ABSTRACT

Increasing urbanization is leading to merging of residential localities with industrial locations, thus exposing the individuals to the hazards of industrial environment. Systematic assessment of the effect of industrial pollution on the health and survival of residents certainly goes a long way in monitoring the pollutants and bringing out mitigative measures by the authorities. Health data reveals a higher prevalence of respiratory, eye and skin problems in the industrial areas, as compared to those living in non-industrial areas. Long-term health studies are suggested for proper management of environment and health in these areas by the governmental authorities and the society at large.

KEYWORDS

INTRODUCTION

Industry plays a vital role in the process of economic growth in the world. It enhances the economic welfare of citizens and supplies the material goods they consume. The mode in which society will develop in the future is largely dependent on how the growth which industry generates is distributed. Industrial rebellion and consequent growth of rapid industrialization have caused serious threats to sustainable growth of both developing and developed countries. Nature itself maintains balance but some of the anti-natural activities of human being take changes on the environment. As a result of that whole humanity has to ponder over the stipulation of the environment which is getting worst day by day.

NEED FOR THE STUDY

Pollution is one of the most severe of all environmental problems and, at its nastiest, poses a major threat to the health and well-being of millions of people and the worldwide ecosystem. Industrial pollution and waste pose potential threats to human and ecological health if not properly managed.

STATEMENT OF THE PROBLEM

The people living in the Tirupur and surrounded areas where severely affected by skin disease, Tuberculosis and cancer. When these human related issues increased, the Government had initiated a strict rule to restrict the water pollution. But they had forgotten to implement strict rules on air pollution and noise pollution. The emission of huge carbon monoxide and carbon dioxide from the textile and Hosiery processing units leads to lungs problem among the residence in and around Tirupur district.

OBJECTIVES OF THE STUDY

- To study the industrial pollution and its effect on environment.
- To find out the causes of industrial pollution and its impact on human health.
- To suggest better strategies for reducing industrial pollution in the industrial locality of Tirupur District.

METHODOLOGY

The validity of any research depends on the systematic method of collecting the data, and analyzing the same in a sequential order. In the present study, an extensive use of both primary and secondary data was made.
DATA COLLECTION

Primary Data

Respondents with varying background were selected based on the important aspects of their age, gender, marital status occupation and income etc. They are all situated throughout the Tirupur district.

Secondary Data

Latest information about the industrial pollution was gathered from well-equipped libraries of Bangalore, Chennai and Coimbatore. Internet web resources were also used.

FRAME WORK OF ANALYSIS

The data thus collected were presented in a sample tabular form and sample statistical tools like Percentage, Average, Range, Standard Deviation, Two-way tables and Chi-Square ($\chi^2$) analysis were used appropriately.

REVIEW OF LITERATURE

Rajannan and Kandasamy (1990)\(^1\) have reported the pollution caused by disposal of effluents from a protein industry in river Pykara (Nilgiris) and also reported turbidity and harmfulness, common crop and miral finger lings.

Ramasamy and Rajuguru (1991)\(^2\)have studied the water samples from dug and tube wells near Noyyal river in Tirupur municipal area and observed several parameters exceed the permissible limits.

DATA ANALYSIS AND INTERPRETATION

Table – 1: Residential Area and Level of Pollution Affected the Environment (Chi – Square Test)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Calculated $\chi^2$ Value</th>
<th>Table Value</th>
<th>D.F</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential area</td>
<td>16.071</td>
<td>13.28</td>
<td>4</td>
<td>Significant at 1% level</td>
</tr>
</tbody>
</table>

It is divulged from the table no.9.1 that the calculated Chi-Square value is greater than the table value and the result is significant at 1 % level. Hence, the null hypothesis (H\(_0\)) is rejected and the alternative hypothesis (H\(_1\)) is accepted. The hypothesis, “Residential area of the respondents and their expression on level of pollution affected the environment in industrial locality” are associated, holds good. From the analysis, it is concluded that there is a close relationship between the residential area of the
respondents and their expression on level of pollution affected the environment in industrial locality.

HENRY GARRETT RANKING METHOD

<table>
<thead>
<tr>
<th>S. No</th>
<th>RESPONDERS</th>
<th>Total Score</th>
<th>Mean Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central government</td>
<td>30261</td>
<td>50.435</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>State government</td>
<td>24585</td>
<td>40.975</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Environmental organizations (NGOs)</td>
<td>30662</td>
<td>51.103</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Industry owners</td>
<td>35984</td>
<td>59.973</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Government officials of pollution department</td>
<td>34243</td>
<td>57.072</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>International organizations</td>
<td>29316</td>
<td>48.860</td>
<td>5</td>
</tr>
</tbody>
</table>

It is witnessed from the above table that among the six competent authorities’ common responders for tackling industrial pollution, the “Industry owners” was placed in the first position to solve the pollution problems which was indicated with the Garrett score of 35984 points. It is followed by the “Government officials of pollution department” which was ranked second with the Garrett score of 34243 points. The other responsible persons such as NGOs organizing “Environmental protection organizations” was placed in the third rank with the Garrett score of 30662 points. The competent authorities such as “Central government” and “International organizations” were placed in the fourth and fifth positions with the Garrett scores of 30261 and 29316 points respectively. Lastly, the “State government” was ranked in the sixth position with the Garrett score of 24585 points. From the analysis, it is identified that the industry owners and government officials of pollution department were the main competent authorities in protecting environment.

FINDINGS

The study highlighted the various effects of Industrial Pollution. It can be found that waterborne diseases and vector borne diseases are quite common. This indicates the level of environmental degradation that has occurred in the area.

SUGGESTIONS

Although there are no comprehensive data on waste generation rates, collection coverage, storage, transport, and disposal volumes and practices, the Central Public Health and Environmental Engineering Organization (CPHEEO) estimated as per capita waste generation in Indian cities and towns in the range of 0.2 to 0.6 kilograms per day. To prevent future problems, India must take immediate steps to control waste
generation, to enhance recycling recovery and reuse, and to ensure better collection and sustainable disposal.

CONCLUSION

Indian municipalities have overall responsibility for solid waste management (SWM) in their cities. However, most of them are currently unable to fulfill their duty to ensure environmentally sound and sustainable ways of dealing with waste generation, collection, transport, treatment, and disposal. The failure of municipal solid waste management (MSWM) can result in serious health problems and environmental degradation.

REFERENCES


http://www.who.int/indoorair/en/

http://www.who.int/topics/environmental_health/en/


http://www.pollutionissues.com/Ho-Li/Industry.html