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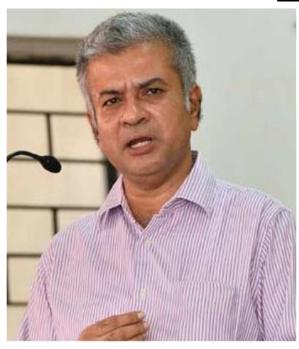
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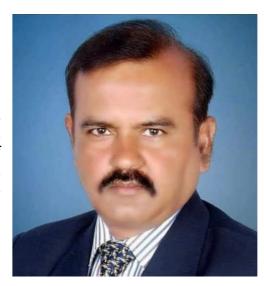


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ABOUT US

WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

"URBANIZATION AND IT'S IMPACT ON ENVIRONMENT IN INDIA: A LEGAL PERSPECTIVE"

AUTHORED BY - ADV. DEEPSHIKHA RANJAN

Abstract

Urbanization is a process in which people migrate from rural areas to urban areas. This usually occurs in a developing country. People migrate in order to get better opportunities and lifestyle. Migration from one to place to another usually leads to concentrated population in a small area and this adversely affects the environment. This article illustrates the impact of urbanization on the environment and the significance of The Environment (Protection) Act, in safeguarding the environment that is crucial for the health of both individuals and the Earth.

I. Introduction

Urbanization¹ signifies the growth of cities in terms of physical, demographic, and economic factors. It also suggests the aggregation of individuals and social activities into settlement patterns known for their high-density land use. The exploration of urban areas and urbanization boasts a rich heritage across the arts, humanities, and various social and natural sciences. Contemporary theories of urbanization took shape in Europe during the 18th and 19th centuries as the industrial revolution altered work, settlement, and lifestyle patterns across the continent. A key area of discussion in urban studies centres around conceptual issues and poses questions about the timing, location, reasons, and mechanisms behind urbanization. A prevalent trend in less developed nations is the emergence of immense cities or primate cities that significantly outnumber other cities in population size within a specific geographical area, such as a region or country.

The rapid and uncontrolled urbanization in India has led to significant environmental degradation, resulting in various issues such as land insecurity, declining water quality, excessive air pollution, noise disturbances, and waste disposal challenges. This study focuses

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¹ https://doi.org/10.1002/9781119429333.ch16

on the impacts of urbanization on essential environmental elements, particularly climate, the biosphere, land, and water resources. A case study examining urbanization in India, especially in metropolitan areas, has been conducted to identify the underlying causes of environmental damage linked to urban growth and to suggest preventive measures to mitigate these effects. While it may not be feasible to halt urbanization entirely, it is crucial to guide it along a path that minimizes its environmental impact.

II. Impact of Urbanisation on the environment

Legally speaking, India's urbanization has a significant negative impact on the environment due to widespread pollution, deforestation, and resource depletion. These factors result in problems with waste management, deterioration of air and water quality, and loss of biodiversity. These issues are partially regulated by environmental laws, which frequently cannot keep up with the country's rapid urban development. This underscores the need for updated legislation and stricter enforcement to address these environmental concerns. Land use conversion, inadequate waste disposal infrastructure, and a lack of regulations on industrial emissions in urban areas are among the main areas of concern.

It seems likely that the majority of the significant environmental issues of the coming century will arise from the continuance and intensification of current issues that do not now receive enough political attention. Many governments either fail to recognize the problems or do nothing about them even when they are identified. Deforestation, population development, freshwater pollution, climate change, and freshwater scarcity are the most recent problems. It is difficult to characterize the interactions between these issues since they are so complicated. Problems must be examined through the lens of the social, economic, and cultural system. Even while we are now more aware of the linkages between environmental challenges, we still don't have precise information about how they are related, how much they interact, or what the best solutions are.

A few significant environmental issues are covered below:

i. Air, Water and Noise Pollution:

Urban areas are significant contributors to pollution, affecting air, water, and soil. The high density of vehicles, industrial operations, and energy production in cities leads to substantial emissions of pollutants, including carbon dioxide, methane, and nitrogen

oxides, which are responsible for climate change and declining air quality. Water bodies situated near urban environments frequently suffer from pollution due to industrial discharges, sewage, and urban runoff, harming aquatic ecosystems and posing health dangers to humans. Contaminated soil resulting from industrial and residential waste further undermines land productivity and the health of ecosystems. Urban development can result in noise pollution due to the high density of individuals, vehicles, construction activities, and industrial operations in urban areas which further leads to loss of hearing, tension, loss of cognitive abilities and majorly affects the life of biodiversity.

ii. Global Warming:

Global warming poses a serious issue as it brings about substantial shifts in the Earth's climate, resulting in more frequent and intense weather phenomena such as heatwaves, droughts, floods, and more powerful storms, which can interfere with ecosystems, harm infrastructure, jeopardize food security, force people to relocate, and adversely affect human health, especially among at-risk populations; increasing sea levels also present a significant danger to coastal areas due to the rising ocean temperatures linked to global warming.

iii. Waste management issues:

Densely populated cities utilize significant amounts of resources while generating various types of solid waste. This waste encompasses municipal waste, industrial waste, hazardous waste, and more. As the population grows, the amount of solid waste produced rises, leading to unpleasant odors and toxic gases that create breeding grounds for disease-carrying vectors. The gases emitted contribute to air pollution, while runoff from the waste leads to water contamination, and the vectors are responsible for spreading various diseases.

Due to a swift rise in both production and consumption, urban areas frequently produce solid materials, resulting in a significant uptick in waste volumes stemming from various sources, including industrial, commercial, domestic, and institutional waste. Waste generated by a typical urban community includes garbage, debris from construction and demolition, fallen leaves, and hazardous materials, among others². According to a

² (Rajput et al. 2009).

survey by the FICCI³ smaller cities like Shimla produce 65 TPD⁴ while Delhi produces 6800 TPD. This information indicates that cities with a higher rate of urbanization also exhibit higher waste generation rates, in contrast to cities with lower urbanization rates. This establishes a direct correlation between urbanization and waste generation⁵. The escalating issue of waste generation contributes to environmental degradation.

iv. Ecological disruption

The process of urbanization alters natural ecosystems by transforming landscapes into cities. Green areas, forests, and wetlands are frequently removed to accommodate housing, infrastructure, and commercial developments, resulting in habitat destruction and a decline in biodiversity. The fragmentation of habitats interferes with the natural functions of ecosystems, affecting both plants and animals. Urban environments also create obstacles that hinder wildlife movement and migration, leading to species isolation and decreased genetic diversity. The overall impact is a chain reaction of disruptions that can jeopardize the stability and resilience of ecosystems. Natural ecosystems are diminished⁶ and fragmented as a result of urbanization, which harms biodiversity. This may result in species extinction, altered ecological relationships, and the formation of obstacles that stop creatures from migrating.

Due to a number of issues linked to growing urbanization and environmental degradation, India's urban biodiversity is significantly declining. Once known as "India's Garden City," Bengaluru is now turning into a concrete jungle. Agricultural fields, orchards, and urban woodlands have all been destroyed as a result of the city's change. Concrete structures have taken their place, negatively affecting the local ecology. Cities like Delhi, Hyderabad, and Mumbai have had comparable instances of urban biodiversity loss.

v. Risks associated with Technology:

Technological risks brought on by urbanization include infrastructural failures, chemical spills, and industrial accidents. Such catastrophes are more likely to occur in metropolitan areas due to the high density of industrial operations and the widespread

⁵ (Vij, 2012).

³ Federation of Indian Chambers of Commerce & Industry) (2009)

⁴ tons per day

⁶ The effects of urbanisation on ecological interactions (Panagiotis Theodorou)

usage of hazardous materials. These technical risks may have detrimental effects on the environment and human health. For example, industrial spills have the potential to contaminate soil and water, causing long-term ecological harm and presenting serious health hazards to urban dwellers. To control these hazards, effective regulation and monitoring are crucial.

vi. Consumption of resources

Due to the rising population in urban areas, because of migration from one place to another, cities need a lot of natural resources, such as raw materials, energy, and water. Therefore, the consumption of resources in urban areas is relatively more. Significant resource inputs are needed for the creation and upkeep of metropolitan infrastructure, including roads, buildings, and utilities. Natural ecosystems and resource reserves are severely strained by this unsustainable consumption behaviour. Overexploitation and unsustainable extraction methods are frequently caused by the increasing demand for resources. The growing demands of urban populations, in particular, put a strain on water supplies, leading to the depletion of aquifers, rivers, and lakes, which can have a significant negative influence on the environment.

vii. Risk and Diseases due to Human Habits

Infectious diseases spread quickly in urban environments due to their high population density and connection. Urbanization increases the spread of infections by creating conditions where many people live close to one another. In many metropolitan settings, the spread of infectious diseases is made worse by poor housing, poor sanitation, and restricted access to medical care. Cities' susceptibilities to worldwide health emergencies and the significance of efficient public health infrastructure and policies have been brought to light by the COVID- 19 pandemic⁷.

Human environments are altered by urbanization, which has an impact on city people' well-being and quality of life. Cities give many opportunities, but they also pose problems like overcrowding, subpar housing, and overburdened public services. In cities people are more used to living a luxurious life, they have means to procure facilities in their doorsteps be it food, vehicle, grocery etc. without knowing that their habits have an adverse impact on the environment. It increases the rate of air, water

⁷ https://www.who.int/health-topics/coronavirus#tab=tab 1

and soil pollution, it also leads to rise of solid waste. Urban environment density and design have an impact on social relationships, physical health, and mental health. Cities must prioritize inclusive urban design that supports green spaces, reasonably priced housing, and easily accessible public services in order to improve the quality of urban life and create sustainable human habitats.

III. History and Evolution of The Environmental (Protection) Act, 1986⁸

The purpose of the 1986 act was to give provisions for environmental protection and enhancement. It gives the Central Government the authority [under section 3(3)] to create authorities tasked with preventing pollution in the environment in all of its manifestations and addressing regionally specific environmental issues. In 1991, the Act was last modified. The Bhopal Gas Disaster directly led to the creation of the Act. In addition to the relationships that occur between water, air, land, people, other living things, plants, microorganisms, and property, the term "environment" also refers to each of these elements. All living things, including plants and microorganisms, as well as their interactions with water, air, and land, are included in the concept of environment since it is so inclusive.

The Central Government now has enormous authority to develop and carry out a nationwide program for the prevention, control, and mitigation of environmental pollution in India thanks to this Act. It gives the government the authority to set rules for controlling industrial areas, develop protocols for handling hazardous materials, maintain environmental quality, create safety measures to stop mishaps and the release of pollutants into the environment, and gather and share data about environmental pollution, among other things.

Importance of Environment Protection Law:

Although there are no explicit provisions in the Indian Constitution pertaining to environmental preservation and conservation, the right to a clean and healthy environment is recognized as a basic right under Article 21 of the Constitution. Furthermore, through a number of Acts, including the Wildlife (Protection) Act of 1972, the Water (Prevention and Control of Pollution) Act of 1974⁹, the Air (Prevention and Control of Pollution) Act of 1981¹⁰, the

⁸ Law Of Environment In India: Problems And Challenges In Its Enforcement by Ashish Verma

⁹ https://www.indiacode.nic.in/bitstream/123456789/15429/1/the_water_%28prevention_and_control_of_pol_lution%29_act%2C_1974.pdf

¹⁰https://www.indiacode.nic.in/bitstream/123456789/12658/1/the air (prevention and control of pollution)_a ct_1981_no._14_of_1981_date_29.03.1981.pdf

Environment (Protection) Act of 1986¹¹, the National Green Tribunal Act of 2010¹², and others, as well as significant rulings, the Constitution demonstrates its intention to guarantee a safe and clean-living environment.

i. To Safeguards the Environment

Laws pertaining to environmental protection work to safeguard the land, water, and air, all of which are necessary for life. Local, regional, and federal governments establish the regulatory frameworks that govern environmental law. The laws, rules, permits, and policies that control environmental management and conservation initiatives are all included in these frameworks.

ii. To Reduces the effects of climate change:

By protecting ecosystems and biodiversity, environmental protection laws can help slow down the effects of climate change.

iii. To Encourages wellbeing:

Laws protecting the environment contribute to the welfare of present and future generations.

iv. Environmental Impact Assessment (EIA):

An essential part of many environmental legislation is the EIA. By balancing prospective impacts against expected benefits, they assess the possible environmental repercussions of proposed projects, assisting decision-makers in making well-informed decisions.

IV. Recent and Important Case Laws relating to the Law of Environment in India.

i. Case of Yogendera Mohan Sengupta13

This case concerned the Shimla Development Plan, 2041, a development plan that the National Green Tribunal 'stayed' because of environmental concerns. In this instance, the SC underlined the necessity of striking a balance between environmental ecosystem growth and preservation. It emphasized how important forest conservation is to preserving the ecosystem. The bench went on to say, "It provides livelihoods and processes the soil and water cycle." As a result, the state should give proper

12 https://www.indiacode.nic.in/bitstream/123456789/2025/1/AA2010 19green.pdf

¹¹ https://www.indiacode.nic.in/bitstream/123456789/4316/1/ep_act_1986.pdf

¹³ The State of Himachal Pradesh and Others vs. Yogendera Mohan Sengupta and Another (January 11, 2024)

consideration to the preservation and sustainable management of forests when developing legislation. The top court ruled that the development had been completed after taking into account the opinions of numerous experts in disciplines such as urban planning and the environment.

It went on to say, "There are enough safeguards to balance the need for development with the need to address ecological and environmental concerns." It is always possible for any citizen to oppose an independent provision before the proper forum if they believe it to be harmful to the environment or ecosystem. It is approved for the appellant, the State of Himachal Pradesh, and its agencies to move on with the development plan's implementation.

ii. In the Case of In Re: Godavarman14

The Supreme Court in this criticized the former Uttarakhand Forest Minister and Divisional Forest Officer for unlawful construction and deforestation in Jim Corbett National Park. It remarked, "This represents a quintessential example of how politicians and bureaucrats have disregarded the public trust doctrine... This case illustrates how a collusion between a Politician and a Forest Officer has led to significant environmental harm for political and financial gain. The recommendations from senior officials in the Forest Department, the Vigilance Department, and the Police Department, which opposed his appointment to a sensitive role, have been completely overlooked. We are astonished by the boldness displayed by the former Hon'ble Forest Minister and Mr. Kishan Chand, the DFO, in completely dismissing statutory regulations. Nonetheless, as the matter is currently under investigation by the CBI, we will refrain from making any further comments on this issue." The judgment's key point mentions that "It is widely acknowledged that a Tiger's presence in a forest indicates the health of the ecosystem. Without measures to safeguard the Tigers, the ecosystem associated with them cannot be preserved. Although statistics indicate a notable decline in tiger poaching and a rise in the tiger population across the nation, this is insufficient. The on-the-ground realities must not be ignored. Incidences of illegal constructions and rampant unlawful tree felling, like those witnessed in Corbett National Park, cannot be overlooked. Preventive measures are essential to address this."

¹⁴ In Re: Godavarman Thirumulpad vs. Union of India and Ors. (January 31, 2024)

iii. In the case of M K Ranjitsinh & Ors15

The apex Court's jurisdiction was called upon in this matter to safeguard the Great Indian Bustard (GIB) and the Lesser Florican, both of which are nearing extinction. A Writ Petition was filed to ensure the conservation of these species. The bench also discussed various measures outlined by the Union of India in its affidavit, which detailed actions that have been taken already and those planned for the future to protect the critically endangered GIB. Some of these initiatives include monitoring GIB movement through satellite telemetry, celebrating 'National Bustard Day' to raise awareness about conservation, promoting the dissemination of local grass seeds to restore degraded grasslands, conducting capacity-building programs, and encouraging collaboration with scientific organizations. Additionally, local stakeholders will be engaged in conservation efforts for the GIB, and awareness programs will be rolled out in the pertinent regions, among other initiatives. Moreover, the Supreme Court stated, "The Union of India and the relevant ministries are instructed to carry out the measures mentioned... which they have committed to implementing."

iv. In the case of Tapas Guha & Ors16

In this given case, the court expressed its worries about the infringement of environmental standards resulting from extensive clearance efforts, as the Silchar Greenfield Airport Project moved forward without obtaining the necessary Environmental Clearance. It determined that the NGT had "abandoned" its responsibilities by not intervening in the construction of the Silchar Greenfield Airport Project. The bench reversed the NGT's ruling and instructed that no construction activities related to the proposed Greenfield airport at the Doloo tea estate should take place unless the requisite environmental clearance is secured. The key part of the ruling highlights that "Environmental regulations exist specifically to ensure that developmental initiatives, like the creation of airports, are carried out in a way that minimizes negative ecological consequences and protects the interests of both the environment and local communities. While recognizing the significance of infrastructure progress, it is crucial that such initiatives are conducted in alignment with environmental laws to avert irreversible damage to ecosystems and biodiversity. The

¹⁵ M K Ranjitsinh & Ors. vs. Union of India & Ors. (March 21, 2024)

¹⁶ Tapas Guha & Ors vs. Union of India & Ors. (May 06, 2024)

necessity for Environmental Clearance acts as an essential barrier against unchecked exploitation of natural resources and helps maintain the principles of sustainable development, which safeguard the interests of both current and future generations. Thus, even though the decision to build an airport may fulfill wider policy goals, it must be carried out within the legal frameworks designed to protect the environment and ensure responsible resource utilization. Noncompliance with these standards not only compromises the integrity of environmental governance but also poses a risk of long-term ecological harm and social unrest."

V. <u>Conclusion</u>

From this, we can infer that some of the reasons for environmental damage caused by urbanization stem from the legislation and regulatory bodies of the country. The inadequate governance in modern cities has led to the proliferation of informal settlements and slums, which create unhealthy living and working conditions. Significant focus should be placed on enhancing urban strategies that foster efficient resource utilization. Controlling vehicle pollution in metropolitan areas and other cities should be of utmost importance. Immediate action is necessary to minimize the creation of solid waste at its source through enforced standards, regulatory fees, tax incentives, education, and voluntary adherence. If sufficient measures are not implemented to curb pollution and enhance the quality of life by offering more social amenities, urban residents in India may face increasingly difficult conditions, potentially leading to health risks and severe destruction.

One of the essential tenets of Indian law is the right of every individual or citizen to live in an environment free from pollution. According to the Supreme Court, the right to a natural, clean, and healthy environment is included in the fundamental rights to life and personal liberty guaranteed by Article 21 of the Indian Constitution. In its numerous historic environmental rulings, the Supreme Court has ruled that the right to a clean and healthy environment, pure drinking water, and a pollution-free atmosphere are all part of the right to life.

The Supreme Court has significantly influenced administrative officers by urging them to take essential measures for environmental improvement. What is required is grassroots social awareness rather than laws imposed from above, as laws function effectively only when compliance is voluntary. To raise awareness about environmental concerns, exhibitions

showcasing slides in local languages should be held in cinemas and on television at no cost. Additionally, as mandated by the Supreme Court, environmental studies need to be made a mandatory subject in schools and colleges in a tiered approach to promote overall awareness. Ultimately, safeguarding the environment and maintaining ecological balance is a responsibility that should be embraced not just by the government, but by every individual, organization, and corporation. This obligation is a social duty and a fundamental responsibility outlined in Article 51-A[g] of the Indian Constitution.

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