



## Current Situation Of Industrialization And Sustainable Development With Special Reference To Position Of 'Vishwamitri' River In Vadodara

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<p>CC License CC-BY-NC-SA 4.0</p>	<p style="text-align: center;"><b>Abstract</b></p> <p>India is a developing country and that is good that with the growth of our economy people do get work but due to that the harmony between sustainable development and industrialization is being compromised. The 'Vishwamitri' is the most polluted river due to chemicals disposal by the companies. Currently due to industrialisation the harmony between Sustainable development and Industrialisation is being compromised. The VMC and Gujrat Environmental Protection Control Authority should find another way for disposal of chemicals rather than the 'Vishwamitri' river. Labour Law and Environmental Laws are connected to this research.</p> <p><b>Key Words – Sustainable Development, Industrial Growth, Environmental Law, Employment Ratio, Deforestation, Soil erosion, Recycling.</b></p>
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### Introduction

Industrialisation is at its peak that is good too for economic growth of the Country but in the race of achieving goals of Industrialisation does the harmony is maintained with Sustainable development. The pollution level is increasing day by day which has many side effects. The situation of 'Vishwamitri' river is getting worst due to the disposal of untreated chemicals by the companies. The Vadodara Municipal Corporation and Gujrat Pollution Control Board should rescue the situation like The Delhi Government has planned 'Yamuna Project'.

The chemicals released in the river is hazardous for marine life. Sustainable development should not be compromised due to Industrialisation, harmony must be maintained between them. The marine life should not be compromised. Laws connected to environment and wildlife i.e., The Water prevention and control of pollution act 1977, Prevention of Cruelty to Animals Act 1960 and the Wildlife Protection Act 1972 must be implemented properly.

## Meaning of Sustainable Development –

Sustainable Development means to achieve the Economic growth without compromising the needs of future generations as well as without overlooking the Nature.<sup>1</sup>

## Concerned Laws and Penalties –

1) The Water prevention and control of pollution act 1977

Section 42 of the of the Water (Prevention & Control of Pollution) Act, 1974 states penalties and fines for certain acts including pulling down pillars, obstructs any person acting under the orders or direction of the Board, damages any works or property belonging to the Board and Failure to furnish any officer other employee of the Board any information required. The fine and penalty includes **Imprisonment** for a term which may extend up to **three months** or with fine to **Rs. 10,000/-** or both<sup>2</sup>.

2) Prevention of Cruelty to Animals Act 1960 – Penalties - If any person— (a) contravenes any order made by the Committee under section 19; or (b) commits a breach of any condition imposed by the Committee under that section; he shall be punishable with fine which may extend to **two hundred rupees**, and, when the contravention or breach of condition has taken place in any institution, the person in charge of the institution shall be deemed to be guilty of the offence and shall be punishable accordingly<sup>3</sup>.

3) Wildlife Protection Act 1972

4) Hazardous wastes (Management and Handling) Rules 1989

5) The Air (Prevention and Control Pollution) Act 1981 – PENALTIES - Failure to comply with the provisions of section 21 or section 22 or with the directions issued under section 31A.—(1) whoever fails to comply with the provisions of section 21 or section 22 or directions issued under section 31A, shall, in respect of each such failure, be punishable with **imprisonment** for a term which **shall not be less than one year** and

<sup>1</sup> Rogers, P. P., Jalal, K. F., & Boyd, J. A. (2012). An introduction to sustainable development. Routledge.

<sup>2</sup> <https://indiankanoon.org/doc/867156/>

<sup>3</sup> <https://www.indiacode.nic.in/bitstream/>

**six months** but which may extend to **six years** and with **fine**, and in case the failure continues, with an additional fine which may extend to five thousand rupees for every day during which such failure continues after the conviction for the first such failure.

(2) If the failure referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which **shall not be less than two years** but which may extend to **seven years** and with fine.<sup>4</sup>

6) The Atomic Energy Act 1982

7) Central Motor Vehicles Act 1993

8) Environmental Protection 3<sup>rd</sup> Amendment Rules 1993

## Research Questions (RQ)

- While achieving the aim of Industrialisation does the Harmony between Industrialisation and Sustainable Development achieve?
- What is the current situation of 'Vishwamitri' river in Vadodara?

## Objectives –

- ✓ To examine the status of Harmony between Industrialisation and Sustainable Development
- ✓ To study the Laws connected with Water Pollution
- ✓ To find out the sources of water pollution
- ✓ To study and know the implication of Laws
- ✓ To find out that the goals of sustainable developments are achieved or compromised in Vadodara City
- ✓ To find out that the 'Vishwamitri Project' is Saviour or a foe for the nature
- ✓ To study the awareness of Laws in people
- ✓ To find out the solutions

**Hypothesis -**

The “Vishwamitri” River is most polluted river in the city according to the perception of research scholar. It's a seasonal river, although the water remains at times in the river is being polluted by many industries by disposing chemicals without proper treatment which may harm

<sup>4</sup> <https://legislative.gov.in/sites/default/files/A1981-14.pdf>

marine life and the living beings dependent on it. As the nature should not be compromised for the development.

The researcher believes that the companies near Vadodara city do dispose garbage/chemicals without proper treatment which is hazardous for health as well as for nature.

**Utility of the study -**

This study will help to find out the level of pollution and the solutions that may be achieved through the help of modification of Laws present or to find out the awareness and implication level of the same. It will also help to spread awareness about various sources responsible for the water pollution and the resolutions for the same.

If there is a growth of Industries than the standard of Sustainable development is achieved or not does the harmony between these two is maintained.

**Methodology used for data collection: –**

Survey method is used for the research purpose as the qualitative and quantitative as well as primary & secondary data collection has been done for the evaluation of the current situation and Laws applicability.

**Survey**

The researcher has done questionnaire survey with 63 people to give justice to this research. The respondents were lawyers, law students and general public.

- 1) Do you stay near Vishwamitri river?
- 2) Do you agree that the water of Vishwamitri is polluted with various pollutants?
- 3) Do you feel that toxic waste is being dumped in to Vishwamitri secretly?
- 4) Do you know about Vishwamitri Project?
- 5) Do you think that the project may affect the crocodiles living in river?
- 6) Do you think that polluted water of Vishwamitri is hazardous for health?
- 7) Do you feel that diminished flow velocity and truncated river flow and reduce the self-assimilation and self-cleaning capacity of the river?
- 8) Do you think that Vishwamitri is the most polluted river in Vadodara?
- 9) Does the development of urban infrastructure pose threats to water regime in terms of its quantity and quality?
- 10) Do you think that this stretch is affected mainly by the release of partially treated or untreated sewage from Industries?
- 11) Do you know about rainwater harvesting?
- 12) Do you think it may help to solve the issue related to Water?
- 13) Do you think that awareness should be spread to curb the discharge of sewage and chemicals in river?
- 14) Do you know about water prevention and control of pollution act 1977 which is there to prevent and control water pollution?
- 15) If yes, do you think about Water Prevention and Control of Pollution Act 1977 to prevent and control water pollution is followed?
- 16) Do you think that the fine and penalty under The Water Act Prevention and Control of Pollution Act 1977 which includes Imprisonment for a term which may extend up to three months or with fine to Rs 10,000/- or both is justified?
- 17) Do you think that the fine and penalty under Water Prevention and Control of Pollution Act 1977 shall

be increased or modified?

### Interpretation of questionnaire data received

The following is the response given by the respondents to these questions.

1. Do you stay near 'Vishwamitri' river? Yes - 29

No - 34

29 persons out of 61 said that they live near 'Vishwamitri' river.

2. Do you agree that the water of 'Vishwamitri' is polluted with various pollutants? Yes - 63

No - 0

Everyone from the respondents believes that water of 'Vishwamitri' is polluted due to various pollutants.

3. Do you feel that toxic waste is being dumped in to 'Vishwamitri; secretly? Yes - 58

No - 4

May be - 1

Most of the respondents believed that the toxic waste is being dumped secretly in to the 'Vishwamitri'.

4. Do you know about 'Vishwamitri' Project? Yes - 33

No - 28

Almost equal ratio received about the knowledge of 'Vishwamitri' Project by the respondents.

5. Do you think that the Vishwamitri project may affect the crocodiles living in river? Yes - 24

No - 10

May be - 28

As most of the respondents are not aware about the 'Vishwamitri Project' they were not able to give justification to this question. There is **less awareness** present amongst the people about the 'Vishwamitri Project'.

6. Do you think that polluted water of 'Vishwamitri' is hazardous for health? Yes - 62

No - 01

Mostly every respondent believes that water of 'Vishwamitri' is **hazardous** for health.

7. Do you feel that diminished (weakened) flow velocity (speed) and truncated (shorten) river flow and reduce of the self-assimilation and self-cleaning capacity of the river? Yes - 50

No - 12

May be - 01

Most of the respondents who answered believes that due to the weakened speed and shorten river flow area the **self-cleaning capacity** of river is **affected**.

8. Do you think that 'Vishwamitri' is the most polluted river in Vadodara? Yes - 56

No - 07

Most of the respondents thinks that 'Vishwamitri' is the **most polluted** river in Vadodara.

9. Does the development of urban infrastructure pose threats to water regime in terms of its quantity and quality?

Yes - 57

No - 05

May be - 01

Most of the respondents believes that the fast-growing economy may ham the water regime in terms of quality and quantity.

10. Do you think that this stretch is affected mainly by the release of partially treated or untreated sewage from Industries?

Yes - 61

No - 02

May be - 00

Almost all respondents believes that development of urban infrastructure pose threats to water regime in terms of its quantity and quality.

11. Do you know about rainwater harvesting? Yes - 54

No - 09

Mostly all the respondents who answered this survey knows about 'Rain Water Harvesting'.

12. Do you think it may help to solve the issue related to Water? Yes - 60

No - 02

May be - 01

Available online at: <https://jazindia.com>

Most of the respondents felt that 'Rain Water Harvesting' may sort the issues related water at some level.

13. Do you think that awareness should be spread to curb the discharge of sewage and chemicals in river?

Yes - 61

No - 02

Every respondent felt the need of spreading **awareness** about the issues taking place like Chemical disposal by the Companies without proper treatment.

14. Do you know about Water Prevention and Control of Pollution Act 1977 which is there to prevent and control water pollution?

Yes - 31

No - 31

50 - 50 ratio was received from the respondents about the knowledge of the Water Prevention and Control of Pollution Act 1977.

15. If yes, do you think about Water Prevention and Control of Pollution Act 1977 to prevent and control water pollution is followed?

Yes - 17

No - 39

As most of the respondents were not aware about the Act present for the rescue due to **unawareness**, they were unable to answer about its implementation.

16. Do you think that the fine and penalty under The Water Act Prevention and Control of Pollution Act 1977 which includes Imprisonment for a term which may extend up to three months or with fine to Rs 10,000/- or both is justified?

Yes - 35

No - 26

No idea - 01 May be - 01

Mixed response has been received from the respondents about the amendment of the penalty but 35 out of 61 said yes it shall be Amended.

17. Do you think that the fine and penalty under Water Prevention and Control of Pollution Act 1977 shall be increased or modified?

Yes - 46

No - 15

May be - 02

The response received about the amendment of the penalty suggests that the penalty shall be modified or revised as per the current situation.

## Conclusion

The research scholar came to the conclusion after this study that the harmony between Sustainable development and Industrialisation is being compromised. The marine life is vanishing due to the chemical release by the Companies in to the 'Vishwamitri' river. There is less knowledge about the laws to common people. Awareness is required to be spread amongst people about their Rights as well as Duties as the lay man may not know about the same. As it has been felt by most of the respondents that the 'Vishwamitri' is most polluted and may be due to the effluents released by the Companies are the biggest reason behind it, The Government needs to take active actions regarding the same.

The Marsh Crocodile or Mugger (*Crocodyles palustris*) is one of the common and wide spread crocodilian species in India. This species is categorized as nationally 'Vulnerable' subsequent to an assessment following IUCN criteria for threatened species (Molur & Walker 1998) and has the highest legal protection in India as it is listed in Schedule I of the Indian Wildlife (Protection) Act 1972.<sup>5</sup>

## Discussions

There is a lack of awareness amongst the people about the Laws that are present for prevention of water, there is a need of awareness. The Vadodara Municipal Corporation should look in to the situation and find the solution for the achievement of Harmony between Industrialisation and Sustainable development which is the priority for the Nation. Actions must be taken to rescue the marine life the water (Like Delhi

'YAMUNA' Project) may be diverted to some other places on the primacy level.

## ReferencesBooks

1. An Introduction to Sustainable Development by Peter P. Rogers, Kazi F. Jalal, John A. Boyd
2. Copeland, C. (2001). Clean water act. Huntington NY: Nova Science Press.
3. Adler, R. W., Landman, J. C., & Cameron, D. M. (1993). The clean water act 20 years later. Island Press.
4. Jain, S. N. (1984). Water (Prevention and Control of Pollution) Act 1974: Basic Legal Issues.
5. Sikdar, S. K., Drahoš, J., & Drioli, E. (1999). Tools for Pollution Prevention. In Tools and Methods for Pollution Prevention (pp. 1-4). Springer, Dordrecht.
6. Lazarus, R. J. (2008). The making of environmental law. University of Chicago Press.
7. Bell, S., McGillivray, D., & Pedersen, O. (2013). Environmental law. Oxford University Press.
8. Kunte, K. (2008). The Wildlife (Protection) Act and conservation prioritization of butterflies of the Western Ghats, southwestern India. *Current Science*, 729-735.
9. Nanda, V. (1995). International environmental law & policy. In *International Environmental Law & Policy*. Brill Nijhoff.
10. Singh, G., & Singh, G. (2005). Environmental Law in India (p. 5). Macmillan India.

<sup>5</sup> Vyas, R. (2012). Current status of Marsh Crocodiles *Crocodylus palustris* (Reptilia: Crocodylidae) in Vishwamitri River, Vadodara City, Gujarat, India. *Journal of Threatened Taxa*, 4(14), 3333-3341.

## Websites

1. <https://www.indiatoday.in/cities/delhi/story/delhi-yamuna-will-be-cleaned-by-december-2023-says-satyendar-jain->
2. <https://www.ndtv.com/india-news/yamuna-will-be-cleaned-by-december-2023-not-2025-delhi-minister-satyendar-jain->
3. Patel, V., & Parikh, P. (2012). Assessment of soil quality parameters and heavy metal load in Mini River Basin, Vadodara. *International Journal of Environmental Sciences*, 3(1), 562-569.
4. <https://timesofindia.indiatimes.com/city/vadodara/tonnes-of-acid-dumped-into-vishwamitri-river/articleshow/81676011.cms>

## Articles

1. Kothari, N., & Thomas, A. (2015). Reviving Vishwamitri river: an effort to a sustainable impact.
2. Sarthak, K., Ripple, V., Sanyukta, M., & Manthan, T. (2015). A vulnerability assessment of human settlement on river banks: A case study of Vishwamitri River, Vadodara, India. *Journal of Environmental Research and Development*, 9(3), 1015- 1023.
3. Chandam, C. D. (2017). Assessment of Human Health in the Neighbourhood of Chemical and Petrochemical Industries: A Case Study of Vadodara City, Gujarat (Doctoral dissertation, Maharaja Sayajirao University of Baroda (India)).
4. Vyas, R. (2012). Current status of Marsh Crocodiles *Crocodylus palustris* (Reptilia: Crocodylidae) in Vishwamitri River, Vadodara City, Gujarat, India. *Journal of Threatened Taxa*, 4(14), 3333-3341.
5. Vaishali, P., & Punita, P. (2013). Assessment of seasonal variation in water quality of River Mini, at Sindhrot, Vadodara. *International journal of environmental sciences*, 3(5), 1424.
6. Parikh Ankita, N., & Mankodi, P. C. (2012). Limnology of Sama Pond, Vadodara City, Gujarat. *Res. J. Recent Sci*, 1(1), 16-21.
7. Rogers, P. P., Jalal, K. F., & Boyd, J. A. (2012). An introduction to sustainable development. Routledge.
8. Chatterjee, S. (2022). A STUDY OF SUSTAINABLE DEVELOPMENT GOAL NUMBER 11.2: A CASE STUDY OF VADODARA. *Towards Excellence*, 14(1).