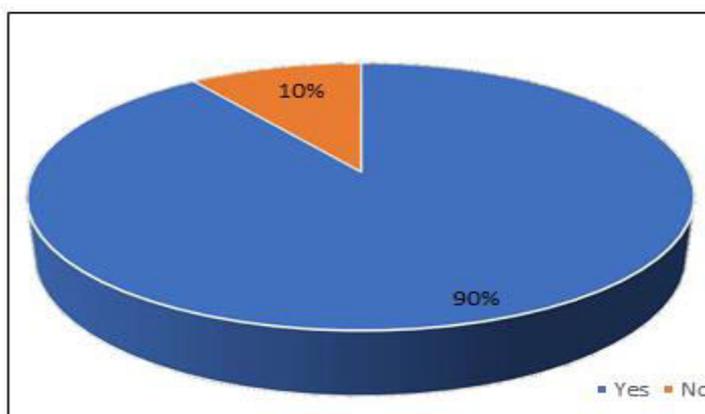


Figure No.35: Response about Health issues due to pollution in MIDC

Table No.55 shows that out of total respondents, majority i.e. 225 (90%) respondents said that due to air and water pollution created by Industrial Units in MIDC area, large number of residents are suffering from headache, nausea, malaria, dengue, pneumonia, typhoid, communicable diseases and skin diseases, etc. It indicates that MIDC in association with MPCB have to take

concrete steps on urgent basis to reduce the intensity of pollution in MIDC area. They have to take strict action or charge heavy penalty on polluting units.

3. Losses Occurred Due to Accidents in Industrial Units during the Last Two Years:

Sample residents opined that there are several incidents of fire, chemical leakages and explosions occurred in the last few years. Amongst them, one of the incident occurred in Dombivli MIDC Phase (II), in which boiler was exploded in Probace Company on 26th May 2016, who was manufacturing and supplying chemicals. In this explosion more than 10 people died and more than 120 people got injured. In addition, 1500 people and 22 industries within 2 km radius of the blast site reported damaged on large scale. Author feels that employees should be given proper training so that this type of accidents should not occur in future. Also, MIDC officials must inspect the safety and security measures implemented by the industrial units at regular intervals.

4. Opinion About Traffic Congestion in MIDC Areas

125(50%) of residents told that MIDC do not take any concrete steps against increasing traffic congestion problem in MIDC area. Bad Conditions of roads and use of footpaths by shopkeepers are the major obstacles for traffic Congestion. Thus, there is urgent need that MIDC with Transportation Authorities to jointly find out remedies for traffic congestion problem in MIDC Area.

5. Opinion about Water Pollution Problem

Out of total respondents, 200(80%) respondents said that MIDC has not taken any steps to reduce water pollution. Pollution of river, vanishing of Green Buffer Zone, Open Other water bodies, mosquitoes and death of aquatic animals are the major factors affecting due to increase in water pollution. Thus, there is a need to find concrete solution by MIDC and MPCB.

6. Opinion about encroachment of illegal hawkers in MIDC areas:

225 (90%) residents complained about encroachment of illegal hawkers in MIDC areas. However, MIDC do not take any steps on encroachment of illegal hawkers, illegal posters, hoardings and markets in MIDC Area.

Author strongly felt that MIDC area is exclusively reserved for industrial units so MIDC have to take strict action against illegal hawkers in MIDC area and stop such illegal activity with immediate effect.

7. Provision about registering and resolving complaints of nearby residents:

Out of total respondents, 150 (60%) respondents complained that MIDC do not provide facility of registering and resolving complaints. It indicates that MIDC should have to start Facilitation Centres at MIDC offices so that residents can lodge their complaints and gets faster resolution for their grievances and complaints.

8. Support of MIDC to Residents in Tree Plantation Movement to reduce pollution:

Out of total respondents, 200 (80%) of residents ask that MIDC do not initiate Tree plantation Movement or any other measures jointly with cooperative societies to reduce pollution.

Author is of the opinion that MIDC must motivate such kind of activity jointly with the support of Residents so that increasing pollution problem can be resolved to a major extent.

9. Suggestions provided by Residents to MIDC Authorities

- i. MIDC should take maximum efforts in reducing pollution of MIDC area
- ii. MIDC must provide internship opportunities to College Students in industrial units of MIDC area.
- iii. It must solve problem of traffic congestions

- iv. MIDC must organise Tree plantation drives, cleanliness programme in association with cooperative societies in MIDC area.
- v. MIDC must find immediate resolution to the complaints of industrial units as well as issues of nearby residents in MIDC area.

5.4 Conclusion

This basically is a survey of all those concerned with development and growth of industrialization in Maharashtra in general and MIDC areas in particular. Survey is both representative of industrial units and MIDC with extensive nature. It examines financial and non-financial aspects relating to infrastructural services in totality. On the basis of the above analysis, it can be concluded that MIDC's are following difficulties and delay in delivery of services. There does not found effective mechanism in MIDC. There found lack of planning in all the MIDC offices. All the officials are expecting the government should play a key role in the development of the MIDC. Thus, to conclude that the status of MIDC reflects both a threat and an opportunity. It is a threat, because MIDC have failed to a large extent, in delivering efficient services, and, as an opportunity because the industrial units expect more and more services from the MIDC which will offer enough opportunities, that could be effectively utilized by MIDC to prove their case for successful continuation.

It has been revealed that mis-utilisation and mis-maintenance in the form of diversion of infrastructural services has become a common problem. Among the main reasons for diversion, poor economic condition of MIDC, lack of proper supervision, lack of utilization of modern equipments for services, difficult and time-consuming sanctioning procedure, role of local politics, communication gap among industrial units, officials of MIDC, various other important institutions. In short major revitalization of MIDC is the need of the hour. Thus, it is inferred that the success of MIDC is dependent upon better financial position and efficient management to bring them out of the general malaise of inefficiency and lethargy.

CHAPTER - 6

**FINDINGS, CONCLUSIONS AND
SUGGESTIONS**

6.0 INTRODUCTION

This chapter attempts to identify the major issues in the management and functioning of MIDC and offer suitable suggestions and workable solutions. The findings are based on the study of available literature, analysis of the secondary data and observations made during the field visits and interactions held with MIDC officials, industrialists, members of associations, nearby residents, employees of industrial units, etc. Author found that all the issues related to various aspects of MIDC such as infrastructural facilities provided by MIDC, growth of MIDC, financial condition, allotment of plots, highlighted issues of chemical, pharmaceutical, textile, engineering industries, etc. Thus, study is based on various services and facilities provided by MIDC.

6.1 FINDINGS

6.1.1 FINDINGS FROM MIDC OFFICIALS

- 1) It is found that only 12(40%) respondents expressed complete satisfaction towards the work and facility of construction of **safe roads and street lights**. Whereas, 15(50%) MIDC official respondents are not at all satisfied about the constructed roads as well as street lighting services. It indicates that construction of road work in the MIDC area is not up to the mark. Due to low quality of construction of roads, use of roads by heavy vehicles and heavy rain roads require repairing every year. Author observed that most of the roads in MIDC areas are in bad condition, heavy loaded trucks are standing at the road side which are creating traffic problems. There is no regular inspection of roads. Roads are maintained or repaired after the protest from nearby residents or industrialists. Thus, there is irregular maintenance of roads. Street lights are also checked and changed once or twice a year. There is no regular maintenance of street lights.
- 2) 18(60%) sample MIDC officials are not satisfied towards provision of **water facility**. Author observed that only few MIDC areas it provides adequate water supply. In many MIDC areas shortage of water is found in summer season as required by industries. Industrial units receive water once in five days of a week. It is also found that MIDC provides water supply but due to uncontrollable situation, the water supply becomes irregular. Water treatment plant is not working at many places which results in impure water supply. There is theft of water by nearby hotels and garage industrialists.
- 3) 60 percent MIDC officials are not satisfied towards the facility and provision of **Common Facility Centres such as Canteen, Bank, Post Office, Police Station, Telecom Office etc.** According to them, MIDC has provided space to all these centres but there is an issue of hygiene in canteen facility in the MIDC areas. There is an existence of Police Stations in the MIDC areas but it is found that there are loopholes with respect to safety measures of people and industrial units.
- 4) It is found that 18(60%) respondents have given negative opinion on provision of adequate **effluent collection system**. It indicates that MIDC has provided effluent collection system at MIDC areas but the existing system is not adequate. Author observed that many effluent collection systems are not maintained properly. Systems are not functioning and treating water with all precautions as well as in many places water is overflowing in these collection systems. It is also found that MIDC did not have adequate capacity effluent collection system. Hence effluent is released without treatment into other water bodies or rivers. There is no system of regular check-up of quality of effluents from MIDC official side.
- 5) 16(53%) respondent MIDC officials have expressed unfavourable opinion about proper and **adequate sewage line system**. Only 20 per cent respondent expressed partial satisfaction. Author observed that MIDC has constructed sewage line system at most of the areas but MIDC is not maintaining and cleaning it regularly. Most of sewage lines are in blocked

position. Even there found that there is open sewage line at many places of MIDC which leads to pollution. It also affects the health of residents and employees of industries. MIDC maintains it but not at regular intervals.

- 6) It is found that 24 (80%) respondents have given negative response for **Sewage Treatment Plant** facility provided by MIDC. Author observed that these sewage treatment plants are not maintained regularly. Machineries on the plants are not functioning. Due to this, water goes to river or other water bodies without treatment. It results in bad impact on the environment and nearby residents of MIDC areas. There is no particular adequate regular manpower (employees) on these plants.

Thus, untreated water is poured into river by industries, the water of rivers and other water bodies becomes chemical based which causes harm to water creatures and those who drink water of the river. Thus, water pollution is one of the highlighted issue which has been arisen due to MIDC industries.

There are very less number of sewage treatment plants available in MIDC areas. Thus, MIDC need the cooperation of Municipal Corporation. But it is observed that these corporations are not cooperating for MIDC sewage treatment plants at MIDC areas. On the other side, it is also observed that huge expenditure is required to construct as well as maintain the sewage treatment plant.

- 7) 40 percent officials are of the opinion that MIDC provides adequate **electricity and power** to MIDC units; whereas same number of respondents expressed negativity about provision of adequate electricity and power to MIDC units. There is always issue of continuous power supply from MSEB side. This affect is seen many times on the production of industries. This problem arises generally in rainy and summer season. Thus, power cut or interrupted power supply to industrial units is the major issue of MIDC areas. In addition, rates of electricity/power to industries are also on higher side. MIDC officials are of the opinion that even after many complaints to MSEB, they are not cooperating to MIDC.

MIDC official opined that due to shortage of generation of power at the power stations, there is a problem of regular power supply by MSEB. Thus, there is mismanagement of MSEB relating to power generation and power distribution which causes the interruption in power supply to MIDC areas.

- 8) 18 (60%) respondents opined that MIDC do not have active **fire station** in nearby areas of industrial units. Author observed that fire stations are there in every MIDC areas but there is no adequate manpower as well as buses at the fire station units. It means that the existing fire station system in the MIDC areas are not in a position to control fire mishap at the earliest. They take the help of other stations to control fire. Fire station officials are not conducting the work of fire audit on regular basis. At the starting of the industry, every industry gets the audit done from these officials, but thereafter there no audit of these industrial units by fire station officials *su-motto*. It results in to risky condition for employees working in these risky units as well as chances of accidents and loss suffered by it will be maximum to the nearby residents.

Thus, they have to take the help of other fire stations staff and their equipments. However, due to less number of staff and equipments and before reaching the help of outside fire stations, a huge loss is incurred to industries. Majority of industries are not doing fire audit regularly.

- 9) It is found that only 20% sample respondents are completely satisfied with implementation of **Tree Plantation Scheme** by MIDC which shows that MIDC is not implementing tree plantation drive in the MIDC areas regularly. Author observed that there are very less trees

in the MIDC areas. Officials said that there is not provision in MIDC Act regarding tree plantation drive in MIDC areas. However, according to them, there is lack of funds and no planning from MIDC level to plant trees.

- 10) Out of total 30 respondents, 24 (80%) respondents are of the opinion that they are not satisfied with the **recreational and health facilities at the MIDC area**. MIDC has not incurred expenditure on recreational and health facility at most of the MIDC areas.
- 11) It is found from 15(50%) officials of MIDC that the **process of development and allotment of MIDC plots to Industrial Units** is slow; 12 (40%) MIDC officials have responded that MIDC takes rapid action once the state government hands over the land to MIDC. Thus, it indicates that there is delay in the process of handing over of plots from the state government to MIDC, development of land by MIDC as well as provision of required facilities and services and finally allotment of developed plot to ultimate entrepreneur.

In addition, entrepreneur has to go through lengthy documentary procedure even though government has announced the single window system of clearance procedure which also includes the permission of various agencies like MPCB, fire station, local bodies, etc. who are involved in the process of development and allotment.

- 12) 30(100%) sample MIDC Officials opined that MIDC is not generating **sufficient revenue to compensate** increasing revenue expenses. It means that MIDC has to either increase the rates of fees or depend on state government for contribution towards deficit.
- 13) It is found from 27(90%) MIDC officials that, preparation of budget for each activity is mandatory but there is no system to propose expenditure for new innovative activities and services. It means that preparation of budget is just a formality.
- 14) It is found that on an average 10% industrial units have **closed down their business without vacating the plot** to MIDC. MIDC officials opined that there are industries in every MIDC areas which are not functioning due to the various reasons such as Government has banned production due to creation of heavy pollution, chemical based production industry, financial crunch, issue of marketability of their products, mishaps occurred in the industry, sickness, etc. However, these industrialists have kept their allotted plots and industry ideal and not returned to MIDC. Industrialists who have closed business have not even paid MIDC dues. MIDC issues continuous notices to such Industrial Units. Even after repetitive notices they do not vacate their plots. Thus, it indicates that there is no control or supervision of MIDC officials on such types of closed business.
- 15) Out of total 30(100%) respondents, majority i.e. 24(80%) officials are of the opinion that the **funds available with MIDC for developmental activities are insufficient**. Thus, it indicates that MIDC has insufficient funds to develop MIDC areas. Hence author observed that MIDC areas has poor quality of facilities such as sewage treatment plant, less number of employees to maintain, poor quality of roads, inadequate water supply etc.
- 16) 21(70%) officials opined that with the increasing number of Industrial Units in MIDC area, there are **shortage of employees**. No permission to fill employees from the board of directors of MIDC, time consuming procedural requirements for appointment of employees, insufficient funds etc. are the factors for inadequate number of employees in MIDC offices.
- 17) It is found from 18(60%) MIDC officials that there is **delay in sanctioning procedure from government officials** and ministers and other political interference; whereas 12(40%) officials were of the opinion that they are getting permissions rapidly. However, author observed that there is huge delay in the process of acquisition of land as land holders goes to court of law for their demands, again MIDC officials require time to develop plot to

- make arrangement of water, power, various safety plans, roads etc. In addition, there is also huge political interruption from local level to state level politicians.
- 18) 21 (70%) sample MIDC officials said that MSFC is not supporting for adequate finance that is required for industrial units. It means that industries are facing the problem to raise finance.
 - 19) 15(50%) respondents have opined that MPCB supports MIDC for Pollution Control; same number of MIDC officials said that MPCB is not working efficiently to control on pollution. Author observed that there is shortage of employees at MPCB. There is no planning or management relating to regular visit to industrial units, MIDC areas, etc for checking pollution. There is no coordination of MIDC and MPCB.
 - 20) 18(60%) of respondents are of the opinion that MIDC has contributed in the growth of industrial development in Maharashtra but failed for balanced growth all over Maharashtra. It means that, MIDC has established at specific places only especially near big towns and cities. It has failed to develop its areas at rural areas of Maharashtra where there is a need of employment.
 - 21) Only 9 (30%) respondents feels that MIDC takes **efforts to encourage entrepreneurs to establish their business** in the MIDC areas; on the other hand, 21(70%) respondents opined that MIDC do not take any steps of encouragement to public at large or especially new entrepreneurs in setting up industries in MIDC areas. Author did not find any initiative of MIDC to attract entrepreneurs. They do not conduct any type of workshop or seminar as well as no provision of internship opportunities to college students. Author observed that there is shortage of funds, shortage of manpower at the MIDC which results in to vacant plots.
 - 22) All the sample respondents said that MIDC has not provided or constructed residential building for employees of Industrial Units as there is no provision in the MIDC Act and MIDC don't have sufficient finance to construct such buildings. It means that employees of industrial units are staying outside the MIDC area after their duty hours. It is very hazardous as far as safety, security and overall control on various facilities and services provided by MIDC is concerned.
 - 23) **Regular maintenance of facility:** 14(47%) officials opined that MIDC maintains infrastructure facilities regularly; 6(20%) said that MIDC is not maintaining at all most of these services. Whereas 10(33%) officials opined that MIDC looks the matter only when serious issues or problems are raised and such issue is raised by industrialists or residents. Thus, it indicates that majority of MIDC areas are not maintained properly. Author observed that due to corruption in tenders and quotations, political interference and shortage of regular MIDC staff, etc. regular maintenance of infrastructural facility is becoming difficult and challenging.
 - 24) MIDC areas do not have separate **facilitation centre**. Industrialists or nearby residents have to give complaints to MIDC office.
 - 25) All 30(100%) sample respondents opined that that MIDC gives **advertisement in Leading Newspapers** regarding its availability of plots for industries. However, MIDC must use different initiatives such as conduction of workshops, seminars for new entrepreneurs by giving advertisement in television, radio and other social media too.
 - 26) It is found that Chemical industries are not following safety norms regularly. In fact, they side line / avoid such safety and precautionary issues, the result of which converts in mishap or big accident. Secondly, these chemical industries are creating heavy water and air

pollution which affect the health of employees, nearby residents.

- 27) It is found that Engineering industries are having two important issues. Firstly, lack of working capital and secondly, frequent breakdown of plant and machinery. Powershortage is also another issue of these industries. Thus, these industries require huge finance for its plant and machinery and for payment to costly raw materials as well as payment to large number of employees.
- 28) It is found that Pharmaceutical industries major issue is lack of training and development facility at the industry which impact on marketability of their products. Secondly, high employee turnover is found. Skilled employees do not stay in the industry for long time on the salary package offered by these pharmaceutical industries. Employee of this sector also looks for better salarypackage and other perquisites.
- 29) It is found that textile industries in MIDC areas are facing the problem of shortage of raw materials. Raw material is brought from far distance. Power shortage is also another issue of these industries.

6.1.2 FINDINGS FROM INDUSTRIALISTS

- 1) **Perception of Industrialists about land acquisition & allotment:** 249 (89%) sample respondents opined that cost of land leased by MIDC is less as compared to other areas land. Author observed these respondents had leased land at SEZ areasof the MIDC. Whereas 31 (11%) respondents had purchased land higher rate from MIDC as it comes outside the SEZ areas.

- 2) **Perception of industrialists towards Power Supply facility**

274 (98%) respondents did not receive regular power supply. Thus, it shows that industrial units are facing the problem of shortage of power supply. Author observed that shortage of power supply especially in rainy and summer season affects production of most of the industries which result in loss to the industries. As on the date most of the production is carried on machineries. Due to shortage of power supply production gets stuck and employees could not do anything in such situation. However, industrialists have to pay salary to employees.

165 (59%) respondents opined that there is a problem of power theft in MIDC areas. It has been increasing day by day. It indicates that there is no strong control and checking of MSEB officials. Such cost of theft is indirectly borne by existing industries i.e. those who pay electricity bill regularly.

249 (89%) respondents said that their industry suffered loss due to shortage of powersupply. Thus, during the interruption of power supply, all the activities in the industry stops which result in no production, labour remain idle. The ultimate result of it is the loss to the industry.

- 3) **Perception of Respondents towards Water Supply facility**

169 (60%) sample industrial units get adequate water supply; whereas 111(40%) receives inadequate water supply. Author found that there is shortage of water supply at particular MIDC areas.

190 (68%) industrialists opined that supplied water is not pure. Industries receive untreated water directly i.e. with inappropriate treatment. Author found that water treatment plants are not functioning. There is no maintenance of various machineries used in these plants.

255 (91%) respondents opined that MIDC does not take quick action against water pollution complaints done by industrialists or nearby residents. It indicates that there is no control and inspection of water pollution from MIDC side.

It is also found from 252 (90%) industrialists that in case of shortage of water MIDC do not have any alternate source of water; whereas 28 (10) industrialists opined that MIDC makes alternative arrangement in case of shortage of water.

4) Perception of Respondents towards Fire Prevention Measures

76 (27%) sample industrialists are of the opinion that MIDC has satisfactory fire protection measures to safe industrial units; whereas, 204 (73%) industrialists opined that the existing fire protection measures to industrial unit is inadequate. It indicates that there are lacunas in fire prevention and protection measures at fire stations.

168 (60%) industrialists said that MIDC conducts inspection for fire safety frequently; whereas 112 (40%) said that there is no inspection of fire safety frequently. According to them fire station inspected their industry at the initial stage of industry. Thereafter in the long run industry has made many changes in their plants but there is not fire audit or inspection from MIDC or fire station side.

255 (91%) industrialists opined that in case of fire in the industry, MIDC provides quick help. Author observed that fire station of the particular MIDC area calls for help to local municipal corporation's fire station or other MIDC areas fire station. However, it takes delay to control fire. There is less equipment i.e., fire bus, staff etc.

118 (42%) respondents said that fire station is very far from their industry. This is very dangerous at the time of crisis.

5) Perception of Respondents towards Safety and Security Measures

272 (97%) Industrialist opined that MIDC does not create or take any effort towards environmental education among entrepreneurs. It indicates that MIDC is not cautious about environmental damages.

176 (63%) industrialists are of the opinion that there is not adequate management and construction of safe roads for transportation and travelling of people in MIDC area. Thus, roads in MIDC areas are not safe as there found potholes on the roads. On the other side 104 (37%) sample industrialists opined that the roads in their areas are safe for transportation.

Majority 154 (55%) industrialists are not satisfied with Common Effluent treatment facility provided by MIDC. Whereas 126 (45%) said that Common effluent treatment plants are working effectively. Thus, it indicates that common effluent treatment facility is not working at all the MIDC areas. Polluted water goes to river or other water bodies without treating effluents of industries.

6) Perception of respondents towards Waste Disposal Management

244 (87%) respondents said that there is no adequate control of MIDC on waste disposal management of industries. According to them, it is the responsibility of MIDC to control waste disposal of industries. But due to less number of employees in the MIDC, they could not control completely. MIDC takes action only when there is any complaint from industrial units or residents.

252 (90%) industrial representatives expressed that they are not satisfied with drainage facility provided by MIDC. According to them, MIDC has constructed drainage lines long years back but MIDC did not maintain it regularly, the result of which it has blocked at many places.

241 (86%) representatives of sample industrial units said that there is no control on liquid waste management by MIDC. However, industrial units are taking care of liquid waste management.

204 (73%) sample respondents opined that MIDC does not maintain waste disposal system on regular basis, but it takes action when industrial units make complaint about it. On the same line, 207 (74%) industrialists opined that there is no such facility at the MIDC to control or conduct environmental impact assessment. Generally, MPCB conducts environmental impact assessment for reducing hazardous waste.

7) **Consultancy**

162 (58%) respondents said that MIDC provides consultancy at the time of inquiry. Whereas 118 (42%) respondents expressed there is no such system of counselling or consultancy at the MIDC office. According to them, an industrial unit has to take follow up for getting facilities from MIDC.

According to 168 (60%) sample respondents, MIDC has facilitation centre, it records issues relating to various services which MIDC has to provide, but, officials of MIDC are not taking prompt action on the various issues. They take time for sanctioning of expenditure from the top authority. Thus, according to them, issues or problems are not solved immediately.

8) **Perception about adequate number of employees in MIDC**

198 (71%) of respondents opined that MIDC do not have adequate number of employees. According to them industrial units do not get quick redressal of complaints by MIDC, it delays in repairs or maintenance of infrastructural facilities and immediate help is not rendered at the time of emergency.

9) **Coordination of MIDC with various bodies/institutions**

Out of total 280 respondents, 168 (60%) respondents opined that MSFC is not providing adequate finance to industrial units. For sanctioning finance, it requires list of documents which at times is not possible to industrial units to submit to MSFC.

196 (70%) respondents are not satisfied with the regular power supply by MSEDCL. According to them, there should be adequate coordination between MIDC and MSEDCL. State government should coordinate with both the organisation for provision of smooth and regular power supply.

112 (40%) respondents are of opinion that MPCB supports MIDC for pollution Control; whereas 168 (60%) respondents opined that there is no coordination between MPCB and MIDC. Both are functioning separately with their own rules and regulations. 168 (60%) respondents are satisfied over the coordination of fire station services and MIDC as industrial units receives help from fire station.

10) **Balanced industrial development in Maharashtra**

Out of the total respondents, 198 (71%) respondents opined that MIDC is not spread all over Maharashtra equally. Hence, we cannot say that MIDC is contributing towards balanced regional development in Maharashtra. In fact, it is spread or expanded near big cities only.

11) **Encouragement by MIDC in setting up industries**

Only 84 (30%) respondents said that MIDC takes efforts to encourage entrepreneurs; whereas majority 196 (70%) respondents opined that MIDC does not take any steps to encourage entrepreneurs in setting up industries in MIDC areas. According to them there is shortage of funds and manpower at the MIDC, hence it becomes difficult for MIDC authorities to organize encouragement programmes such as workshop or seminars.

12) Housing building for the employees of Industrial Units by MIDC

All respondents are of opinion that MIDC should construct housing building for employees of Industrial Units in MIDC area as it has sufficient land to construct. Respondents told that MIDC has constructed housing building to their employees and not for employees of industrial units.

6.1.3 FINDINGS FROM OFFICIALS OF MAHARASHTRA POLLUTION CONTROL BOARD

Due to interest involved of different groups of people, MPCB does not take strict action against them. Author observed that level of pollution in MIDC area has increased at a rapid pace which has impacted on the health of employees and nearby residents as well as other natural resources.

6.1.4 FINDINGS FROM INDUSTRIAL ASSOCIATION

Out of 6 respondents, 4 respondents said that Industrial Associations provides solid platform to solve issues of industrial units. Association helps to reduce hurdles relating to infrastructure facilities that industries are facing at the inception stage. This was possible only by effective representation of the issues of the industries and creation of proactive forum for members to redress their grievances with various government, semi-government and local bodies.

6.1.5 FINDINGS FROM EMPLOYEES OF INDUSTRIAL UNITS

1. **Working conditions of industrial units:** 210 (75%) sample respondent employees expressed satisfaction towards working condition in the industry. Whereas, 70 (25%) employees are not satisfied with the working conditions of industrial unit.
2. 110(39%) employees are satisfied with the water facility in industrial unit; whereas 170 (61%) sample respondent employees provided dissatisfaction towards water availability in the industry. It indicates that industrial units are facing shortage of water.
3. 210 (75%) employees are dissatisfied with the transport facility. only 70 (25%) employees are satisfied. It indicates that majority of employees are facing the problem of transport. Industrial unit as well MIDC has not made any type of transport arrangement. Most of the employees are using their own vehicle for transport.
4. Majority 68 (60%) employees are dissatisfied with safety and security facility available in industrial units; whereas 112 (40%) employees said that industrial units have taken overall precautions relating to safety and security.
5. **Opinion of Employees towards Infrastructural Facility provided by MIDC:** 224(80%) and 210 (75%) sample employees are dissatisfied with facility of Waste Management System and Common Effluent Treatment Plant facility of MIDC respectively. It indicates that waste management system and common effluent treatment plants are not working efficiently. Both MIDC and industrial units had not taken care about the same.
6. 60% to 65% employees have shown their dissatisfaction for Pollution Control Measures and Sewage Treatment Facility provided by MIDC respectively. This indicates that MIDC needs to improve the efficiency of these facilities too.
7. **Financial or non-financial support of MIDC in case of accident:**
All employees told that MIDC do not provides any type of financial or non -financial support to injured or their family members in case of any accidents in industrial units.

8. Other problems faced by employees are as under:

A.Low wages, casual labour policy, poor working conditions and exploitation of labour leads to loss of interest in the work.

B.Unequal treatment to male and female employees by industrialists.

C.Training and development programmes and counselling sessions are not conducted periodically to increase the productivity of industrial workers.

D.Female employees in Thane MIDC areas are not safe at the time of journey to and from home. Majority of the time, at evenings street lights in MIDC areas are not functioning and there is no such availability of public transport. There are many industries where the female employees are required to walk for two to three kilometres for their industrial unit.

6.1.6 FINDINGS FROM NEARBY RESIDENCE OF MIDC AREAS: Pollution Affecting Health of Residents:

Majority i.e., 225 (90%) respondents said that due to air and water pollution created by industrial units in MIDC area, large number of residents suffer from headache, nausea, malaria, dengue, pneumonia, typhoid, communicable diseases and skin diseases, etc.

200 (80%) respondents opined that MIDC has not taken any steps to reduce water pollution. Pollution of river, vanishing of Green Buffer Zone, Open other water bodies, mosquitoes and death of aquatic animals are the major factors affecting due to increase in water pollution. Thus, there is a need to find concrete solution by MIDC and MPCB. 150 (60%) respondents complained that MIDC do not provide facility of registering and resolving complaints.

6.2 SUGGESTIONS TO MIDC

- 1) **Safe Roads and Street Lights:** It is found that construction of road work in the MIDC area is not up to the mark due to low quality of construction of roads, continuous use of roads by heavy vehicles and heavy rain in the Thane region. Author also observed that most of the roads in MIDC areas are in bad condition, heavy loaded trucks are standing at the road side which are creating traffic problems. Thus, there is a need to take immediate and regular action with respect to construction and repairing work of internal roads of MIDC area. MIDC must assign the work of inspection / audit of internal roads to the MIDC's internal department who is looking after the road construction and repairing work and on the basis of inspection report, MIDC must undertake the work of repairing or construction as the case may be. Especially, it must take utmost care in rainy season and bridge potholes immediately.

MIDC must warn industrial units to park their heavy loaded trucks at their industry parking or the parking areas provided by MIDC. As on the date there is no parking areas provided by MIDC for trucks. However, considering the need of parking, MIDC must provide separate parking space to each and every industry on pay and park basis or monthly rent basis along with complete security. This will help to reduce traffic problem. MIDC must take action against those heavy loaded trucks standing at the road side by way of fine. This action will help to reduce pollution as well as traffic jam problem.

It is found that there is no regular maintenance of street lights. This is very dangerous sign as far as theft and security is concerned. Therefore, there should be regular inspection and checking and repairing work of street lights. Thus, MIDC should take responsibility of quality and safe road facility.

- 2) It is found that there is inadequate **Sewage Treatment Plant facility** in the MIDC areas. The capacity of existing STP plants is inadequate considering the need of industrial units. Therefore, there is urgent need to increase capacity of Sewage Treatment Plants. This will

help to reduce water pollution in the MIDC areas. MIDC must inspect industrial units regularly and check whether industrial units are providing primary treatment to effluent. MIDC must charge either fine on those units who do not provide primary treatment to their industrial effluent or MIDC must stop provision of water to such units. This has made mandatory as per the Environmental

Protection Act, 1986. Thus, MIDC officials needs to check and maintain its own STP plants regularly and should take stringent action against those industries who creates water pollution. In addition, MIDC needs to take immediate steps for open sewage lines to be covered as well as regular maintenance of sewage line so that health of employees and nearby residents will not get affected. There is a need to look after the effluents of each and every industry so that not a single industry should release its effluent without proper treatment. In no case effluent shall be released into river or other water bodies. If possible, MIDC may conduct environmental education programmes for industrial units, employees for control of water pollution. In addition, in case of pollution, there is an urgent need to take immediate measures by MIDC in collaboration with MPCB authorities.

- 3) **Waste Disposal Management** - Author felt that industrial units should implement various modern waste management techniques such as converting waste into biogas, fertilizers and recycling and reusing waste water after proper treatment. It will help industrial units to decrease the cost of production and thereby increase long term profitability. For this purpose, MIDC must conduct workshop for better waste management for Industrial Units
- 4) **Common Facility Centres such as Canteen, Bank, Post Office, Police Station, Telecom Office etc.** Author is of the opinion that there is an urgent need for increasing supply of all these facilities in the MIDC areas. For this purpose, MIDC should coordinate and take assistance of all the related government officials, private bodies for betterment and increase of all these common facilities. This initiative will help to ensure smooth functioning of industrial units of Thane MIDC.

MIDC must start hygienic canteen facility at each MIDC areas at subsidized rate. This will save time of employees of industrial units to rush to nearby areas for food.

- 5) It is found that only few MIDC areas, MIDC is able to provide adequate **water supply** to industrial units. It indicates that there is shortage of water to industrial units in particular MIDC areas. Considering this fact into account, author strongly felt that water is basic need of most of the industrial units in MIDC areas. Due to inadequate water facility, industrial units could not produce their products. Therefore, there should be separate department named as water supply department in every MIDC areas. The said department must look after day-to-day water requirement of industrial units. In addition, it must look after the theft of water by

Nearby hotels, garages and nearby other projects. MIDC must make appropriate agreements with government water supply department and reserve adequate water in dams or rivers for smooth functioning of industrial units. Thus, there is need to tackle this issue with utmost importance so that these particular MIDC will get a boost to increase number of industries. It is found that this problem is more severe especially in summer season. Therefore, proper planning of water supply should be made so that water should also be available in summer season.

It is found that, generally chemical units need more water. Therefore, there is a need to calculate demand of water by each and every industrial unit in the MIDC areas and accordingly, it must make plan to supply uninterrupted water supply.

There is also urgent need to maintain water pipeline regularly. Author found that there are many small water pipeline, leakages at many places. The maintenance of pipeline will save water from wastage.

It is also found that water treatment plants in MIDC areas are not working at many places, results into impure water supply to industrial units. Therefore, water department of MIDC must inspect Water treatment plants regularly. This action will help industries to receive pure and adequate water.

It is also found that there are outstanding water charges from local authorities like Gram Panchayats and Municipalities etc. It is necessary that MIDC must recover civil water charges strictly from all these bodies. Otherwise, water supply should be discontinued.

Thus, there is a need to develop sound policy for supplying water on continuous basis. Also, MIDC should keep strict supervision and control on theft of water from pipelines and if possible, charge heavy penalty on them.

In addition, MIDC should encourage Rain Water Harvesting Projects among each and every industrial units to avoid the future water complexities. If possible, it may offer extra incentives to those units who are implementing Rain Water Harvesting projects. For this purpose, MIDC officials must provide guidance to industrial units for recycling of waste water and reusing the same for various purposes.

- 6) It is found that industrial units in MIDC areas receive inadequate **power supply**. There is always issue of continuous power supply. This affects production of industries. Author strongly felt that there is urgent need of cooperation and coordination among and between MIDC, MSEB and industrial units. MIDC should consult MSEB to avoid mismanagement of power generation and power distribution system. There is also a problem of power theft in MIDC areas. Therefore, there should be strong control and checking of power supply by MSEB officials and charge heavy penalty as far as power theft is concern. Because if power theft is not controlled then such cost is indirectly borne by existing industries i.e. those who pay electricity bill regularly. Thus, for smooth running of industrial units in MIDC areas, MIDC should take initiative of co-ordination with MSEB / MSEDCL Ltd and find out the causes of shortage of power supply and provide solution to it.

To generate and get adequate power supply, new as well as existing industries in MIDC areas should also be permitted to set up captive power plants. If possible 'Independent Power Producer' for the dedicated provision of power to IT and BT Parks and Special Economic Zones should be promoted so that problem of shortage of power supply will be minimized. In addition, MIDC should make an agreement with other Private sector power supply companies to provide power supply to MIDC's industrial units with due consent of MSEB authorities.

MIDC should in collaboration with State Government start wind power projects, cogeneration power plants, biomass-based power plants, solar power plants and small hydro projects as an alternative for power/electricity.

- 7) It is found that fire stations are there in every MIDC areas but there is no adequate manpower as well as fire buses at the fire station units. Thus, existing fire station system is not in a position to control fire mishaps at the earliest.

Fire station officials should conduct fire audit of each and every industry on regular basis. As on the date, industries doing inspection from fire station officials at the initial stage only. However, there is a need to get the fire audit done by all the industrial units every year or whenever there is expansion of industrial units. Even MIDC has to undertake

inspection of fire safety measures in industrial units at regular interval. MIDC should inspect and advise all the industrial units for fixing fire-fighting installations such as fire alarm system, automatic sprinklers, automatic high-pressure water spray system and carbon dioxide fire extinguishing system. Thus, MIDC authority needs to deal the issue with collaboration with fire station officials. In addition, there is a need to increase staff and required equipments at every fire station. If possible, MIDC may prepare fire safety policy which includes fines and penalties in case of non-fulfilment of safety norms to industrial units which must be followed by all the industries of MIDC areas. This will help to create fire safe environment in industrial areas.

- 8) It is found that industrial units in MIDC areas are not implementing **Tree Plantation programmes** in their areas even though level of pollution is increasing day by day. Thus, considering the ecology and environmental problem, MIDC have to initiate tree plantation schemes in MIDC areas and should maintain or provide water to all planted trees. MIDC can also make it mandatory for each industrial unit to participate in Tree Plantation Scheme. It is the need of the hour to reduce pollution. However, author is of the view that industrialists must be motivated to plant trees in nearby areas. They may be motivated to use CSR fund in tree plantation and drive.
- 9) It is found that there are no **recreational and health facilities** in MIDC areas. On the other side, there is increasing number of incidents of accidents in industrial units. Author also observed there are large numbers of highly risky industrial units situated in MIDC areas. Thus, there is urgent need to increase recreational and health facilities so that it helps in providing help to the injured person at the time of any accident. If possible, MIDC with the support of state government must take measures for increasing recreational and health facilities in MIDC areas.

MIDC should allow medical practitioners to open their clinics or hospitals in MIDC areas at subsidized rate. MIDC may counsel medium and large-scale industries to provide medical facilities to their employees.

- 10) **Process of development and allotment of MIDC plots to Industrial Units.** It is found that process of acquisition of land, development and allotment of plots is very slow. In fact, delay is found in the process of handing over of plots from the State Government to MIDC. Therefore, MIDC should update and reframe Land acquisition policies and should sanction demands of land owners favourably. There is a need of rehabilitation of farmers whose land is acquired by the government. There is a need to provide equal land at other places along with the provision of water, road and other facilities. In addition, at least one member of the family must get job in the industry permanently.

When industries expand its business, there is need of additional space. Thus, considering the genuine need of the space, MIDC must permit additional Floor Space Index (FSI) over and above the basic FSI by charging premium at rates decided by the MIDC with the permission of Government.

It is found that entrepreneur has to go through lengthy documentary procedure even though government has announced the single window system of clearance procedure which also include the permission of various agencies. Thus, considering the existing procedure MIDC must appoint committee to see the documentary procedure of permission and find the solution for the same. This step will help to attract a large number of entrepreneurs in MIDC areas.

11) Sufficient Revenue to Compensate Necessary Expenditure

Author strongly felt that MIDC should generate their own internal sources of revenue instead of depending on state government. This will help MIDC to receive extra revenue and industrial units will get adequate and additional facilities and services. If possible, it may increase the rates of water charges to outside businesses of the MIDC areas. It may increase rates on delayed payment charges and service charges. It should start its own hygienic canteen, hospital as per the demand. In addition, it should propose the Maharashtra Government for new government company in each and every MIDC areas by assuring government that MIDC will look after all the activities of such government company.

MIDC should hire its few infrastructural services to outside parties with lower cost and may collect additional charges from industrialists. MIDC should also examine the possibility of privatization of services like water supply, health services, maintenance of industrial areas etc for generating additional income and better quality of services.

With the permission of State Government and MSEB, it must start its own hydro-electricity and non-conventional energy sources of power generation projects and provide power and electricity to industries in MIDC areas.

- 12) It is found that MIDC has not made any provision or thought relating to education facility. However, if possible, it may take steps to provide existing few vacant plots at subsidized rates to industrialists for opening schools, professional colleges, vocational training centers for imparting different types of skill-based education required for industrial activities. This will help students and local residents to get practical as well as hands-on training knowledge. Author observed that there is no such college which provides practical or hands-on training of such type.

13) Preparation of Budget

Considering the present budget system, it shows very important items of income and expenditure only. It is expected to show the bifurcation of each and every item of income and expenditure in detailed form. The budget should be provided for all the services and infrastructural facilities. Considering the services mentioned in the MIDC act, all the services are essential for the growth and expansion as well as for the industrial growth, hence MIDC must provide budgetary provision to each and every services and infrastructural facilities and services.

- 14) **Closed down without vacating the plot:** It is found that few industries have closed down their businesses in the industrial areas but not vacated their plots. It is due to sickness. Financial crunch i.e. shortage of fund, low quality of production, market issue, competition, banned production due to creation of heavy pollution, mishap occurred in the industry, etc. MIDC must think and propose to State and Central Government regarding financial issues. So that these units will get finance at low rate of interest. In addition, MIDC must support industrial units for marketability of industrial products, especially import and export of product is concerned.

In case, those units who have closed down their business, author is of view that MIDC has to take strict actions against such Industrialists to vacate plots on urgent basis so that these plots can be made available to other Industrialists. For this purpose, there should be separate department at the MIDC which can look after the issue of closure of business and vacation of plots.

- 15) It is found that MIDC raises funds by way of issue of loan bonds to public and loans from other institutions at higher rate of interest. Therefore, MIDC should take immediate step for

reducing the amount of loans by generating new avenues of cheap sources of funds. It will help MIDC to reduce the burden of interest on loans.

- 16) As per the opinion of MIDC employees and industrialists, MIDC has **shortage of employees**. Hence it could not pay attention on each and every services and infrastructural facilities. Thus, there is urgent need that MIDC top officials must consider the issue on urgent basis and proceed to fill the required staff. In addition, MIDC should adopt proper HR Planning in their offices through transferring excess staff from the place of abundance to the place of scarcity.

It is found that terms and conditions of MIDC employees' employment is governed by the State Government under the regulations made as per section 12 (iii) (b) of MIDC Act 1962. The power should be delegated to the Board of Directors in the efficient functioning of MIDC without government intervention.

It is also observed that MIDC has not given any attention towards employing the management techniques like SWOT, MBO, TQM, ISO, Re-engineering etc. for understanding strength and weaknesses. However, if MIDC implement these techniques, it will help MIDC to measure the progress and quality of services from time to time. Thus, it is suggested that MIDC should make use of these techniques for the effective implementation of policies and decisions.

- 17) It is found that Maharashtra Pollution Control Board is not working efficiently to control pollution. There is also shortage of employees at MPCB. There is no planning or administration relating to regular visit to industrial units or industrial areas for checking pollution. Thus, it is found that there is no overall coordination among MIDC and MPCB. There is urgent need that MIDC in collaboration with MPCB should increase the efforts for controlling industrial pollution. They should warn industrial units strictly that industrial units should discharge the effluent only after adequate treatment and after the permission of MPCB authorities. MIDC should conduct workshops on Liquid Waste Management for industrial units once or twice a year. This will create awareness amongst industrial units. In addition, MIDC should increase the scope of Environmental Impact Assessment (EIA) for reducing hazardous waste in MIDC areas.

MPCB should follow an inspection-based strategy for pollution control. In fact, there is a need that MPCB should monitor and analyze pollution of each and every industrial unit and see that whether it is violating the rules and regulations and institute legal proceedings in cases where the violation is found. Even in case of extreme situation, it should act to the extent of closing down the polluting unit which is causing the damage to ecology and environment.

In addition, industrial units should be promoted to adopt voluntary schemes based upon the benchmarks prescribed as per international standards like ISO certification.

Considering the current pollution situation, Author strongly felt that there should be penal provisions like fines and charges on those industrial units which are creating pollution beyond the permissible limit and without taking appropriate permissions of pollution board.

It is found that complaints relating to pollution are not entertained promptly. MPCB should attend such complaints promptly by inspecting, monitoring and verification through its officials or by sending special team or by vigilance squad to visit the site. There should be a provision that person can lodge online complaint on the MPCB website. Both written and oral complaints must be attended on a priority basis.

Thus, it indicates that there is a need of coordination and cooperation among MPCB and MIDC. Both of them should prepare a strategic plan of controlling pollution. In addition, Author feels that MPCB in collaboration with the local NGOs can effectively control the increasing level of pollution in MIDC area. MPCB should utilize its major part of fund on pollution reduction activities. It is observed the most of the fund remain unutilized.

- 18) **Balanced Industrial Development with the help of MIDC:** MIDC is established for the overall development of industrialisation all over Maharashtra. To achieve this objective, following points must be considered by MIDC:

There is urgent need to have cent percent coordination at least among four departments. They are MPCB, MSEB, Financial Institutions and MIDC. Only then a drastic change of balanced development and growth of MIDC areas in Maharashtra will take place.

It is observed that MIDC has established its areas at specific places only especially near big towns and cities. However, there is a need to establish more MIDC areas in backward and rural areas. Author also found that there is uneven distribution of industrial areas in Thane district. This is due to State Government policy and local political influence. In fact, MIDC should establish its MIDC areas in every taluka. MIDC must establish MIDC areas at places where adequate vacant land is available but there is no adequacy of water, electricity, power, roads etc. This will help to develop undeveloped region.

It should also increase the percentage of expenditure on infrastructural facilities. This is possible because MIDC enjoys the privilege of working as a direct agent of the State Government for the purpose of developing industrial areas and water supply schemes. In addition, MIDC is handled by Chief Executive Office who is usually from IAS cadre and works under the guidance of State Government appointed Board of Directors.

MIDC have to strengthen complaint redressal system, increase coordination with different related parties who are involved with the MIDC activities.

Thus, MIDC has huge scope to spread all over Maharashtra with quality infrastructural services and facilities. However, lack of quality services by MIDC leads to imbalanced industrial development in Maharashtra. Author strongly feels that MIDC should concentrate on rural areas for overall development of Maharashtra.

- 19) It is found from majority of the respondents that MIDC do not take any steps of encouragement to public to establish industries in setting up industries in MIDC areas. Author did not find any initiative of MIDC to attract entrepreneurs. Thus, there is a need to conduct seminars, workshops of new entrepreneurs or those who want to become entrepreneur, professional colleges etc. In addition, there is a need to provide internship opportunities to college students in the industries in MIDC areas. These initiatives will lead to efficient utilization of vacant plots which will result in balanced development of MIDC.
- 20) There should be separate department or cell providing **consultancy services** to the entrepreneurs in respect of technology, plant layout, material planning etc. In addition, MIDC should also think of training the entrepreneurs on different aspects of business management and keeping the liaison with other organizations. To increase industries, MIDC can also provide subsidy to the entrepreneurs of scheduled castes, scheduled tribes or other backward class communities and even women entrepreneurs on a priority basis.
- 21) It is found that there is urgent need to construct **residential buildings** for employees of MIDC officials and employees of industrial unit. Because, as of now, employees of industrial units are travelling from city area to the MIDC industrial areas. It takes time in transport as well as it increases pollution and traffic problem in MIDC areas. Thus, if MIDC

reserve the plot and construct building for residential facility to both MIDC employees as well as employees of industrial units then it will help employees to stay near their industrial unit. This facility will reduce the travelling time of employees of industrial unit, curtail pollution as well as MIDC will also get additional source of revenue. State government should provide grant for such essential activity. Even MIDC and industrial units may come together to provide the residential facilities to employees of industrial units at subsidized rate.

- 22) It is found that due to political interference, corruption in tenders and quotations has been increased. On the other side, MIDC has also shortage of regular MIDC staff for **regular maintenance of infrastructural facility. Thus, it became** difficult and challenging to provide adequate and regular infrastructural facilities. Hence, Author strongly felt that MIDC should have professional approach and improve the quality of infrastructural services for attracting more entrepreneurs.
- 23) **Facilitation Centre-** MIDC should provide active facilitation centre for immediate resolution of various issues faced by existing industries of MIDC. It is found that industrial units and new entrepreneurs need for guidance as well as to resolve complaints. Thus, to provide guidance or solve complaints, MIDC has to play the role of consultant in many cases.
- 24) **Advertisement in Leading Newspapers-** To attract new entrepreneurs to establish industrial units in MIDC areas, MIDC must use different initiatives such as conduction of workshops, seminars for new entrepreneurs by giving advertisement in television, radio and other social media too.
- 25) **Safety and Security Measures:** Chemical industries must take utmost care while producing their chemical based production. Author strongly feels that there should be regular check-up of chemical plants by MIDC officials, whether they are taking utmost precautionary measures or not.

MIDC and MPCB should organise workshops for environmental awareness among industrial units. It should motivate industrial units to apply Green Design and environment friendly technology by providing awards or rewards on periodical basis.
- 26) It is found that MIDC is not entertaining complains made by **Manufacturing Associations.** In fact, it should resolve complaints on urgent basis. For this purpose, it should play a role of mediator or coordinator. Thus, increasing cooperation and coordination with various Manufacturing Associations will help MIDC to frame entrepreneur friendly policy and also help in its effective and efficient implementation.
- 27) **Transport Facility:** There is a need that MIDC and Industrial Units jointly with the cooperation of Transportation Authorities have to take steps to provide better transportation facilities for employees of Industrial Units.
- 28) **Financial or non-financial support of MIDC in case of accident-** Author felt that there is a need that MIDC with the support of industrialists have to start certain schemes for helping employees or their family members at the time of any accident in industrial units. Both MIDC and industrialists are responsible for provision of infrastructural facilities.

6.3 CONCLUSION

Maharashtra Industrial Development Corporation is playing a major role in increase in industrial growth. In fact, it plays role of balanced industrial development of Maharashtra. For this purpose, it assists with by providing basic facilities to Industries in MIDC area like water supply, roads, street lights, drainage, plot development, and other infrastructural facilities. It also

encourages entrepreneurs in setting up industries at various locations. Research Methodology used by the author which described statement of problem, objectives of the study, hypotheses, sources and methods of data collection, etc. This methodology helped author to focus on various aspects of analysis of MIDC.

Considering the geographical features of Thane District, the district has lot of potential for growth and development of Industries in particular and thereby rapid growth of MIDC areas in general. However, considering the connectivity of Thane District, it has less number of industrial units functioning as on the date. Therefore, there is a need that MIDC have to take steps to increase more number of Industrial Units which will promote more number of employment opportunities.

There are multiple issues exist with MIDC areas. In brief they are under developed infrastructure, development of adequate number of suitable plots for different types of industries, frequent power failure, lack of will of MIDC officials and authorities to develop MIDC areas, rampant encroachment in the MIDC areas, illegal businesses going on in the MIDC areas, industries are violating the rules of MPCB. Heavy water pollution, air pollution, issue of dumping garbage, approval issue, safety and security issue especially fire incidences, inadequate drainage facility, etc. There is no appropriate bifurcation of responsibility among various related authorities such MIDC, MPCB, MSEB, Local Corporations, Employees Association, Water supply authority and so on. All these issues need to be solved on urgent basis. However, to solve these issues, MIDC has to pay a greater role.

The study found that, number of industrial units have increased due to MIDC. This has supported as well as provided various facilities to different types of industries of Micro, Small, Medium and Large Scale Units. It has also resulted into creation of job opportunities in Thane District. M.I.D.C. should concentrate more on increasing the sources of funds and reducing the expenditure on various heads so that current deficit can be easily converted into surplus in near future. For generating additional income and better quality of services, M.I.D.C. should take steps to privatize of some of the services like water supply, power supply, telecommunication, health services, fire-fighting services, maintenance of industrial areas etc. In short major revitalization of MIDC is the need of the hour. Thus, it is inferred that the success of MIDC is dependent upon better financial position and efficient management to bring them out of the general malaise of inefficiency and lethargy.

MIDC's are following difficulties and delay in delivery of services. There does not found effective mechanism in MIDC. There found lack of planning in all the MIDC offices. All the officials are expecting the government should play a key role in the development of the MIDC. Thus, to conclude that the status of MIDC reflects both a threat and an opportunity. It is a threat, because MIDC have failed to a large extent, in delivering efficient services, and, as an opportunity because the industrial units expect more and more services from the MIDC which will offer enough opportunities, that could be effectively utilized by MIDC to prove their case for successful continuation. It has been revealed that mis-utilisation and mis-maintenance in the form of diversion of infrastructural services has become a common problem. Among the main reasons for diversion, poor economic condition of MIDC, lack of proper supervision, lack of utilization of modern equipments for services, difficult and time-consuming sanctioning procedure, role of local politics, communication gap among industrial units, officials of MIDC, various other important institutions.

There should regular inspection and checking and repairing work of street lights. MIDC should take responsibility of quality and safe road facility. MIDC may conduct environmental education programmes for industrial units, employees for control of water pollution. In addition, in case of pollution, there is an urgent need to take immediate measures by MIDC in

collaboration with MPCB authorities. MIDC must conduct workshop for better waste management for Industrial Units. MIDC must start hygienic canteen facility at each MIDC areas at subsidized rate. This will save time of employees of industrial units to rush to nearby areas for food. Water department of MIDC must inspect water treatment plants regularly. This action will help industries to receive pure and adequate water. There is a need to develop sound policy for supplying water on continuous basis. Also, MIDC should keep strict supervision and control on theft of water from pipelines and if possible, charge heavy penalty on them. MIDC officials must provide guidance to industrial units for recycling of waste water and reusing the same for various purposes. For smooth running of industrial units in MIDC areas, MIDC should take initiative of co-ordination with MSEB / MSEDCL and find out the causes of shortage of power supply and provide solution to it. MIDC should in collaboration with State Government start wind power projects, cogeneration power plants, biomass-based power plants, solar power plants and small hydro projects as an alternative for power/electricity. MIDC may prepare fire safety policy which includes fines and penalties in case of non-fulfilment of safety norms to industrial units which must be followed by all the industries of MIDC areas. This will help to create fire safe environment in industrial areas. MIDC can also make it mandatory for each industrial unit to participate in Tree Plantation Scheme. It is the need of the hour to reduce pollution. MIDC with the support of state government must take measures for increasing recreational and health facilities in MIDC areas. MIDC may counsel medium and large-scale industries to provide medical facilities to their employees. MIDC must appoint committee to see the documentary procedure of permission and find the solution for the same. This step will help to attract a large number of entrepreneurs in MIDC areas. MIDC should generate their own internal sources of revenue instead of depending on state government. This will help MIDC to receive extra revenue and industrial units will get adequate and additional facilities and services. MIDC may take steps to provide existing few vacant plots at subsidized rates to industrialists for opening schools, professional colleges, vocational training centers for imparting different types of skill-based education required for industrial activities. This will help students and local residents to get practical as well as hands-on training knowledge. Considering the services mentioned in the MIDC act, all the services are essential for the growth and expansion the industrial growth, hence MIDC must provide budgetary provision to each and every services and infrastructural facilities and services. MIDC has to take strict actions against those Industrialists who have close down their business to vacate plots on urgent basis so that these plots can be made available to other Industrialists. For this purpose, there should be separate department at the MIDC which can look after the issue of closure of business and vacation of plots. MIDC should take immediate step for reducing the amount of loans by generating new avenues of cheap sources of funds. MIDC should adopt proper HR Planning in their offices through transferring excess staff from the place of abundance to the place of scarcity. MIDC should make use of management techniques like SWOT, MBO, TQM, ISO, Re-engineering etc. for the effective implementation of policies and decisions. MIDC should conduct workshops on Liquid Waste Management for industrial units once or twice a year. This will create awareness amongst industrial units. In addition, MIDC should increase the scope of Environmental Impact Assessment (EIA) for reducing hazardous waste in MIDC areas. There is a need of coordination and cooperation among MPCB and MIDC. Both of them should prepare a strategic plan of controlling pollution. There is urgent need to have cent percent coordination at least among four departments. They are MPCB, MSEB, Financial Institutions and MIDC. Only then a drastic change of balanced development and growth of MIDC areas in Maharashtra will take place.

MIDC should establish its MIDC areas in every taluka. MIDC must establish MIDC areas at places where adequate vacant land is available but there is no adequacy of water, electricity, power, roads etc. This will help to develop undeveloped region. MIDC have to strengthen complaint redressal system, increase coordination with different related parties who are involved

with the MIDC activities. There is a need to conduct seminars, workshops of new entrepreneurs or those who want to become entrepreneur, professional colleges etc. In addition, there is a need to provide internship opportunities to college students in the industries in MIDC areas. There should be separate department or cell providing consultancy services to the entrepreneurs in respect of technology, plant layout, material planning etc. MIDC and industrial units may come together to provide the residential facilities to employees of industrial units at subsidized rate. MIDC should have professional approach and improve the quality of infrastructural services for attracting more entrepreneurs. MIDC should provide active facilitation centre for immediate resolution of various issues faced by existing industries of MIDC. MIDC and MPCB should organise workshops for environmental awareness among industrial units. It should motivate industrial units to apply Green Design and environment friendly technology by providing awards or rewards on periodical basis. Increasing cooperation and coordination with various Manufacturing Associations will help MIDC to frame entrepreneur friendly policy and also help in its effective and efficient implementation. MIDC and Industrial Units jointly with the cooperation of Transportation Authorities have to take steps to provide better transportation facilities for employees of Industrial Units. There is a need that MIDC with the support of industrialists have to start certain schemes for helping employees or their family members at the time of any accident in industrial units. Both MIDC and industrialists are responsible for provision of infrastructural facilities.

Appendix – 1 Questionnaire for MIDC Officials

1. Name:
2. Designation:
3. Contact No:
4. Express your opinion about satisfaction level about infrastructural facilities provided by MIDC to industrial units.

Sr. No.	Facilities	Completely Satisfied	Partially Satisfied	Not Satisfied
1)	Work of construction of roads and street lights			
2)	Water supply provision			
3)	Provision of common facility centres such as Canteen, Bank, Post Office, Police Station, Telecom Office, etc.			
4)	Provision of adequate effluent collectionsystem			
5)	Provision of sewage line system			
6)	Provision of sewage treatment plant			
7)	Provision of adequate electricity/power facility			
8)	Provision of fire station availability			
9)	Implementation of tree plantation scheme			
10)	Provision of recreational and health facilities			
11)	Education facilities such as schools/nursery atMIDC area.			

5. According to you, MIDC develop Industrial areas at faster rate and make them available for undertakings to establish?

Rapid		Slow		Very Slow	
--------------	--	-------------	--	------------------	--

6. How much percentage of collected fees or service charges are spend by MIDC on maintenance of roads, drainage, water facility etc.?

Range	Particulars
30%-50%	
50%-70%	
70%-90%	
90% and above	

7. What type of actions MIDC takes in case of outstanding fees from industrialists?

.....

8. Is MIDC taking steps to curtail increasing administrative expenditure and maintenance expenditure?

Yes		No	
-----	--	----	--

9. Whether MIDC generates sufficient revenue to compensate increasing expenses?

Yes		No	
-----	--	----	--

10. Whether MIDC borrows money from the open market by issue of Bond, Debentures, and Stocks, loan from the Bank or from any Other Institution?

Open Market Operation	<input type="checkbox"/>
Borrowings from Bank	<input type="checkbox"/>
Borrowed from any other Institution	<input type="checkbox"/>

11. Whether MIDC prepares Financial Budget for different types of activities?

Yes		No	
-----	--	----	--

12. According to you, how much percentage of allotted MIDC Plots to industrialists are not functioning/running/ closed down their business without handing over to MIDC? What are the reasons to close down these industries?

.....

13. Do you think that MIDC has less fund to develop MIDC Area?

Sufficient		Insufficient	
------------	--	--------------	--

If insufficient, provide reasons for the same

.....

14. Do you think that your MIDC has appointed adequate number of employees to provide various services and facilities?

Yes		No	
-----	--	----	--

If insufficient, then provide reasons for the same

.....

15. Do you think that there is a delay in the process of sanction/ permissions from Government relating to major proposals of MIDC?

Yes		No	
-----	--	----	--

If yes, Give reasons for the same

.....

16. What support MIDC provides in getting permissions from different authorities to start the Industrial units in MIDC areas?

17. Do you think that there is adequate coordination of MIDC with the following various bodies /institutions?

Sr. No.	Particulars	Yes	No
1.	MSFC for getting adequate finance		
2.	MSEB for regular power supply		
3.	MPCB for pollution control		
4.	Fire station facility		

18. Do you think that MIDC has achieved Balanced Industrial Development in Maharashtra?

Yes		No	
-----	--	----	--

.....

19. Does MIDC takes efforts to encourage entrepreneurs in setting up Industries at MIDC Areas?

Yes		No	
-----	--	----	--

If yes, then mention some of the efforts taken by MIDC

.....

20. Did MIDC construct building for the housing of employees of Industrial Units?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

21. Kindly give any 2 major issues /problems of the facilities mentioned.

Sr. No.	Facilities	Issues
1)	Construction of roads and streetlights	i) ii)

2)	Provision of water supply	i) ii)
3)	Providing common facilityCenters such as Canteen, Bank, Post Office, Police Station, Telecom Office etc.	i) ii)
4)	Adequate effluent collectionsystem	i) ii)
5)	Sewage line availability	i) ii)
6)	Sewage treatment plantavailability	i) ii)
7)	Adequate electricity/poweravailability	i) ii)
8)	Fire station availability	i) ii)
9)	Implementation of tree plantation scheme	i) ii)
10)	Provision of recreational andhealth facilities	i) ii)
11)	Education Facilities such as Schools/Nursery at MIDC Area	i) ii)

22. What is your opinion about maintenance of facility?

Regularly Maintained Maintained as per the issue/problem

Not maintained regularly

23. Does MIDC has Facilitation Centre to solve the issues of existing industries relating to various services and facilities provided by MIDC?

Yes **No**

If no, then provide reasons for the same

.....

24. Do you think that number of industries have been increased due to MIDC?

Yes **No**

If yes, then mention the efforts of MIDC to increase number of industries every year

.....

25. Does MIDC arrange promotion / initiative programs with the help of advertisement in television or newspaper advertisement or any other media to promote Industrialization?

Yes **No**

If yes, then mention some of the promotion programme

.....
.....

26. According to you, what are the important issues of chemical industries? Please mention issues.

.....
.....

27. According to you, what are the important issues of engineering industries? Please mention issues.

.....

28. According to you, what are the important issues of Pharmaceutical industries? Please mention issues.

.....

29. According to you, what are the important issues of Textile Industries? Please mention issues.

.....

30. According to you, what are the Expectations of Industrialists from MIDC?

.....
.....

Appendix – 2 Questionnaire for Industrial Units**Section-A****Profile of the Industrial Unit:****A. Individual Profile of Enterprises:**

1. Name of the owner / representative of industrial unit: (Optional):
.....
2. Name of the industrial unit:
3. Year of establishment:

4. Type of Organization:

1. Sole Proprietorship 2. Partnership 3. Private Ltd Company
5. Type of Industrial unit
1. Small Enterprise 2. Medium Enterprise 3.Large Enterprise

6. Classification of Industry (By Product): -

1. Textile 2. Chemical 3. Engineering 4. Pharmaceutical

7. What is annual turnover?

1. Below 25 lacs 2. 25 to 50 lacs 3. Above 50 lakhs

8. Type of Employment

1. Permanent 2. Temporary 3. Contractual Basis

Section-B**I-A) Land Acquisition and Allotment Policy :(Put ‘√’ at required place.)**

Sr. No.	Questions	Yes	No
1	MIDC provides land to industrial units at subsidized rate.		
2	Do you think that the cost of leased land in MIDC area is less as compared to other land?		
3	Cost of land in MIDC area is less as compared to other land.		
4	Do you think any illegal construction is constructed in MIDC area?		
5	MIDC’s Single Window Clearing process of acquiring land by MIDC is convenient		
6	Does the procedure for licensing and permission for land acquisition and allotment is simple and speedy?		

I-B) Provide suggestions to further improve Land Acquisition and Allotment Policy of MIDC.

.....

.....

II-A) Power Infrastructure Facilities: (Put ‘√’ at required place.)

Sr. No.	Questions	Yes	No
1	Industrial units in MIDC areas have power supply at subsidized rate		
2	Industrial units receive regular power supply		

3	Quick Redressal of complaint of power supply from MIDC		
4	Power Theft is taking place in MIDC area		
5	Loss occurs due to shortage of power		
6	Enough energy for sustaining unit		

II-B) Provide your suggestions for further improvement in Power Infrastructure Facilities.

.....

.....

III-A) Water Supply Facility: (Put '√' at required place.)

Sr. No.	Questions	Yes	No
1	MIDC provides adequate water supply to the unit		
2	Do company gets pure water supply from MIDC?		
3	MIDC provides pure water supply from MIDC		
4	Do MIDC provide any alternate source of water in case of shortage of water?		

III-B) Provide your suggestions to further improve Water Supply Facility.

.....

.....

IV-A) Fire Prevention and Protection Measures: (Put '√' at required place.)

Sr. No.	Questions	Yes	No
1	MIDC has adequate fire protection measures		
2	Whether MIDC conducts inspection for fire safety frequently?		
3	MIDC conducts inspection for fire safety frequently		
4	Does MIDC provides technical support for fire protection measures?		
5	MIDC provides quick help in case of Fire		

IV-B) Provide your suggestions to further improve Fire Prevention and Protection Measures.

.....

.....

V-A) Safety and Security Measures: (Put '√' at required place)

Sr. No.	Questions	Yes	No
1	MIDC creates awareness for environmental education among entrepreneurs		
2	Does MIDC have separate provision of facilities like Police Station, Post Office, Banks or Telephone Exchange?		
3	MIDC have separate provision of facilities like Police Station, Post Office, Banks or Telephone Exchange		
4	Are you satisfied with Common Effluent Treatment carried out by MIDC?		
5	MIDC has provided and maintained safe roads for transportation and travelling		
6	Has MIDC provided any good and clean environment protection while allocating land to the Industries?		

V-B) Provide your suggestions to further improve Safety and Security Measures.

.....

.....

VI-A) Waste Disposal Management: (Put '√' at required place.)

Sr. No.	Questions	Yes	No
1	MIDC has adequate control on waste disposal management of Industries.		
2	Are you satisfied with drainage facility provided by MIDC?		
3	Drainage facility in MIDC area is maintained regularly by MIDC.		
4	Does MIDC provide quick redressal of complaint for Waste Disposal?		
5	MIDC has control on liquid waste management of industries.		

VI-B) Provide your suggestions to further improve Waste Disposal Management.

.....

.....

VII-A) Consultancy: (Put '√' at required place.)

Sr. No.	Questions	Yes	No
1	MIDC provides counselling/ consulting facility		
2	Has MIDC established facilitation centre to solve issues relating to services provided by MIDC?		
3	Timely information to Industrial units		
4	Do you face any problem due to lack of proper consultation service?		

VII-B) Provide your suggestions to further improve Consultancy

.....

.....

VIII) Do you think that MIDC has adequate number of employees for providing various services and facilities?

Yes		No	
-----	--	----	--

IX) Do you think that there is proper coordination of MIDC with other bodies/institution in providing their services or permissions?

Sr. No.	Particulars	Yes	No
1.	MSFC for getting adequate finance		
2.	MSEB for regular Power Supply		
3.	MPCB for Pollution Control		
4.	Fire Station facility		

X) Do you think that MIDC has achieved balanced industrial development in Maharashtra?

Yes		No	
-----	--	----	--

XI) Does MIDC takes efforts to encourage entrepreneurs in setting up industrial units in MIDC area?

Yes		No	
-----	--	----	--

If yes, then mention some of the efforts taken by MIDC

.....
.....

Do you think that MIDC should construct building for the housing of employees of Industrial Units?

Yes		No	
-----	--	----	--

If yes, then provide reasons for the same

XII) According to you what other facilities and services MIDC must provide to improve overall MIDC area?

.....
.....

Appendix - 3

Questions for Interview for Maharashtra Pollution Control Board Officials

1) Does MIDC Cooperate as well as coordinate to MPCB for controlling pollution of Industrial Units of MIDC?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

.....

2) Does MPCB takes strict action against those Industrial Units who generates more pollution?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

.....

3) What efforts MPCB takes to control pollution of MIDC Industrial Area?

.....

.....

4) According to you, do Industries fulfil the norms established by MPCB smoothly?

.....

.....

5) What efforts MPCB takes to reduce pollution in MIDC areas?

.....

.....

6) Do Industrial Units immediately fulfil the measures suggested by MPCB for reducing pollution?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

.....

7) Do you conduct Meeting with MIDC authorities at regular interval?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

.....

8) Provide suggestions to MIDC for solving problems related to pollution

.....

Appendix - 4 Questions for Interview for Association Related to MIDC

1) What facilities and services MIDC must provide adequately & carefully to Industries of MIDC Area?

.....
.....

2) According to you, what are the major issues of MIDC Industries that MIDC must solve?

.....
.....

3) What efforts your association takes to control pollution and other issues of MIDC Industrial Area?

.....
.....

4) According to you, what are the various problems faced by Employees of MIDC Industrial Units?

.....

5) Does MIDC cooperate as well as coordinate with Industrial Associations for resolving the complaints of Industrial Units in MIDC area?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

6) Do Industrialists implement the suggestions provided by you with immediate effect?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

7) Do you create awareness campaign for registering maximum number of Industrial units in your Association?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

8) Does your association help industrial units in resolving their complaints with MIDC Authorities?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

9) Does your association conduct meeting with MIDC authorities at regular interval?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....
.....

10) Provide suggestions to MIDC for increasing their efficiency

.....

Appendix – 5 Questions for Interview for Employees of Industrial Units

1) Are you are satisfied with the working conditions of your Industrial Unit?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

2) Are you satisfied about the water facility, transport facility, safety and security facility available in your Industry? (Put '√' at required place.)

Facility	Satisfactory	Unsatisfactory
1. Water Facility		
2. Transport Facility		
3. Safety and Security Facility		

3) Are you satisfied with following facilities (Put '√' at required place.) –

Facility	Satisfactory	Unsatisfactory
1. Waste Management System		
2. Common Effluent Plant Treatment		
3. Sewage Treatment Facility		
4. Pollution Control Measures		

4) Do MIDC help in resolving your complaints with Industrialists on urgent basis?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

5) Whether you get any support for better transportation facilities?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

6) In case of any accidents, does MIDC provide any financial or non- financial support to injured or his family members?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

7) What are the other problems faced by employees of Industrial Units of MIDC?

.....

8) Do MIDC authorities conduct regular inspection of Industrial Units?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

9) Provide suggestions to MIDC

.....
.....

Appendix - 6 Questions for Interview for Nearby Residents of MIDC Areas

1) Do land affected people got employment opportunities from MIDC?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

2) Whether pollution from MIDC Units is affecting health of residents on largescale?

Yes		No	
-----	--	----	--

If yes, then provide reasons for the same

.....

3) Has any loss occurred due to accidents in Industrial units in last 2 Years?

.....

4) Does MIDC take any steps in resolving the problem of traffic congestion in MIDCarea?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

5) Does MIDC taken any concrete steps to resolve the problem of water pollution?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

6) Whether MIDC takes steps on encroachment of illegal hawkers in MIDC area?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

7) Does MIDC provide facility of registering and resolving complaints of MIDCResidents?

Yes		No	
-----	--	----	--

If no, then provide reasons for the same

.....

8) Does MIDC support residents in tree plantation movement or any other measures to reduce pollution?

Yes		No	
-----	--	----	--

If yes, then mention some of the measures

.....

9) Provide suggestions to MIDC

.....

APPENDIX - 7**List of Industries****D) Chemical Industries**

1	Vijay Gas Industry	B-65, Anand Nagar, Ambernath
2	Sima Chemical	W-13, Chemical Zone, Ambernath-421501
3	Asha Enterprises	Plot No. B/39, Vadolgaon, Ambernath (w)-421501
4	D.V.S. Chemicals Engineering Industries	A-135, MIDC Ph-I, Dombivli (E)
5	ESBE Chem Products	W-61, MIDC Phase-II, Dombivli (E)-421204
6	Ferrocator Industries	W-115, MIDC, Ph-II, Dombivli (E)-421204
7	Insulations and Polymers Pvt.Ltd.	B-16, MIDC Phase-I, Dombivli (E)-421203
8	Jalaram Organics	A-60, MIDC-I, Khambalpada Road, Dombivli(E)-421203
9	Pliogrip ResinsChemicals Pvt. Ltd.	W-78, MIDC-Phase-II, Dombivli (E)-421204
10	Techno Chem	9, MIDC, Phase-I, Dombivli (E)-421203
11	Indo Amines Pvt. Ltd.	W-35, MIDC Phase-II, Dombivli (E)-421204
12	Vinyltek Platichem Pvt. Ltd.	W-226 C, MIDC, Ph-II, Dombivli (E)
13	Peddington Chemical	Tech Shed No.10, Road No.6, MIDC, Ph-I, Dombivli E-421203
14	Versatile Chemicals Pvt. Ltd.	W-35, MIDC Phase II, Dombivli E-421204
15	Carlton Industrial Engineers	B-20, Additional MIDC, Anand Nagar, Ambernath E-421501
16	Chaitnya Engineers	D-21, Phase II, MIDC, Dombivli-421204
17	Chaitanya Industries	D-15, Additional Ambernath, Industrial Area, Anand Nagar, MIDC, Ambernath E-421506
18	Shree Samarth Engineering	Plot No. W-73, Addl.Ambernath, MIDC, Ambernath 421506
19	S. K. Industries	W-233 B, MIDC, Phase-II, Dombivli E-421204
20	Anuradha Dyestuff Industries	A-71, MIDC Phase I, Dombivli E-421203
21	Hanaka Organics P. Ltd.	W-109/110, MIDC, Morivli, Ambernath 421505
22	Malve Chemical (I) P. Ltd.	F-1/23, MIDC, Badlapur
23	Meghdoot Chemicals Pvt. Ltd.	¼, MIDC, Kalyan-Bhiwandi Road, Sarvali P. O. Kalyan 421311
24	Orgamme Chemicals (I) Pvt.Ltd.	W-8, MIDC, Phase II, Dombivli E-421204
25	A.L.A. Chemicals Pvt. Ltd.	Plot C-5, MIDC, Chemical Zone, Ambernath(W)-421501
26	Aarti Industries Ltd.	D-53/55, MIDC Phase II, Dombivli East
27	Akrur Chemicals Pvt. Ltd.	W-130, MIDC, Phase II, Dombivli E-421204
28	Akshay Chemicals	D-33, MIDC, Ph-II, Sagaon, Dombivli E-421204
29	Alchem Industries	Plot-4, MIDC, Indl.Estate Chemicals Zone, Ambernath 421501
30	Alginates Allied ChemicalsPvt. Ltd.	A-41, MIDC, Kulgaon, Badlapur-421503

31	Aromatic and Industrial Chemical Pvt. Ltd.	Plot B-15, Chemical Zone, MIDC, Ambarnath-E
32	Beekay Finochem Pvt. Ltd.	Plot No. F-19, MIDC, Phase-II, Domivli E-421204
33	Bhavika Chemicals Corporation	Shed 17, MIDC, Chemical Zone, Ambarnath-421501
34	Co-operative Resins and Chemicals	56, MIDC, Morivali, Ambarnath (w)-421205
35	Innovative Organic Pvt. Ltd.	A-19, MIDC, Ph-I, Dombivli E-421203
36	Jaishil Sulphur and Chemical Industries	B-11/2, MIDC, Phase I, Dombivli E-421203
37	Joystar Chemical Industries	A-97, MIDC Phase I, Dombivli(E)-421203
38	Nav Nidhan Organics Pvt.Ltd.	A/131, MIDC, Phase I, Dombivli E-421203
39	NEEMCO	A-78, MIDC, Ph-I, Dombivli E-421203
40	Nilchem Industries	F-20, MIDC, Badlapur-421503
41	Omega Fine Chemicals	W-231/D, MIDC Phase II, Sonarpada, Dombivli E-421204
42	Ortho Esters	W-125, MIDC, Ph-II, Dombivli E-421204
43	Purnima Synthetics	W-179, MIDC, Ph -II, Dombivli E-421204
44	Ram Chem	W-123A, MIDC, Badlapur-421501
45	Samuh Chemicals	W-104, MIDC Phase II, Dombivli E-421204
46	Sontara Organo Industries	Shop No.6 and 16, MIDC, Chemical Zone, Ambarnath W-421501
47	Suma Chemicals Pvt. Ltd.	W-75/B, Chikloli MIDC, Ambarnath 421205
48	Synthotex Chemicals	Gala-2, Bhagawan Patil Compound, Sonarpada, MIDC, Dombivli E-421204
49	Aakar Rasayan Pvt. Ltd.	W-147, MIDC Industrial Area, Phase-II, Dombivli (E)-421204
50	Alchemie Laboratories	B-39, Phase-I, MIDC, Dombivli 421203
51	Alok Enterprises	A-15, MIDC, Phase-I, Dombivli (E)-421203
52	Amar Jyot Industries	A-108, MIDC, Phase-I, Dombivli (E)-21203
53	Ambarnath Organics Pvt. Ltd.	W-61,(A) & W-63 (B), Chikhloli MIDC, Ambarnath 421505
54	Amogh Chemicals Pvt.Ltd.	W-79 & 80, MIDC, Mankivli, Badlapur (E)
55	APIFAC	Shed 2, S.Patil Compound, Kalyan-Shil Road, Sonarpada, Dombivli (E)-421204
56	Ashu Organics (I) Pvt.Ltd.	W-118/119 (A) Kharvai, MIDC ,Badlapur (E) 421503
57	Astec Life Sciences Ltd.	F-39, MIDC, Phase-II, Dombivli (E)-421204
58	Auchtel Products Ltd.	Plot No.A-85,A-86 & C-22, MIDC ,Phase I, Dombivli (E)-421203
59	Bhoomija Chemicals Corporation	Technical Shed No.1, MIDC, Phase-I, Dombivli(E)-421203
60	Bombay Chlorides Pvt. Ltd.	W-77, B MIDC Industrial Area, Badlapur (E)
61	Chemcos Corporation	W-40, Morivli ,MIDC, Ambarnath 421501
62	Chemindya/Vyana Organics	W-57, MIDC ,Phase-II, Dombivli (E)
63	Chemiya Chemicals	A/62, MIDC ,Phase I, Dombivli (E) 421203
64	Chem-Org	W-122, MIDC, Phase-II , Dombivli (E)421204
65	Chemorgan Fine Chemicals	Plot-N/25, Addl Incl. Area, Ambarnath (E)

)421506
66	Chikhholi Chemical Pvt. Ltd.	118, Chgikhholi MIDC, Ambarnath (W) 421505
67	Chloral Chemicals (I) Pvt.Ltd.	Shed No.24,MIDC Indl Area, P.O. Kulgaon, Badlapur 421503
68	Crystal India	W-114, MIDC, Phase II, Manpada ,Dombivli 421204
69	D.N. Organic Chemicals	76-A,Plot N-5, MIDC Chikhholi, Ambarnath
70	D.V.S. Chemicals & Engineering Industries	A-135, MIDC Ph-I, Dombivli (E)
71	De-Chem Industries	14-B, Engineering Zone, MIDC Indl. Estate, Ambarnath 421501
72	Electro-Chem	N-I, W-61A, MIDC, Ambarnath
73	Evershine Drug Product Pvt.Ltd.	W-110,MIDC, Ph-II, Dombivli (E)-421204
74	Fine Organic Industries Pvt.Ltd.	A-122,A-123,A-124,A-125, MIDC, Ph-I, Dombivli (E) 421204
75	Fine Speciality SurfactantsPvt. Ltd.	W-250-261, MIDC Phase II, Manpada Road, Dombivli (E) 421204
76	Five Star Chemicals Pvt. Ltd.	W-116, MIDC, Phase II, Manpada Road,Dombivli (E) 421204
77	Freesia Chemicals	Plot No.37,Morivali MIDC, Ambarnath (W) 421505
78	Ganesh Special Industries	C-7,Sagaon, MIDC, Dombivli (E) 421204
79	Gayatri Chemicals	Shed No.7,Mhatrepada, MIDC Phase II, Dombivli (E) 421203
80	Gem Synthetics & Polymer(India)	A-175, MIDC, Ph-I, Dombivli 421203
81	Gemchem Industries	D-56, MIDC, Phase -II, Dombivli (E) 421204
82	Green Field Industries	Plot No.D-49, MIDC, Ph-II, Manpada Rd,Dombivli (E) 421204
83	Hanuman Chemical Industry	W-42/A, Shirgaon ,MIDC, Badlapur
84	Hilton Chemicals	W-124, MIDC, Phase II, Sonarpada, Dombivli(E) 421204
85	Himalaya Industries	A-54,MIDC, Kulgaon, Badlapur 421506
86	Hindustan Monomers Pvt. Ltd.	W-40/41, MIDC Ph-II, Sonarpada ,Dombivli(E)421204
87	Ideal Chemi Plast Pvt. Ltd.	A-1 & 2,MIDC, Badlapur
88	Indian Agro Chem IndustriesPvt. Ltd.	B-13, MIDC, Badlapur 421503
89	Industrial Bureau	32, MIDC, Morivali,Ambarnath
90	Jagruti Chemical Industries	Rice Mill Compound, Manpada Road, Dombivli (E) 421204
91	Kajay Remedies Pvt. Ltd.	Shed No.-18,Plot No.27 & 53,Opp. MIDCOoffice, Badlapur
92	Kandhari Chemicals Industries Pvt. Ltd.	15/A, MIDC, Chemical Zone, Ambarnath421501
93	Kanta Chlorides Pvt. Ltd.	A-57, MIDC, Badlapur
94	Kapko Chemical Works	B-16, MIDC, Ambarnath 421501
95	Khadelwal Peroxides Pvt.Ltd.	D-7/3,Phase-I,MIDC,Near Shiva Suitings, Dombivli (E) 421304

96	Kripa Chem Industries	Shed No. W/2, MIDC, Chemical Zone, Ambarnath (W)
97	Labie Chemie (I) Pvt. Ltd.	W-136, MIDC Phase II, Dombivli (E)
98	Landmark Chemicals	W 112, Phase II, MIDC, Dombivli (E)-421204
99	Leonard Chemical Industries	N-2, Unit W/65/A, Chikloli, MIDC, Ambarnath 421505
100	Monomer Chemical Industrial Pvt. Ltd.	Plot 32, Chemical Zone MIDC, Industrial Area, Ambarnath
101	Metafin Chemicals	D/7,7B, MIDC Phase I, Dombivli (E) 421203
102	Montage Chemicals Pvt. Ltd.	W-38, MIDC Morivali, Ambarnath (W) 421505
103	National Chemical Industries	W-43, Morivali, MIDC, Ambarnath 421505
104	Neelam Ayurchem India Pvt.Ltd.	A-43, Vicco Naka, Phase I, MIDC, Dombivli (E) 421203
105	Nirmal Chemicals	A-73, Phase -I, MIDC, Dombivli 421203

II) Engineering Industries

106	Chavare Engineering Pvt.Ltd.	TS-19, MIDC, Ph-II, Sagaon, Dombivli E-421204
107	Neo Power Electronics and Projects Pvt. Ltd.	W-104, MIDC, Ph II, Dombivli E-421204
108	Sarman Engineering Pvt. Ltd.	A-26, D-Road, MIDC, Phase I, Dombivli E-421203
109	Shree Uma Engineering	W-91, Anand Nagar, MIDC, Ambarnath-421506
110	Amit Engineering Works	W-103(A), Kharvai, MIDC, Near Hope India, Badlapur E-421503
111	Mec Mektronic Engineering Pvt. Ltd.	D-6, Anand Nagar, MIDC, Addnal Ambarnath E-421506
112	Merchdes Engineers	W-203, Phase-II, Sonarpada, Dombivli E-421204
113	Praveen Engineering and Fabricators	W-180, MIDC, Ph-II, Sonarpada, Dombivli E-421204
114	Sahyadree Engineering Works	W-72, MIDC, Phase II, Dombivli E-421203
115	Shree Industries	W-176, MIDC, Phase II, Dombivli E
116	Sold Tech Systems	W-12, MIDC, Sonarpada, Dombivli E-421204
117	Aashree Engineering Pvt. Ltd.	Shed No.A-6, Phase I, MIDC Industrial Area, Dombivli E-421203
118	Prakash Engineering Works	Shed No.7, MIDC, Ph-I, Near State Bank, Dombivli E-421203
119	Bhave Engineering Pvt. Ltd.	23, Shed No.16, Opp. MIDC Office, Badlapur(E)
120	Jig and Fixtures	B-11, Anand Nagar, Old Bhendi Pada, MIDC, Ambarnath (W)-421501
121	Atlas Engineers	B-26, Addl. MIDC, Anandnagar, Ambarnath(E)
122	Beena Equipments	B-2 ,Patil Compund, Opp D-26, Kalyan Shil Rd, MIDC-Phase -II, Dombivli (E)
123	Bhagyalaxmi Engineering	S.B.Patil Chawl, Near New Hindustan, Anil Auto, Sonarpada, Kalyan Shil Road, Dombivli

124	Bhavesh Engineering Works	Jai Bai Patil Chawl, Sonarpada Bus Stop, Kalyan Road, Near Phase-II, Dombivli
125	Cee Square Engineers	Eknath Gaikar Estate, Opp. Techno Petrol Pump, Kalyan Shil Road, Dombivli (E)
126	Chandrabhan Engineering	Mhatre Compound, Kalyan Shil Road, Dombivli (E)
127	Deccan Engineers & Contractors	B-49, Additional MIDC, Anand Nagar, Ambernath (E)
128	EAC Engineers	W-8 (B), Addl MIDC, Ambernath (E)
129	Fertiequip Engineering Co.	W-102, Addl MIDC, Ambernath (E)
130	Flodyne Purpose (India)	F-16, Addl. MIDC, Anand Nagar, Ambernath (E)
131	Girish Iron and Steel Works Pvt. Ltd.	W-236, MIDC- Phase -II, Dombivli (E)
132	Gomur Fabrics Mills Pvt. Ltd.	F-43, MIDC, Phase II, Behind Pimpleshwar Temple, Dombivli (E)
133	H.M.S Metal Corporation	B-56, Additional MIDC, Anand Nagar, Ambernath
134	Icon Cranes & Equipments	A-33, Addl MIDC, Anand Nagar, Ambernath (E)
135	Jay Drugs Engineering Works	W-41C, MIDC, Shirgaon Zone, Badlapur (E)
136	M.P. Engineering Construction (I) Pvt. Ltd.	D-39, Additional MIDC, Anand Nagar, Ambernath (E)
137	Maharashtra Engineering	A-43, Addl MIDC, Anand Nagar, Ambernath (E)
138	MD Engineers and Fabricators	F-18, Additional Ambernath Indl. Area, Anand Nagar, MIDC, Ambernath
139	Meta Fab Engineering	D-9, Addl MIDC, Anand Nagar, Ambernath (E)
140	Metro Mechanical & Engineering Works	A-16, Addl MIDC, Anand Nagar, Ambernath
141	Nirmal Engineers Pvt. Ltd.	A-78, Addl MIDC, Anand Nagar, Ambernath (E)
142	Oclusion Products	2/11-MIDC, Kulgaon, Badlapur
143	OM Industry	W-122, Kharvai MIDC, Badlapur (E)
144	Petrochem Engineers	A-59, Addl MIDC, Anand Nagar, Ambernath (E)
145	Precifab Engineers	W-102 A, MIDC, Badlapur
146	Prokem Engineers Pvt. Ltd.	W-236, MIDC, Ph-II, Dombivli East
147	Rashtriya Engineers Pvt. Ltd.	A-38, MIDC, Kulgaon, Badlapur (E)
148	Reliable Galvanisers & Engineers	W-76/C, Mankivli MIDC, Near Telephone Exchange, Badlapur (E)
149	Sachin Engineering Works	W-90, Chikloli MIDC, Ambernath
150	Semco Engineering Corporation	Sonarpada, MIDC-Phase II, Dombivli (E)
151	Sharon Engineering Industries	D-25/2, Additional MIDC, Ambernath

III) Pharmaceutical Companies

152	Bhusal Laboratories Pvt. Ltd.	W-11, MIDC, Badlapur-421503
153	Dana Pharmaceuticals Pvt. Ltd.	34, MIDC, Morivali, Ambernath-421501
154	Ethical Products of India	A-41, Additional Ambernath, MIDC, Ambernath 421506
155	G. Amphary Pharmaceuticals Pvt. Ltd.	Plot-107, Chikloli MIDC, Ambenath
156	India Pharmaceuticals	W-111, MIDC, Phase-II, Dombivli E-421204
157	Muktavan Pharmaceuticals	59, Muktavan House, Morivali, MIDC, Ambernath 421505
158	Rose Research Laboratories Pvt. Ltd.	W-249(A), MIDC, Phase II, Dombivli E-421203
159	Aceto Pharma (India) Pvt. Ltd.	W-116/117, MIDC, Phase II, Dombivli (E)-421204
160	Samarpan Pharmaceutical Pvt. Ltd.	68, Chikhloli, MIDC, Ambernath(w)-421501
161	Athena Drug Delivery Solutions Pvt.Ltd.	A-1, A-5, MIDC, Chemical Zone, Ambernath (W)-421501
162	Benzo Chem Industries Pvt. Ltd.	W-24, MIDC, Chemical Zone, Ambernath (W)-421501
163	Calyx Chemicals and Pharmaceuticals Pvt. Ltd.	W-212/213/216/217 MIDC, Phase II, Dombivli (E)-421204
164	Centaur Pharmaceuticals Pvt. Ltd.	Plot No.75, 76/1, Chikloli, MIDC, Ambernath (W)-421501
165	D. K. Pharmachem Pvt. Ltd.	F-32, W-7/6/5, MIDC, Badlapur-421503
166	Dortmund Lab. Pvt. Ltd.	B-46, MIDC, Phase II, ShivajiUdyog Nagar, Dombivli E-421204
167	Herbert Brown Pharmaceutical and Research Laboratories	W-256-258, MIDC, Phase II, ShivajiUdyogNagar, Dombivli E-421204
168	Nikava Pharmaceutical Industries	W-52, Morivali, MIDC, Ambernath (W)-421205
169	Sequent Scientific Ltd.	A-68/69, Addl.Ambarnath MIDC, Industrial Area, Ambernath (E)-421503
170	Suma Pharmaceuticals Pvt. Ltd.	Plot No.126, Chikhaloli MIDC, Ambernath (W)-421205
171	Ayurchem Products	W-74, MIDC, Phase II, Manpada Road, Dombivli (E)-421204
172	Vicco Laboratories	C-20, MIDC, Phase I, Dombivli (E)-421203
173	Ace Fabricators Pvt. Ltd.	Plot No.A-48, Anand Nagar, Addl. Ambernath, MIDC, Ambernath
174	Acharya Chemicals	Plot No. W-41/42, MIDC Industrial Estate, Morivali, Ambernath (W)
175	Asuwaldi Pharmaceuticals	Plot No.D-9,MIDC, Phase-II, Manpada Road,Dombivali
176	Enaltec Labs Pvt. Ltd.	Plot No.N-61, Addl. MIDC, Ambernath (E)
177	Entod Pharmaceutical Ltd.	Plot No.W-25(A),Addl. MIDC, Anandnagar, Ambernath (E)

178	Ethypharm LL Pvt. Ltd.	Plot No.A-1 to A-5,MIDC, Chemical Zone, Ambernath (W)
179	Filtra Technopark Cleanroom Systems Ltd.	Dawadi Village,Opp. Nakoda Powder Coating, Kalyan Shill Road, Dombivli (E)
180	Getz Pharma Research Pvt. Ltd.	Plot No.PL-11,MIDC, Additional Ambernath, Ambernath (E)
181	Manbro Pharma Pvt. Ltd.	Plot No.W-66,Phase-II, MIDC, Dombivli (E)
182	Narmada Chemicals	Plot No.A-17/2, MIDC Badalpur
183	Orex Pharma Pvt. Ltd.	Plot No.B-5,Phase-I,MIDC, Industrial Area, Dombivli (E)
184	P. I. Drugs & Pharmaceuticals Ltd.	Plot No.A-68,Additional Ambernath, MIDC Industrial Area, Ambernath (E)
185	Pharma Base India Pvt. Ltd.	Plot No.N-35,Additional Ambernath ,MIDC, Ambernath
186	Polydrug Laboratories Pvt. Ltd.	Plot No.N-37,Anand Nagar, Addl. MIDC, Ambernath (E)
187	Polypeptide Laboratories Pvt. Ltd.	Plot No.K-28,MIDC, Addl. Ambernath (E)
188	Purnima Synthetics	Plot No.W-179,MIDC, Phase-II,Dombivli (E)
189	Rare Pharma Pvt. Ltd.	Plot No.W-82/B, MIDC, Badlapur
190	Rubicon Research Pvt. Ltd.	Plot No.K-30/4,K-30/5,MIDC, Anand Nagar, Additional Ambernath (E)
191	Sedan Speciality Chem Pvt. Ltd.	Plot No.F-16,MIDC, Mankivali, Badlapur (E)
192	Silverline Chemicals Co.	Plot No.W-39/C,MIDC, Anand Nagar, Addl. Ambernath Ambernath (E)
193	Unomac	Plot No.A-61, MIDC, Anand Nagar, Ambernath
194	Yashica Pharmaceuticals Pvt. Ltd.	Off. No.2,First Floor, Annpoorna Tower,Syndicate, Kalyan (E)
195	Ideal Polymers (India) Pvt. Ltd.	A-36,Addl.MIDC,Ambernath (E)
196	Speciality Ploymers Pvt. Ltd.	3,MIDC, -Shirgaon ,Badlapur
197	Phaex Plymers Pvt. Ltd.	Plot No. 3/W/ 44/B,MIDC, Shirgaon ,Badlapur (E)
198	Asvik Pharma & Chemicals Pvt. Ltd.	W-108/109, MIDC Phase-II, Dombivli (E)
199	Chin-Chem/Rare Pharma P. Ltd.	F-16, MIDC, Ph-II, Dombivli (E)
200	Salpra Pharmaceuticals Chemical	A-136/137,MIDC Phase-I, Dombivli (E)
201	Kevin Pharmachem	A-60,MIDC,Opp.Telephone Exchange, Badlapur (E)
202	Arudaya Chemicals Pvt. Ltd.	Plot No.W-46,Morivali ,MIDC, Ambernath(W)

IV) Textile Industries

203	Abhishek Texchem Pvt. Ltd.	A-169, MIDC, Ph-I, Dombivli (E)-421203
204	Agarwal Dyeing	A1-110 & C-28, MIDC, Phase I, Dombivli (E)-421201
205	Alok Dyeing and Bleaching Mills Bom. Pvt. Ltd.	Plot No.-A106, 107, Phase I, MIDC, Dombivli 421203
206	ALPIC (India)	Plot No.F-1, MIDC, Phase II, Sonarpada, Dombivli (E)-421204
207	Amarsons Textile Mills	B-45, MIDC, Ph-II, Dombivli (E)-421203
208	Amritvarsha Textile Mills	B-52, MIDC, Ph-I, Dombivli (E)-421203
209	Bidhata Industries Pvt. Ltd.	Plot No.C-5, MIDC, Kulgaon-Badlapur (E)-421503
210	Bombay Precision Saws and Tools Pvt. Ltd.	D-1, MIDC, Phase II, Dombivli (East)
211	Brisk Chemical Industries	W-221, MIDC, Phase II, Manpada Road, Dombivli (E)
212	Century Rayon Ltd.	Murbad Road, MIDC, Shahad-421103
213	Deffiance Knitting Industries Ltd.	K-6, Additional Ambernath Industrial Area, MIDC, Ambernath (E)
214	Dhanvarsha Dyeing Pvt. Ltd.	B-47, MIDC, Phase-I, Dombivli (E)-421203
215	Dhupeshwar Silk Mills Pvt.Ltd.	Dhupeshwar Comp., Plot B/27, MIDC, Vadolgaon, Ambernath W-421501
216	Gopal Krishan Fabrics Pvt.Ltd.	Plot No.C-9, MIDC, Vadolgaon, Ambernath(E)-421501
217	Gopal Prints and Process Pvt.Ltd.	A/69, A/70, MIDC, Phase I, Dombivli (E)-421203
218	Hari-Leela Process House Pvt.Ltd.	13/1, MIDC, Saravali, Kalyan Bhiwandi Road, Kalyan
219	Idol Textiles Limited	D-1/1, MIDC Phase I, Dombivli (E)-421203
220	Indian Fabrics Corporation	C-19, MIDC Phase I, Dombivli (E)-421204
221	Jay Industrial Chemical Pvt. Ltd.	Plot No.A-104, 116, 155 MIDC Ph-I, Dombivli (E)
222	Krishna Alkaly (Bombay)Pvt. Ltd.	B-32, MIDC, Phase-I, Dombivli (E)-421203
223	Link Bulk Drug Products Pvt. Ltd.	W-227 & W-228, MIDC, Ph-II, Dombivli (E)-421204
224	Mahesh Textile Processors Pvt. Ltd.	C-27/5, 6, MIDC, Phase-I, Dombivli(E)-421203
225	Nagrik Textiles Pvt. Ltd.	B-34/2, MIDC, Phase I, Dombivli (E)-421203
226	Navjeevan Synthetics (P) Ltd.	D-35/42/43, Phase II, MIDC, Manpada Road, Dombivli (E)-421204
227	New Empire Textile Process Pvt. Ltd.	1/1, MIDC, Kalyan-Bhiwandi Road, Sarvali, MIDC-421311
228	Pako Hindustan	14, MIDC, Phase II, Dombivli-E-421204
229	Rashmi Processors	A-5/1, MIDC, Phase I, Dombivli E-421201
230	Surfchem Organics Pvt.Ltd.	W-148, MIDC, Phase II, Dombivli (E)-421204
231	Ullengal Brothers	T.S.4, Near SBI, MIDC-Ph-I, Dombivli (E)-421203

232	Tirupati Processors	B-48, MIDC, Phase I, Dombivli E-421203
233	Triveni Chemicals	D-52, MIDC Phase II, Dombivli (E)-421204
234	Agarwal Fabrics Pvt. Ltd.	Plot No.D-7/10,MIDC, Phase-I,Dombivli (E)
235	Antique Rasayan	Plot No.W-16/A,Ambernath,Ambernath Anand Nagar,addl.
236	Ashish Dye Chem & Tex. Pro. Pvt. Ltd.	Plot No.A-56,B-18,MIDC, Industrial Area, Dombivli (E)
237	Ashlesha Chemicals	Plot No.W-65,MIDC, Industrial Area,Phase-II, Dombivli (E)
238	Avni Textile Mills P. Ltd.	Plot No.4/5,,Morani Compound, Saravali, Bhiwandi
239	Badlapur Textile Industries Pvt. Ltd.	Plot No.B-39,MIDC, Badlapur
240	Bijoy Chemi Products	Gala No.7,Vasant Vaze Estate, Mhatre Compound, Kalyan Shill Road ,Behind Vijay Transport, Near Lalit Weigh Bridge, Manpada, Dombivli (E)
241	Binayak Tex Processors	Plot No.B-35, MIDC, Phase-I, Dombivli (E)
242	Bishen Dyeing, Printing & Weaving Mills	Plot No.C-11, MIDC, Phase-I, Dombivli (E)
243	Bombay Crimpers Pvt. Ltd.	1/5,MIDC Area, Saravali, Kalyan Bhaiwandi Road, Kalyan
244	Bombay Fency Textile Co.	Plot No.C-18, MIDC Estate, Dombivli (E)
245	Chemical Corporation of India	Plot No.W-77/C, Badlapur (E)
246	Chhabria Textile Mills Pvt. Ltd.	Plot No.B-45, MIDC, Phase-II, Dombivli (E)
247	Chirag Textile Processors	Plot No.B-35/2,MIDC , Badlapur
248	Dhanlaxmi Dyeing & Printing Mills Pvt. Ltd.	Plot No.B-40,MIDC, Badlapur
249	Dhanlaxmi Fabrics Ltd.	Bhopar Village, Manpada Road, Dombivli (E)
250	Empress Creation	Plot No.A-98/99,MIDC Phase I,Dombivli (E)
251	Emtex Industries (I) Ltd.	Plot No.F-4,MIDC, Post Badlapur
252	Gopran Chemicals	Plot No.A-101, Addl. MIDC ,Phase-II, Dombivli (E)
253	Graphicks India	Plot No.B-14, MIDC, Ambernath (W)
254	Gurera Synthetics Pvt. Ltd.	Plot No.D-6/2, MIDC, Phase-I, Dombivli (E)
255	Gurudev Textile Processors Pvt.Ltd.	Plot No.B-23, MIDC, Badlapur
256	Just Textile Ltd.	Plot No.K-5,Additional Ambernath,MIDC, Ambernath (E)
257	Kagzi Brothers Pvt. Ltd.	Plot No. C-29,MIDC, Phase-I, Dombivli (E)
258	Kamaldeep Colur Inds. Pvt. Ltd.	Plot No.A-26, MIDC, Phase-II, Dombivali (E)
259	Kedia Processing & Printing Mills	Bhopar Village, Manpada Road, Dombivli (E)
260	Khator Fibre & Fabrics Ltd.	Plot No.12/A, MIDC, Saravali, Kalyan-Bhiwandi Industrial Area, Bhjwandi
261	Kleema Chemicals	Plot No.5,MIDC, Badlapur

262	Krishna Processors & Industries Pvt. Ltd.	Ravindra Corporation Compound, Opp. Tata Power House, Pishavali Village, Post Katemanivali, Kalyan (E)
263	Monogram Textile Processors Pvt. Ltd.	Plot No.B-44, MIDC, Kharvai, Badlapur (E)
264	Montex Fiber Industry Pvt. Ltd.	Plot No.C-2, MIDC, Phase -II, Dombivali
265	Nandan Textiles Pvt. Ltd.	Plot No.B-31/32, MIDC, Badlapur
266	Navbharat Industries	Plot No.A-156, Phase-I, MIDC, Dombivali (E)
267	Navjivan Textile Pvt. Ltd.	Plot No.B-13/2-B-14, MIDC, Phase-I, Dombivali
268	Navrang Dyeing (P) Ltd.	Plot No.A-91/92, MIDC, Phase-I, Dombivli (E)
269	Navratna Processors	Plot No.B-30, MIDC, Phase-I, Dombivli (E)
270	Nirmala Process Pvt. Ltd. (Bombay)	Plot No. W-9, MIDC, Phase-II, Dombivli (E)
271	Nova Speciality Chemicals	Plot No.W-47/B, MIDC, Shirgaon, P.O. Kulgaon, Badlapur (E)
272	Pallavi Enterprises Pvt. Ltd.	Plot No.W-192, Phase-II, MIDC, Dombivli (E)
273	Panna Textile Industries Pvt. Ltd.	Plot No.A-159, MIDC, Phase-I, Dombivli (E)
274	Panna Textile Pvt. Ltd.	Plot No.A-159
275	Parag Textile	Plot No.W-99/A, MIDC, Near Rani Sati Mills, Kulgaon, Badlapur (E)
276	Paresh Chemical Corporation	Plot No.A-33, Phase-II, MIDC, Dombivali
277	Pioneer Dyeing Pvt. Ltd.	Plot No. C-28/2, Road No.5, MIDC, Phase-I, Dombivli (E)
278	Ranisati Fabric Mills Pvt. Ltd.	Plot No.F 1/5, MIDC, Badlapur
279	Ravindra Corporation	13/3, Pisavali Village, Katemanivali, P.O.No.226, Haji Malang Road, Kalyan (E)
280	S.V. Business Pvt. Ltd.	Plot No.F-14, MIDC, Phase-II, Dombivli (E)

Appendix – 8 List of Abbreviations

1	BIFR	Board for Industrial and Financial Reconstruction.
2	CEO	Chief Executive Officer
3	CPCB	Central Pollution Control Board.
4	EOU	Export Oriented Unit.
5	ERP	Enterprise Resource Planning.
6	ERP	Enterprise Resource Planning.
7	FDI	Foreign Direct Investment.
8	HR	Human Resources.
9	ICS	Indian Civil Service.
10	IPS	Indian Police Service.
11	IRMP	Integrated Risk Management Plans.
12	IT	Information Technology.
13	ITES	Information Technology Enabled Services.
14	MCC	Maharashtra Chamber of Commerce.
15	MIDC	Maharashtra Industrial Development Corporation.
16	MPCB	Maharashtra Pollution Control Board.
17	MSFC	Maharashtra State Financial Corporation
18	MSEB	Maharashtra State Electricity Board.
19	MSEDC	Maharashtra State Electricity Distribution Company.
20	MSMED	Micro, Small and Medium Enterprises Development.
21	MSME	Micro, Small and Medium Enterprises.
22	MSSIDC	Maharashtra Small Scale Industries Development Corporation.
23	R & D	Research and Development.
24	SICOM	The State Industrial and Investment Corporation of Maharashtra Limited
25	SEZ	Special Economic Zone.
26	SSI	Small Scale Industries.

Appendix – 9

BIBLIOGRAPHY

1. Alexander (1963): Industrial Estates in India, Asia Publishing House, Mumbai. And Aurangabad.
2. Badri Chatterjee. (2019, August 15). Form Panel to study impact of Ulhas river's untreated waste on environment, says NGT. Hindustan Times, p.4.
3. Badri Chatterjee. (2019, October 20). Rejected twice, air pollution plan for city finally gets nod. Hindustan Times, p.7.
4. Bredo, William (1962): Industrial Estates: Tools For Industrialization, Asia Publishing House, Mumbai.
5. Brief Industrial Profile of Thane District. Mumbai: MSME Development Institute, 2012.
6. Clara Lewis. (2019, August 9). SC Slams MIDC and Civic Body for 'Poor Efforts' to clean Ulhas River. Times of India. p.1.
7. Darade. (2012). MIDC, 50 years Special Issue, Magnetic Maharashtra. Aurangabad: MIDC.
8. Dr. G.Y. Shitole. (1996). The Performance Evaluation of Maharashtra Industrial Development Corporation (PhD thesis). Shivaji University, Kolhapur
9. Dr. M.A. Lokhande (2000), Industrial Development of Jalna District – Problems and Prospects (PhD thesis), Dr B.A.M.U., Aurangabad
10. Dr. Salve Deepak Mahadev. (2011). Industrial Relations-A Way to improve productivity A Study of select industries of MIDC, Dombivli. National Conference on Corporate Social Responsibility-Issues and Challenges, ISBN NO.978-81-8424-681-0, 351-361.
11. https://economictimes.indiatimes.com/articleshow/65103340.cms?from=mdr&utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
12. MIDC Annual Report-2012-13, 2013-14 & 2014-15
13. MIDC, An Outline of Activities, 31 March 1989, Mumbai, p. 3.
14. MIDC, Annual. Report (1969-70), MIDC, Mumbai, p. 8.
15. MIDC, Silver Jubilee Souvenir, Mumbai, 1st August, 1987, p.20.
16. National Industrial Development Corporation Limited. (n.d.). Retrieved 2017, from www.mapsofindia.com
17. New Venture Digest (January/February, 1992), Ed. Ranjit Hira, Volume III, Issue I, New Venture Digest Publication, Nashik
18. Padmaja Singh. (2019, June 13). Four Polluting Factories at Taloja MIDC Close down. Hindustan Times, p.4.
19. Padmaja Sinha. (2019, August 16). Fire? Call us, not cops: Fire Brigade to Taloja MIDC Staff. Hindustan Times, p.4.

20. Padmaja Sinha. (2019, December 5). MIDC to curtail water supply to Taloja Firms. Hindustan Times, p.6.
21. Padmaja Sinha. (2019, October 18). 7 Polluting Industries get closure notice. Hindustan Times, p.7.
22. Padmaja Sinha. (2019, September 22). Holidays to Industries due to water shortage. Hindustan Times, p.4.
23. Padmaja Sinha. (2019, September 22). MIDC pays Rs.8-Cr fine for polluting waterbodies. Hindustan Times, p.4.
24. Padmaja Sinha. (2019, September 27). Residents of Taloja demand cleaner air, plandrive on. Hindustan Times, p.4.
25. Pradeep Gupta. (2020, January 23). 1 Killed ,3 hurt in blast at MIDC Chemical Plant. Times of India. p.1.
26. R & D (Reference & Directory)-MIDC & Assent R & D, Pune, 2015
27. Ram Parmar, (2019, July, 3). 125 Industrial Units flooded at Boisar MIDC . Hindustan Times, p.4.
28. Report of All India Associations of Industries,2013-14
29. Representative, (2018, March,13). Badlapur MIDC releases polluted water in the River. Loksatta. p.3.
30. Representative. (2014, November 21). MIDC Residential and Industrial Division got Relief-Water Bill Rate will reduce by Rs.4 to Rs.5. Loksatta, p.3
31. Representative. (2016, September 15). 20 Thousand Employees are in problem. Loksatta, p.3.
32. Representative. (2017, November 21). Blast in Company in Dombivli MIDC-3 Injured 1, Serious 21. Gujarat Samachar, p.4.
33. Representative. (2018, March, 10). Bad Position of Roads of MIDC-Industrialists suffer due to Water Problem .Loksatta, p.3.
34. Representative. (2018, May 2). MIDC become platform for illegal activities. Loksatta, p.3.
35. Representative. (2019, August,1) Work related with Industrial Stability. Loksatta,p.3.
36. Representative. (2019, August,1). Timely Plan for New Industries. Loksatta, p.1.
37. Representative. (2019, August,18) Theft of Materials at MIDC. Loksatta, p.3.
38. Representative. (2019, February 13). Seventh Pay Scale started for MIDC Employees. Loksatta, p.3.
39. Representative. (2019, July,16). Release of Chemical Water into Nullah. Loksatta,p.3.
40. Representative. (2019, July,26) Water Shortage in Wagle Industrial Estate. Loksatta, p.3.
41. Representative. (2019, July,27) If chemical carrying Vehicle parked on roads than action will be taken. Loksatta, p.3.

42. Representative. (2019, July,9). Hide and Seek of Electricity in Industrial Estate. Loksatta, p.3.
43. Representative. (2019, October,5) Dissatisfied Dombivli MIDC Industrialist started maintenance of roads as well as garbage removal work. Loksatta, p.5.
44. Representative. (2019, September 1). MPCB ranked first in terms of efficiency. Gujarat Samachar, p.4.
45. Representative. (2020, February,25). Boosting Industry Friendly Environment. Loksatta, p.3.
46. Rohit Chandavarkar. (2014, December 5). Maha Industrialists never had it so good. Economic Times, p.8.
47. Sampada (Marathi Monthly) November 1992. Ed. Sathe, M.G., Maratha Chamber of Commerce & Industry, Pune.
48. Sandhya Nair. (2019, May 13). 3 Employees died due to Toxic Gas Leakage. Hindustan Times, p.4.
49. Sanjana Nambiar. (2014, November 29). Pollution Board pulls up 46 Companies for Flouting Norms. Hindustan Times, p.3.
50. Sanjana Nambiar. (2014, November 30). MIDC Residents to protest against Dumping. Hindustan Times, p.5.
51. Sanjana Nambiar. (2014,October 8). Authorities ignoring Dombivli MIDC: Experts. Hindustan Times, p.5.
52. Sanjana Nambiar. (2017, November 16). Civic Bodies prepare plan for river revamp. Hindustan Times, p.4.
53. Sanjana Nambiar. (2018, August 31). Inadequate water supply in MIDC. Hindustan Times, p.4.
54. Sanjana Nambiar. (2019, July,19). Segregation of Effluents will curb pollution. Hindustan Times, p.4.
55. Sanjana Nambiar. (2019, July,27). Rain Water Harvesting prevents flooding in MIDC. Hindustan Times, p.4.
56. Sanjana Nambiar. (2019, November,23). Effluents spill on roads at Dombivli MIDC, residents face health issues. Hindustan Times, p.6.
57. Sanjana Nambiar. (2019, November,24). 6 blasts take place at Dombivli MIDC every year. Hindustan Times, p.5.
58. Sanjana Nambiar. (2020, February,13). Dombivli Factories Under Scanner. Hindustan Times, p.5.
59. Sanjana Nambiar. (2020, March,19). Withdraw Notice, allow us to operate: Dombivli Industries tell authorities. Hindustan Times, p.5.
60. Sanjana Nambiar. (2014, October 16). Dombivli MIDC witnessing rampant encroachment. Hindustan Times, p.5.
61. Shitole, D. Y., & Rajan, L. (2005). Industrial Sickness in Dombivli, Ambernath and Badlapur-MIDC areas in Thane District. Dr. V. N. Bedekar Memorial Research Volume, 127-133.

62. Small Scale Industries, National Monthly for Small Scale Industries, Nov. 1990, Edited by Bhojan Krishnan, Eastern Grade Press, Mumbai
63. Special Supplement, MEDC Monthly Economic Digest, Aug. 1998, Mumbai
64. Subhash Desai. (2017, October 28). MIDC land to be reserved for Business Women. Times of India. p.1.
65. The Maharashtra Industrial Development Act, 1961 (Maharashtra Act No. III of 1962), Director, Government Printing, Stationery and Publications, Maharashtra State, Bombay, (1992) P. 6735
66. United Nations Industrial Development Organization (1967), Policies and Programmes for the Establishment of Industrial Estates, International Symposium on Industrial Development, Athens.

ABOUT THE AUTHORS



Dr. Hasitkumar H. Nagariya

M.Com (Accountancy), MBA (Financial Management), PGDIM, PGDFM, DIM, GDCA&CHM, UGC-NET (Commerce), Ph.D. (Business Administration).

Dr. Hasitkumar Nagariya is a Assistant Professor at BMS department of The SIA College of Higher Education, Dombivili East, Mumbai. He has got Approval from Mumbai University for Graduation and Post Graduation Teaching.

He has been in teaching profession from last 17 Years in Commerce and Management field. He is having good command over Accountancy, Finance, Human Resource Management and other Management related Subjects. He has contributed, presented and published several research papers in the International, National and State level seminars and Conferences as well as in the reputed journals. He is awarded as Best Teacher Award by Rotary Club of Bhiwandi. He has also participated in World Record Event of Magic of Eleven - ABCD International Speakathone (Speaker Marathone around the Globe) by ABCD International Family and Bhabad International Publication on the topic 'Spirituality'.



Dr. Kishor G. Nawale

M.Com. G.D.C&A., SET, Ph. D (Management)

Dr. Kishor Nawale is an Associate Professor of Commerce at Shri Shahu Mandir Mahavidyalaya, Pune. He has been in teaching profession since last 20 years and taught various subjects mainly Accountancy, Business Management, Business Finance, Capital Market and Financial Services, etc at both undergraduate and post graduate courses of Commerce.

He is a recognized Post Graduate teacher and also M.Phil and Ph.D Guide of Savitribai Phule Pune University. Besides this, he is also a head, Ph.D Research Center of Shri Shahu Mandir Mahavidyalaya. He has contributed, presented and published total 56 research papers in the International, National, State and Intercollegiate Level Seminars, Conferences and reputed Journals. He is member of B.O.S. and hold number of other important positions in the different fields.

ABOUT THE BOOK

Maharashtra Industrial Development Corporation is playing a major role in the growth of industrialization in Maharashtra. In fact, it plays role of balanced industrial development in all over Maharashtra. For this purpose, it assists by providing basic facilities to Industries in MIDC area like water supply, roads, streetlights, drainage, plot development, and other infrastructural facilities. It also encourages entrepreneurs in setting up industries at various locations.

Author has written this book which is based on surveys and fact finding enquires of different functioning aspects about MIDC units along with issues of established industries in the MIDC areas which need to be solved by MIDC units. Thus, the present book is written descriptively and also analytically. It is descriptive because thoughts are based on the state of affairs as it exists at present. It is also analytical type because author has used facts or information which was already available and made critical evaluation of the data.

The Present book discusses about the basic issues relating to its functioning and services i.e. issues relating to services and infrastructure facilities. The book will help to understand various problems of industrialists, employees, nearby villagers, etc. Author focused on lacunas in organizational and management aspects of MIDC which will help MIDC to concentrate on lacunas and grow rapidly.

The principal objective of writing this book is to present the in-depth information about the working, performance and contribution of MIDC units in the overall industrial development of Maharashtra in general and Thane District's MIDC units in particular along with issues relating to various services and infrastructure facilities provided by MIDC and to suggest remedies to overcome these issues. Thus the present book is an outcome of study of organizational structure of MIDC, its growth and development, financial aspect with specific indicators, issues with respect to infrastructural services provided by MIDC.



www.empyreanpublishinghouse.com