Legal Measures for Controlling Pollution: An Empirical Study of Yamuna River Between Delhi to Agra

REGISTRATION NO- 144/2017 5803

REVISED SYNOPSIS

SUBMITTED TO

DR. B. R. AMBEDKAR UNIVERSITY
AGRA

FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
Law
Faculty of law

BY
Chandra Kant Lavania

UNDER THE SUPERVISION OF
Dr. Om Prakash Rai
Agra College, Agra

2014-15
DECLARATION

I, **Chandra Kant Lavania** declare that the work embodied in this revised synopsis is my own bonafide work carried out by me, as per suggestion laid by Research Degree Committee, under the supervision of **Dr. Om Prakash Rai** (Associate Professor), Faculty of Law, Agra College, Agra (Dr. B. R. Ambedkar University, Agra, U.P.) Session 2014-15. The content embodied in this Ph.D. synopsis has not been submitted previously for the award of any Degree or Diploma in this or any other University or Institute.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea in my revised synopsis where other ideas or words have been included; I have adequately cited and referenced the original sources.

Date: 22/2/2018

Place-Agra

Candidate Signature
CERTIFICATE

This is to certify that Chandra Kant Lavania, is a research scholar in law, Registration no- 144/2017 5803, session 2014-15, at Faculty of Law, Agra College, Agra (Dr. B. R. Ambedkar University, Agra, U.P.). He has prepared the revised synopsis on the topic titled “Legal Measures for Controlling Pollution: An Empirical Study of Yamuna River between Delhi to Agra” as per suggestion laid by Research Degree Committee, under my supervision and guidance. This synopsis has embodied original work of the candidate and has not been submitted anywhere else for the award of any other Degree or Diploma in this or any other University or Institute.

I have no objection to guide the candidate on the topic mentioned above.

Head of Department
Dr. Piyush Tyagi
Faculty of Law, Agra College, Agra
(Dr. B. R. Ambedkar University, Agra)

Supervisor
Dr. Om Prakash Rai
(Associate Professor)
Faculty of Law, Agra College, Agra
(Dr. B. R. Ambedkar University, Agra)
CONTENTS

Declaration

Certificate

List of Cases

Introduction......................................................................................1-3

Literature Review.............................................................................3-14

Objectives of Present Work..........................................................14-15

Hypothesis.......................................................................................15

Work Plan and Methodology.........................................................15

Scope of Study................................................................................15-16

Impact and Utility of Proposed Work.............................................16

Chapter Scheme..............................................................................16-17

Bibliography....................................................................................18-22
List of Cases
And Quiet Flows the Mauly Yamuna Vs. Central Pollution Control Board

& Others........................................................................................................12

Manoj Mishra Vs. Union of India & Others.............................................. 12, 13

Mohd. Salim Vs. State of Uttarakhand and Others...............................12

Samir Mehta Vs. Union of India & Others..............................................13

Selaqui International School v. Union of India & Others.......................14

Subash Kumar Vs. State of Bihar..........................................................1

Tapesh Bhardwaj Vs. UP State Pollution Control Board & Others.........12

INTRODUCTION

Every person has right to life under Article 21 of the Constitution of India which include pollution free environment. Environment includes water, air and land and the inter-relationship which exists among and between water, air and land and human beings, other living creatures, plants, micro-organism and property. Water is the most important element for life; a person cannot survive without it. In Past, Most of the civilization flourished along the rivers. Rivers are main source for survival of civilization. In India, Rivers are worshipped and called Mother. The Ganga, the Yamuna, the Godawari, the Narmada etc are main rivers of India. The Yamuna is the longest and the second largest tributary river Ganges in northern India. Originating from the Yamunotri Glacier at a height of 6,387 metres on the south western slopes of Banderpooch peaks in the uppermost region of the Lower Himalayas in Uttarakhand, it travels

2 Sec2(a) of the Environment Protection Act1986.
a total length of 1,376 kilometers and has a drainage system of 366,223 square kilometers (141,399 sq mi), 40.2% of the entire Ganges, before merging with the Ganges at Allahabad. It is the longest river in India, which does not directly flow to the sea\(^3\).

Just like the Ganges, the Yamuna too is highly venerated in Hinduism and worshipped as goddess Yamuna, throughout its course. Lord Krishana did his leelas at the bank of river Yamuna. He made it pollution free by removing the Kaliya Naag. According Hindu Religion, she is the daughter of Sun God, Surya, and sister of Yama, the God of Death, hence also known as Yami and according to popular legends, bathing in its sacred water frees one from the torments of death\(^4\). The Yamuna that is known for giving life is struggling for her existence. Now, it is considered one of the most polluted rivers in India.

It was the Stockholm Conference (1972) which caused the amendment in the Constitution of India and various laws relating to environment were come into existence. The Constitution of India deals with the protection of environment including rivers.\(^5\) Apart from the Constitution of India, the Indian Penal Code1860, the Criminal Procedure Code1973, Torts, the Environment (Protection) Act1986, the Water (Prevention and Control of Pollution) Act1974, the Water (Prevention and Control of Pollution) Cess Act1977, the Water (Prevention and Control of Pollution) Cess (Amendment) Act2003, the Water (Prevention and Control of Pollution) Rules1975, the Water (Prevention and Control of Pollution) Cess Rules1978, the Water (Prevention and Control of Pollution) Rules 2011, the Indian Easement Act1882, The Indian Fisheries Act1897, the North India Canal and Drainage Act1873, the Factories Act1948, other Local Laws etc. deal with the provisions which can be used to curb pollution in Yamuna River. Recently To save Yamuna, the Uttarakhand High Court declared the Yamuna living entities, bestowing on them same legal rights as a person, a move that could help in efforts to clean the pollution-choked rivers. The order also ends the five-day reign of New Zealand’s Whanganui River as the only one in the world to be granted living entity status. The court’s order will allow complaints to be filed in the name of the two rivers, held sacred by millions of Hindus. It also gives the Centre eight weeks to set up boards for cleaning and maintaining the rivers\(^6\). However it has been stayed by the Supreme Court.

The water of Yamuna is of "reasonably good quality" through its length from Yamunotri in the Himalayas to Wazirabad in Delhi, about 375 kilometres, where the discharge of waste water through 15 drains between Wazirabad barrage and Okhla barrage renders the river severely polluted after Wazirabad. There are main sources of pollution in the river, namely households and municipal disposal sites, soil erosion


\(^5\) Articles 21, 48A, 51A(g), 32, 226 of the Constitution of India.

resulting from deforestation occurring to make way for agriculture along with resulting chemical wash-off from fertilizers, herbicides, and pesticides and run-off from commercial activity and industrial sites.\(^7\) A new study has revealed that the Yamuna River in Delhi has almost ‘died’ - and there are no signs of healing as even after treatment, the water remains toxic and unfit for any purpose.

After passing Delhi, it enters in Haryana again, in Faridabad district that is known for Industrialization. It contributes in pollution in already died Yamuna. Then it enters in Palwal district comparative small district create less pollution.

After that it enters in holy city Mathura. In Mathura, the polluted effluents from hundreds of sari-dyeing units discharged in the river have only compounded the problem. After the construction of the Gokul Barrage, the river has distanced itself from the historical Gokul ghats. This obviously causes deep resentment and angry outbursts. "The water is not fit for a holy dip or aachman. Those who dare to enter the Yamuna downstream of Gokul Barrage return complaining of an itching and burning sensation," according to a panda of Mahavan Radhey Guru.\(^8\)

Like others cities, Agra is also contributing in polluting Yamuna river. In Agra untreated waste is being drained in Yamuna. The Yamuna, by the time it flows through Agra, has nearly 50 times more biochemical oxygen demand (BOD) than the permissible limit. The Central Water Commission (CWC) has declared that the river water at Agra is safe neither for irrigation nor for domestic use. Water in the river, now polluted beyond repair, an official said, is also contaminating ground water.\(^9\)

The Condition of Yamuna is miserable and it has almost died. It has convert only in seasonal river. Though the various legal provisions are available and the govt. has spent Rs.4000/- crores on Yamuna Action plan, no improvement is seen. In my research, I shall try to find out solution of following questions.

1. What are the causes of pollution in Yamuna?
2. How Polluted Yamuna does adversely affects human health?
3. What is the role played by Central Government and State Governments in preventing and controlling the problem of pollution in Yamuna?
4. What is the role played by Central Pollution Control Board and State Pollution Control Boards in preventing and controlling the problem of pollution in Yamuna?
5. How much is the Legal Mechanism effective to stop pollution in Yamuna?
6. Is there any need to change/amend in provisions of Law for implementation?

\(^7\) Supra 3
7. What is the role of judiciary/NGT in protecting Yamuna?
8. How much are the common people aware about the Legal Measures for controlling pollution in Yamuna?

**LITERATURE REVIEW**

In a research paper, “**Legal Control of Water Pollution**” T.H. Khan observed that environmental pollution is one of the biggest hazards to human existence. The growth of population with heavy industrialisation and urbanisation has created serious problem of water pollution. He also observed that it is a hopeful sign that there appears to be now an increasing awareness on the parts of the courts to deal with water pollution problem effectively and efficiently. However, he further observed the existence of human existence is in danger due to such problem. It has also increased awareness on the parts of the boards to discard the persuasive approach and pursue their statutory role.\(^{10}\)

In a research paper “**Control Of Water Pollution In India: Judicial Enforcement**”, B. Aruna Venkat observed that In India, the position of water resources is really alarming. The central and the state boards reports for the prevention and control of water pollution show that the major sources of pollution of natural water courses are the discharge of community wastes from human settlements. Most of the community and industrial waste water goes straight into water courses rendering them unfit for most users. She further observed that the Indian judiciary has played admirable role. It has not only provided preventive relief but also remedial justice by giving necessary and appropriate direction to the concerned authorities.\(^{11}\)

In “**Water Quality status of Yamuna**” the project related with monitoring of Yamuna water quality under Yamuna action plan has been assigned to CPCB by National River Conservation Directorate (NRCD), Ministry of Environment & Forests. The present report covers the findings of studies under NRCD project and National Water Quality Monitoring Programme of CPCB. The water quality status of River Yamuna presented in this report is for the period 1999-2005.\(^{12}\)

---


In a research paper, “Water Pollution and the Law”, Shravya K. Reddy observed that the pollution is the biggest threat to existing water resources. This is the single largest cause of denial of access to clean water and has wide ranging side effects on the environment. The problem is more serious in developing nations, because of the presence of large population, poor finances and lack of scientific expertise. He also observed that India has had a rich tradition of legal protection for the natural environment. He also stated that Water Act of 1974, Environment Act, 1986 are playing an important role in the prevention and control of water pollution with the help of judiciary in India.\(^{13}\)

In a research paper, “Legal Regime Governing Water Pollution”, M.D. Krishna observed that India has excellent laws to protect the environment, but what is needed to be implemented, which is the equal responsibility of the industry and the public. The primary objective of any legislation is to ensure social justice and well being through enforcement of certain code of conduct. Legislation for environmental protection is also based on the fact that it is necessary to abide by the requirements to prevent damage to the environment which is a common property.\(^{14}\)

In a research paper, “Water Pollution: Legal Regime and Its Effectiveness”, Javaid Talib observed that the pollution of water by community wastes is growing due to urbanisation and population explosion and sewage system is not able to cope with the increase in the flow and volume of community wastes. He further observe that water is colourless and transparent substance. The polluted water means such water which contains foreign substances in it, which alters physical, chemical or biological properties of water rendering it unfit for use.\(^{15}\)

In “Water Law Reforms-Analysis of Recent Developments”, Phillipe Cullet observed that the regulation of freshwater uses has been a subject of increasing attention from last few years. This is linked to increasing water scarcity and to the adequacy of existing laws and principles in the water sectors. He also observed that the existing lack of a comprehensive and clear legal framework leads to a situation where there is a lack of clarity with regard to the rights and obligations of all concerned individuals and institutions with customary and religious practices.\(^{16}\)

In “The Environmental Risk And Water Pollution: A Review From The River Basins Around The World” Abdul Bashar Bhuiyan and others observed that Polluted Rivers are seriously caused for hampering of the Sustainable Development especially in the context of sustainable development, 


ecosystems change, sustainable livelihoods, land cover, ecosystems, environmental sensitivity, biodiversity and geo diversity as well as social and economic arena in a river basin over the world. The study has drawn Necessary recommendations & policy considerations which would be raised and highlighted for implementation by policy and decision makers throughout the study.\textsuperscript{17}

In “What The Eye Does Not See: The Yamuna in the Imagination of Delhi” Amita Baviskar stated that the shifting visibility of the river Yamuna in the social and ecological imagination of Delhi. It delineates how the river bed has changed from being a neglected “non-place” to prized real estate for private and public corporations. It argues that the transformation of an urban commons into a commodity is not only embedded in processes of political economy, but is also driven by aesthetic sensibilities that shape how ecological landscapes are valued. However, the co modification of the riverbed must confront the fact that the Yamuna is an ecological entity with dynamics that can defy attempts at domestication.\textsuperscript{18}

In “Water Pollution With Special Reference to Pesticide Contamination in India” authors observed River Yamuna is the primary source of drinking water for Delhi, the capital of India, and also for many cities, towns and villages in the neighboring states of Uttar Pradesh, Uttaranchal and Haryana. In the last few decades, however, there has been a serious concern over the deterioration in its water quality. The river has been receiving large amounts of partially treated and untreated wastewater during its course, especially between Wazirabad and Okhla, National Capital Territory (NCT) of Delhi. Pollutants flowing into the river are contributed from the waste of the cities situated along its bank. Once the lifeline of Delhi, Yamuna has now become the most polluted water resource of the country. It now looks like a sewer. From big industries and factories to people living in big colonies, slums and rural areas, all pollute the river with impurity because of untreated water. Increasing pollution of the Yamuna has now become an international issue and a cause of concern for environ-mentalists. \textsuperscript{19}


In “River: Legal and Institutional Issues in India” Analyzing that the state of rivers in India in the context of legal and institutional issues has a huge canvas. The paper starts with the definition of a river and then it goes on to describe the existing legal and institutional measures that affect state of rivers in India. There are a number of laws and related institutions that have remained ineffective and problematic. There is not even one success story of a polluted stretch of river in India being cleaned up due to the efforts of the legal or institutional mechanism of the government. The few success stories have come about though social and community efforts.

In a research paper “Legal Issues of River Pollution through Industrial Effluent” It is stated that Rivers are said to be one of the most precious natural resources. It has great importance in the economy. In spite of having many laws, rivers are getting more and more contaminated day by day through industrial effluents indiscriminately. Industrial units discharge their effluents to the rivers directly and indirectly.

In an article “Issue of Idol Immersion Religion or Pollution?” The author highlights the issue of Idol immersion. The DurgaPooja and Ganesh Chaturthi are the most celebrated function in India. Idol immersion is one of the biggest reasons of pollution in water bodies. The studies of Central Pollution Control Board and scientists shows a sharp rise in the content of heavy metals like Lead, Mercury and Cadmium in Water bodies during Ganesh Chaturthi and Durga Pooja.

The Final Report “Restoration and Conservation of River Yamuna” submitted to NGT. Many PILs were pending before the Courts(including the Supreme Court). The Supreme Court transferred the case Manoj Mishra Vs Union of India & Others (Application No. 6 of 2012) before the Hon’ble National Green Tribunal (NGT). The NGT directed the Ministry of Environment & Forests, Government of India to constitute an Expert Committee to examine various issues related to the dumping of solid wastes, the Riverfront Development Scheme of DDA and the restoration, preservation and beautification of the river Yamuna. The MoEF constituted a three-member Expert Committee. The members of the committee surveyed both banks of the river along the entire 52 km stretch from Palla to Jaitpur. They held discussions with different stakeholders including the Applicant. We also critically examined the

---

documented information available in Reports of the committees and authorities and Court Orders and decisions.\textsuperscript{23}

In the “\textit{Evolution of Water Law and Policy in India}” P. Cullet and J. Gupta states this historical overview of the evolution of Indian water law. It reveals how intricately water law is linked not only with the social, religious, and economic developments, but also with the rise and fall of rulers. They further states there are certain common elements. i.e the common elements of water law—property law, the right to water, restrictions on nuisance, penalties, and monitoring systems—can be found in ancient Hindu water law and all subsequent bodies of law. Within these concepts there might be differences regarding who has ownership, and how rights were acquired. The basic subject matter of water law has remained relatively constant. With conquest, the aim of the rulers was to consolidate control, but not necessarily intervene in the lives in the villages and small cities. Thus, the closer one was to the capital, the more it was likely that rights to water and water ownership rules changed to suit the rulers, but there was a coexistence of systems of water rules from the early Hindu times until 1857. It is only as water became vital to trade, transport, agriculture, and industry, that a comprehensive system to control water works was established.\textsuperscript{24}

In a research paper “\textit{Impact of Industrial Pollution on River Yamuna: A Review}” For controlling industrial pollution in River Yamuna some preventive measures are given:\textsuperscript{25}

\begin{itemize}
\item Industries should have Effluent Treatment Plants (ETP) so that industrial wastes do not find the way to river without treatment. There should be regulatory guidelines for operation and maintenance of ETPs.
\item Treated and untreated effluent should be separated, and recycling and reuse of treated waste water should be encouraged.
\item Systems and procedures need to be strengthened to ensure accurate measurement of both the quantity of treated effluent being discharged as well as its quality with reference to the prescribed parameters.
\end{itemize}


• Prevention of Yamuna River pollution cannot be achieved without people's participation. Therefore it's important to create awareness among the people regarding the way river pollution is occurring and its related consequences. People should be taught various means to be adopted to reduce the increasing pollution levels in the river.

• Steps should be taken from not putting the industrial waste into the river as most of the Industries are on the banks of Yamuna.

• A water abstraction control policy is required to check and control over maximum and wasteful use of river water in industries.

• Water conservation practices through information, education and communication should be implemented with the help of community participation.

In a research paper “Water Policies and Legal Framework in India” Mohd Shawahiq Siddiqui states from the first laws drafted during British India to the revisions and additions post independence. It talks about the provisions in the law as well as the flaws and omissions and suggests an examination of and strengthening of the existing water laws and policies to address the problems of environment, ecology, equity and development. There is a need to devise an alternative socio-legal discourse and practice where the concerned authorities use organic knowledge of water resource management as seriously as the scientific knowledge, and work a consideration of people’s struggles for water resource management as pursuit of human rights.26

In a research paper “Regulating Sewage Pollution of Malaysian Rivers and its Challenges” Mariani Ariffin Siti Norhafizah and M. Sulaiman states many rivers continue to suffer from sewage pollution in Malaysia. This paper provided concise exposition the regulatory framework of sewage pollution control of inland surface waters under the country's existing primary federal environmental legislation. They also discussed in the paper regulators’ perceptions on the main causes that lead to the recurring sewage pollution problem in Malaysian rivers. They highlighted a mixture of causes to the recurring problem of sewage pollution in our rivers including insufficiency of the law and its implementation, outdated technology as well as lack of public awareness. This research gathers essential views from different

authorities that can be of use by policy-makers in the efforts of improving the existing situation of sewage pollution problem in the country.  

In a research paper “Pollution and Conservation of River Ganga” Dr. O.P. Rai discussed the causes of pollution in Ganges in detail. He further elaborates the steps taken by the State Governments and Central Government. He also discussed the role of the Supreme Court in making Ganges pollution free.

In “Water Quality Status in Delhi stretch of River Yamuna” the Yamuna River water quality monitoring in Delhi stretch based on monthly study carried out during the year 2015 and 2016 which shows the pathetic condition of river Yamuna.

In a working paper “Environmental Policy, River Pollution and Infant Health: Evidence from M.C. Mehta vs Union Of India” India’s rivers are heavily polluted. One of the more polluted sites is the city of Kanpur, on the banks of the river Ganga (or Ganges). The river receives large amounts of toxic waste from the city’s domestic and industrial sectors, particularly the tannery industry. We study the impact of a landmark piece of judicially mandated environmental legislation in this city. In September 1987, the Supreme Court of India ordered the tanneries of Kanpur to either clean their waste or shut down. We explore the mortality burden of this ruling in Kanpur district as well as districts downstream, and find a significant drop in both river pollution (as measured by Biochemical Oxygen Demand) and health risk (as measured by infant mortality). We also explore the channels that drive these policy impact and cannot reject that the drop in pollution levels following the Supreme Court decision accounted for the entire observed effect on infant mortality.

In a research paper “Environmental Law: Its Development and Jurisprudence” Madan B. Lokur mentioned that despite expenditure of 87 crores on Yamuna Action Plan I & II, the river continues to remain dirty as it was about a decade ago. The main reason for this state of affair is that there is no effective of monitoring. The result is that orders passed by the court are not implemented and deadlines set in the various order are not met. The second reason is that the focus of the case seems to have got

---


diverted. It is clear from at least three order passed by the SC which go to show that apart from the question of cleaning up the river Yamuna and treating the matter as a purely environmental issue.\(^{31}\)

P.K. Goel in his book “Water pollution- Causes, Effects and Control” provided comprehensive information on the fundamentals and latest developments. In the field of Water Pollution, he is covering almost all the aspect of Water Pollution including Water Resources and General Properties of Water; history Of Water Pollution and Legislation; origin, sources and effects of pollutants etc.\(^{32}\)

Radha Kant Bharti in “Interlinking of Indian Rivers” observed our Indian culture, rivers are worshipped as life-giving mother. For an agricultural country like India, rivers are even more important. Based on a comprehensive research, the book explains the social, economic and commercial significance of linking of rivers in the country. It also discusses National Water Policy and disputes over distribution of water resources, all over the sub-continent of India.\(^{33}\)

David L Haberman in “River of Love in the Age Of Pollution: The Yamuna River of Northern India” introduces Indian river environmentalism, a form of activism that is different in many ways from its western counterpart. "River of Love in an Age of Pollution" concludes with a consideration of the broader implications of the Yamuna's plight and its effect on worldwide efforts to preserve our environment.\(^{34}\)

S. C. Shastri in the chapter Water Pollution of his book “Environmental Law” observed that in old text like Yajurveda, water was regarded as a source of life and grain but in modern times water pollution has assumed alarming dimension in the light of advanced scientific and technological growth.\(^{35}\)

S. Shanthakumar in the chapter Water Pollution of his book “Introduction to Environmental Law” observed that letting out of untreated industrial effluents into rivers, along with disposal of untreated- half treated domestic sewage into water bodies by local bodies and use of pesticides and fertilizers for agricultural purpose are the major causes of water pollution. He further stated that the damage done by water pollution is irreparable and the effects of water pollution may continue for indefinite periods.\(^{36}\)

S.K. Agarwal in his book “Water pollution” observed that pollution of water has emerged as one of the most significant environmental problem. Water pollution is emerging as a threat to all mankind. Gross pollution of water has its origin in urbanization, industrialization and increasing human population. He

---


\(^{34}\) David L Haberman., River of Love in the Age Of Pollution: The Yamuna River of Northern India, University of California Press, 2006.


further observed that wastewater from municipalities are increasing due to expanding population. Only a fraction of the population is served with adequate sewers and wastewater treatment facilities in India.\textsuperscript{37}

In the book “\textit{In Search Of Yamuna Refelection on a River Lost}” The author makes an effort to encapsulate this present conflict. Deconstructing the nature of claims and stakes that riverine communities have on the riverbanks today, it is an attempt to describe the current processes of marginalisation of certain groups, and disengagement with nature for the sake of 'development'. The author makes an attempt to capture this current reality of India by discussing it in the framework of one of its holiest rivers trapped in a modern city. She aimed to respond to a mood of confusion about what Delhi symbolizes today and what the Yamuna has come to mean to this modern, yet historic city. Tracing the river from Yamunotri to Allahabad, the book delves into her cultural essence and the various meanings she symbolizes across time and space.\textsuperscript{38}

In “\textit{Environment Law and Policy}” Aruna Venkata presents a detailed account of various Indian environmental laws and policy documents in a systematic way at the national level against the backdrop of the relevant international legislative and administrative efforts for the protection of global environment. The main focus has been on judicial innovation which has become necessary in the context of apathy on the part of the Executive in the enforcement of environmental laws in the country.\textsuperscript{39}

Dr. J.J. R. Upadhyaya in the chapter “\textit{Water Pollution Control of his book Environmental Law}” Water is the most important element for human life. The crucial problem before us at present is no developing countries can afford measures for control of water pollution but can they afford to nelect them. Pollution of water is one of the major problems facing humanity.\textsuperscript{40}

In the book “\textit{Pollution Impact of River Yamuna Water on Fishery and Public Health}” The author discussed the strategies to give relief from the various problems aroused by the polluted water. The treatment of sewage and industrial wastes, various sanitation schemes, treatment of sewage effluents, construction of electric crematorium at various localities near Yamuna and the most important Yamuna Action Plan are discussed.\textsuperscript{41}

In the book “\textit{Living Rivers, Dying Rivers}” The author observed that the Yamuna, the river of India’s capital, are mortally sick. many other rivers in the country are declining or dying. it is difficult to find living, healthy rivers, and even the few that exist are under threat of decline. heavy pollution is a major cause of this situation, but there are also other factors, such as excessive abstractions or diversions of

waters, and violence to their physical components such as the river-bed, banks, floodplains, and so on. underlying such abuses is a poor understanding of what constitutes a river.\textsuperscript{42}

In the case \textbf{Mohd. Salim vs. State of Uttarakhnad and Others}\textsuperscript{43} Dated 20/3/2017 The Uttarakhand high court declared the Ganga and Yamuna living entities, bestowing on them same legal rights as a person, a move that could help in efforts to clean the pollution-choked rivers.

In the matter of \textbf{Tapesh Bhardwaj Vs UP State Pollution Control Board & Others}\textsuperscript{44} dated 13/04/2017 regarding dumping of garbage on the river bed of River Yamuna by Mathura Cantonment Board. The oxygen level in the River Yamuna in Mathura is close to zero and the landfill site created by the Cantonment Board is a huge contributor to this. The Board is causing destruction of the river bed and the flood plain of River Yamuna.

NGT directs Uttar Pradesh Pollution Control Board to pay Environmental Compensation of Rs. 5 Lakhs and Mathura Cantonment Board shall pay Environmental Compensation of Rs. 10 Lakhs.

Order dated 18/07/2017 regarding dumping of garbage on the river bed of River Yamuna by Mathura Cantonment Board, Uttar Pradesh. NGT directs that the sum of Rs. 10 lakhs that the Cantonment Board is directed to pay to Central Pollution Control Board shall be paid to CPCB, however, the Cantonment Board will submit its proposal along with its payment, the manner in which they wish to develop the dumping site maintained by it.\textsuperscript{45}

A PIL, instituted by the Supreme Court 23 years ago on its own after taking note of a newspaper report (And Quiet Flows Maili Yamuna) was transferred to the National Green Tribunal (NGT) on the ground that there cannot be "parallel proceedings" on the same issue. In the matter of News Item Published in Hindustan Times \textbf{“And Quiet Flows the Maili Yamuna” Vs. Central Pollution Control Board & Others}\textsuperscript{46} dated 19/05/2017 regarding Yamuna pollution. NGT directs the State of Uttar Pradesh, Uttar Pradesh Jal Nigam, Namami Gange (Ministry of Water Resources) and State of Haryana to submit their proposed plan for prevention, control, rejuvenation and restoration of river Yamuna in this stretch. The

plan should be submitted district wise keeping in view the drains that join river Yamuna. Court also directs the State of Haryana and Himachal Pradesh Pollution Control Board to jointly conduct a study of water quality, flow and other incidental aspects of river Yamuna at the point where it enters Haryana and submit that Report within four weeks from today along with the list of industries which are located on the catchment area of river Yamuna.

In the matter of **Manoj Mishra Vs. Union of India & Others** dated 19/05/2017 regarding pollution of river Yamuna generated in the area of Delhi. Tribunal is informed that within a period of one month the civil construction and mechanical work of STPs, sewage and connectivity would start and the same would be completed by May, 2019. NGT compliments the various stakeholders i.e. Ministry of Water Resources, Ministry of Environment, Forest and Climate Change, Ministry of Urban Development, Delhi Development Authority, National Mission for Clean Ganga and Delhi Jal Board along with NCT, Delhi who have come together and made efforts to ensure commencement of this work, though it has taken more than 2 years to finalize and commence execution of the project.

NGT directs that no waste of any kind and open defecation will be permitted in around in any water body and on the flood plain of river Yamuna. The authorities including police would take stringent action against the defaulting persons and every defaulter would be liable to pay environmental compensation of Rs. 5,000/- per incident in addition to liability on such person that may accrue under any other laws which was invoked by the concerned authorities.

In the matter of **Samir Mehta Vs. Union of India & Othrs.** dated 23/05/2017 regarding open defecation and waste dumping on Yamuna floodplains.

NGT directs that the Central Pollution Control Board and the various State Boards in consultation with the Municipal Corporations and the Local Authorities to identify the villages near the industrial clusters or even otherwise, where in pursuit of corporate social responsibility, the *industries paying environmental compensation are directed to construct toilets* which are in villages nearby and locality specific.

NGT also directs the South Delhi Municipal Corporation, East Delhi Municipal Corporation and North Delhi Municipal Corporation to submit list of the unauthorized colonies where there is shortage of

---


toilets and people are indulging in open defecation. They will identify places particularly adjacent to railway tracks and flood plains of river Yamuna where such toilets can be provided to ensure that there is no open defecation in these areas.

In the matter of Selaqui International School Vs. Union of India & Others\(^49\) dated 25/07/2017 regarding discharge of toxic waste by the factories at the Pharma City, Selaqui, Dehradun into River Yamuna. National Green Tribunal directs the Uttarakhand Pollution Control Board to submit affidavit stating the time period from which the industries have been operating without consent of the Board. The Uttarakhand Pollution Control Board and the representative of the Central Pollution Control Board shall conduct a joint inspection of all these industries and submit a complete and comprehensive report before the Tribunal within four weeks.

**OBJECTIVES OF PROPOSED WORK:**

Water is the most significant element in the biosphere because on one hand it is vital for the survival of all forms of life and on the other hand it helps in the movement, circulation and cycling of nutrients in the biosphere. No life is possible on this planet without water. It supports life system and its shortage has been serious concern of human beings. Rivers are the main source of water and these are getting contaminated.

After independence, our country is also passing through an era of industrial revolution and it is aggravated the problem of pollution in rivers. The Yamuna is one of the worst effected rivers by pollution. It is unfortunate that despite effective orders and directions issued by the courts from time to time, not much heed is being paid in this aspect and water pollution is continuing unabated. The problem of water pollution in the Yamuna is very serious in its nature. Accordingly, the objectives of the study are:

1. To study the efficacy of constitutional and statutory provisions regarding prevention and control of pollution in Yamuna River.
2. To examine the role/contribution of judiciary and NGT regarding prevention and control of pollution in Yamuna River.
3. To examine the role/contribution of Central and State Governments, Central and State Pollution Control Boards regarding prevention and control of pollution in Yamuna River.

4. To examine the steps taken under Yamuna Action Plan.
5. To examine the role/contribution of NGOs and Individuals regarding prevention and control of pollution in Yamuna.
6. To study/examine the reasons, causes and effects of pollution between Delhi and Agra and what efforts, if any are being taken to prevent and control the same.

**HYPOTHESIS**

Despite having constitutional and statutory provisions for the prevention and control of water pollution and the contribution made by judiciary in this regard, the problem of pollution in Yamuna River is getting worse day by day. The hypotheses of the study are:

1. The pollution in Yamuna River varies due to growing population, industrialization, sewage and excessive use of pesticides.
2. Legal provisions, related to the prevention and control of pollution in Yamuna River, are effectively implemented.
3. The pollution in Yamuna River varies due to coordination of the implementing agencies.
4. There is adequate awareness among the people regarding legal measures used for prevention and control of pollution in Yamuna.

**POPULATION, WORK PLAN AND METHODOLOGY**

The study is empirical in nature. Universe of the study is Delhi, Faridabad, Palwal, Mathura, and Agra. Questionnaires will be filled from each above-mentioned district using stratified random sampling technique. Historical, analytical and descriptive methods would be used where needed. Information will be collected from both primary and secondary sources. The primary sources include interviews. Both questionnaire and scheduled methods would be used for collecting requisite information. Observation method will also be employed to get information. Secondary Information will been collected from water pollution related Acts, judicial decisions, Supreme Court guidelines, books, journals, articles, newspapers and Internet etc.
SCOPES OF THE STUDY

The study is confined to the laws relating to pollution in Yamuna with the insight into the provisions contained in the Constitution of India and International law. The scope of research shall also include:

1. The magnitude of the pollution in Yamuna River between Delhi to Agra and its effects on the environment.
2. The Role of Judiciary, National Green Tribunal to prevent and control of pollution in Yamuna River.
3. The Role of State and Central Government, State Pollution Control Boards and Central Pollution Control Board, Local Bodies etc. to deal with pollution in Yamuna River.
5. The contribution of NGOs and Individual to deal with this problem.

IMPACT AND UTILITY OF PROPOSED WORK

As it is well known fact, Yamuna, one of the longest of river of North India, is on the verge of dying and it has become one of the most polluted rivers. The Governments have taken a lot of steps i.e. Yamuna Action Plan and spent more than Rs 4000 Crores in cleaning Yamuna. There are also a lot of provisions in law to protect Yamuna from pollution. In spite of all the laws and executive actions, the condition of Yamuna is still miserable.

In my study, I will analysis the provisions of law and steps taken by executive. By making empirical study between Delhi to Agra, I shall try to find out causes and effects of pollution in Yamuna. I shall also find out implementation, efficiency and loop holes of laws and executive actions. After reaching conclusions, I shall make some suggestion that may be helpful to tackle the problem of Yamuna Pollution.

CHAPTER SCHEME

Chapter First-INTRODUCTION: The chapter will be introductory in nature. The chapter will include the meaning and definition of pollution, water pollution. The chapter will also include the detailed Information about Yamuna on the basis of available sources such as magnitude of pollution in Yamuna, causes of pollution in Yamuna, its effects etc.

The Chapter will also discuss the objectives of studies, hypothesis, review of literature, scope of study, research methodology etc.
Chapter Second- MEASURES UNDER INTERNATIONAL LAW: The Chapter will discuss the provisions of law regarding water pollution at International Scenario. It will also include the incident of river pollution of other countries.

Chapter Third-PROVISIONS / MEASURES UNDER INDIAN LAW: The Chapter will discuss the provisions of laws which are relevant in eliminating the river pollution. It will include: (a) Constitution Law and Judicial Response (b) Statutory Laws such as provisions of the Indian Penal Code1860, the Criminal Procedure Code1973, Torts, the Environment(Protection) Act1986, the Water (Prevention and Control of Pollution) Act1974, the Water (Prevention and Control of Pollution) Cess Act1977, the Water (Prevention and Control of Pollution) Cess (Amendment) Act2003, the Water (Prevention and Control of Pollution) Rules1975, the Water (Prevention and Control of Pollution) Cess Rules1978, the Water (Prevention and Control of Pollution) Amendment Rules 2011, the Factory Act 1948 the Indian Easement Act1882, The Indian Fisheries Act1897, the North India Canal and Drainage Act1873, other Local Laws etc.

Chapter Fourth-MEASURES OF EXECUTIVE AND NGO: The Chapter will discuss (a) Role of Central Govt. (b) Role of State Government (c) Role of Central Board (d) Role of State Board (e) Yamuna Action Plan (f) Role of Individual and NGO.

Chapter Fifth-MEASURES OF NATIONAL GREEN TRIBUNAL: The Chapter will discuss the provisions of law and active role played by the NGT in prevention and controlling the pollution in Yamuna.

Chapter Sixth-EMPIRICAL STUDY ON YAMUNA POLLUTION: The Chapter will have empirical study. The chapter will be divided in to 5 parts: (A) Empirical Study about Delhi (B) Empirical Study about Faridabad (C) Empirical Study about Palwal (D) Empirical Study about Mathura (E) Empirical Study about Agra

Chapter Seventh- CONCLUSIONS AND SUGGESTIONS: The Chapter will discuss the conclusions and suggestions.
BIBLIOGRAPHY

(A) Articles/ Research Paper


[10]. Jumbe A S and others “Legal Aspects of Surface Water Pollution in India: An Overview of Existing Statutory Frameworks in Management of Lake Ecosystem” available at


available at http://digitalcommons.law.byu.edu/cgi/viewcontent.cgi?article=1194&context=jpl
visited on 23/7/2017.

[24].Thakkar Himanshu, “River: Legal and Institutional Issues in India” available at

[25].Venkat, B.A. “Control Of Water Pollution in India: Judicial Enforcement”, Delhi Law Review,

(B) Books


[28].Goel, P.K., Water Pollution-Causes, Effects and Control, New Age International (P) Limited
Publishers, Delhi, 2006.

[29].Haberman, David L., River of Love in the Age Of Pollution: The Yamuna River of Northen India,


[31].Jain, Sarandha, In Search Of Yamuna Reflection on a River Lost, Vitasta Publishing Pvt.Ltd,
2011.

[32].Kant, Rajni and Keshav Kant, Water Pollution :Management, Control And Treatment, New Age

[33].Rana K. S., Pollution Impact of River Yamuna Water on Fishery and Public Health, LAP

[34].Shanthakumar, S Introduction to Environmental Law, Wadhwa and Company, Nagpur, Second


(C) Case Laws

[38].And Quiet Flows the Main Yamuna” Vs. Central Pollution Control Board & Others
http://www.indiaenvironmentportal.org.in/content/442942/order-of-the-national-green-tribunal-
[39]. Manoj Mishra Vs. Union of India & Others

[40]. Mohd. Salim vs. State of Uttarakhand and Others Writ Petition No.126 of 2014

[41]. Samir Mehta Vs. Union of India & Othrs

[42]. Selaqui International School Vs. Union of India & Others


[44]. Tapesh Bhardwaj Vs UP State Pollution Control Board & Others

(D) Statutes

[45]. The Constitution of India, 1950
[46]. The Indian Penal Code, 1860
[47]. The Criminal Procedure Code, 1973
[48]. The Environment Protection Act, 1986
[49]. The Water (Prevention and Control of Pollution) Act, 1974
[50]. The Water (Prevention and Control of Pollution) Cess Act, 1977
[51]. The Water (Prevention and Control of Pollution) Cess (Amendment) Act, 2003
[52]. The Water (Prevention and Control of Pollution) Rule 1975
[53]. Water (Prevention and Control of Pollution) Cess Rule 1975
[54]. Water (Prevention and Control of Pollution) Rule 2011
[55]. The Factories Act, 1948

(E) Miscellaneous


**Details of Candidate**
1. Title of Synopsis: Legal Measures For Controlling Pollution: An Empirical Study of Yamuna River Between Delhi to Agra.

2. Name of Scholar: Chandra Kant Lavania

3. Subject / Faculty: Law

4. Registration No.: 144/2017 5803

5. Enrolment No.: 145188

6. Name of Supervisor: Dr. Om Prakash Rai

7. Designation: Associate Professor, Faculty of Law, Agra College, Agra

8. Name of Research Centre: Faculty of Law, Agra College, Agra

9. Total No. of pages: 22

10. Email ID: lavaniack@gmail.com

11. Mobile No.: 9690051952

12. Postal Address: 16 A Dashrath Kunj A West Arjun Nagar Agra -282001