

# INTERNATIONAL SPILLOVERS AND THE QUEST FOR GLOBAL ENVIRONMENTAL JUSTICE: INFERENCES FROM THE CASE STUDY OF INDIA

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## INTRODUCTION

In the contemporary interconnected world, environmental challenges have transcended national boundaries, giving rise to complex **international spillovers** that threaten global environmental justice. From the smog-choked skies of Delhi, influenced by crop burning in neighboring states<sup>1</sup>, to the plastic-strewn beaches of remote Pacific islands<sup>2</sup>, the consequences of environmental degradation know no borders. This paper explores the intricate relationship between international spillovers and global environmental justice, with a particular focus on the challenges faced by developing nations.

**Environmental justice**, a concept born from civil rights movements in the 1980s United States<sup>3</sup>, has evolved from a localized concern about disproportionate pollution burdens on marginalized communities to a global imperative. Today, it encompasses issues ranging from climate change and biodiversity loss to resource depletion and waste management, all viewed through the lens of equity and fairness on a planetary scale. This debate springs

fundamentally from the basic tension that underlies it: the asymmetry of interests of those who benefit from environmentally degrading activities and those who bear their consequences. This is particularly acute in the context of international spillovers, where actions in one nation have far-reaching effects on others that often affect populations who had no say in the decisions that led to their plight. Consider, for example, the process of ocean acidification. Carbon dioxide emissions from industrial activities in developed nations dissolve in the world's oceans and affect the delicate pH balance of marine ecosystems. The ripple effect of such a change is felt throughout the food chain and rebounds into the shores of coastal communities in small island developing states, whose contribution to global carbon emissions is negligible.

Legal and policy frameworks under which these transboundary environmental issues run have changed markedly over the last half century. The **Stockholm Declaration** of 1972 became a landmark to establish the principles relating to transboundary pollution and liability of states to prevent environmental damage outside their borders. From then, unilateral and bilateral attempts at global action to address specific environmental challenges have resulted in agreements such as the United Nations Framework Convention on Climate Change in 1992 and the **Paris Agreement** in 2015.

Despite all these advances, enforcing and

- 1 Daniel H. Cusworth et al., Quantifying the influence of agricultural fires in northwest India on urban air pollution in Delhi, India, 13 ENV'T RSCH. LETTERS 044018 (2018).
- 2 Jennifer L. Lavers & Alexander L. Bond, Exceptional and rapid accumulation of anthropogenic debris on one of the world's most remote and pristine islands, 114 PROC. NAT'L ACAD. SCIS. 6052 (2017).
- 3 ROBERT D. BULLARD, DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY (1990).

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implementing international environmental law remains difficult. The state's sovereignty is often at odds with an effort for collective action to address global environmental problems. The Trail Smelter case (United States v. Canada, 1941) established that states have a responsibility to prevent transboundary harm<sup>4</sup>, yet translating this principle into effective action in a world of competing national interests has proven to be an ongoing struggle. In addition, the environmental governance landscape of the world is characterized by fragmentation of regimes and institutions. While the increase in multilateral environmental agreements has helped to address specific problems, a rather problematic confluence of obligations and mechanisms has resulted<sup>5</sup>. Fragmentation can hamper coherent and effective responses to many international spillovers that often cut across multiple environmental domains.

International spillovers create particularly insidious challenges for **developing countries**. Many of those countries are, as a matter of urgent necessity, simultaneously developing their economies and cleaning up their environments-most of which have been damaged from outside the borders. India, for instance, battles intense air pollution partly due to spillovers of other types, all while trying to raise millions of people out of poverty<sup>6</sup>.

In examining the subtleties of spillovers globally and, consequently, how they respond to globalization and environmental justice, the relevant questions become rather straightforward: How can a global regime of this type be constructed in such a way that transboundary environmental challenges are addressed while at the same time respecting the sovereignty and developmental needs of individual nations? How will the costs and benefits of environmental protection be equitably shared around the world? How, then, might we utilize technological innovation and international cooperation to generate paths of sustainable development with low spillovers abroad?

4 Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1905 (1941).

5 Harro Van Asselt, *The Fragmentation of Global Climate Governance: Consequences and Management of Regime Interactions* (2014).

6 Michael Greenstone & Rohini Pande, *India's Particulate Matter Air Pollution: Implications for Food and Water Security* (Harvard Kennedy Sch., Geography & Env't Discussion Paper Series No. 5, 2014).

This paper attempts to probe those questions using a multilevel approach. We will discuss legal and policy frameworks governing international spillovers, delve into specific challenges that development nations face and show those in case studies on India, and discuss landmark cases that have informed our understanding of transboundary environmental issues.

Drawing these strands together, we aim to weave a comprehensive portrait of the complex relationship between international spillovers and global environmental justice and outline pathways toward more equitable and sustainable futures.

### 1.1 Objectives

The following are the primary goals of this research:

1. To Define how the concept of international spillovers works in global environmental justice theory.
2. To assess the international spillovers within the context of legal and policy frameworks at the international level.
3. Through the case study of India, to determine what concrete specific challenges developing countries face in terms of how to address and adapt to international environmental spillovers.
4. To Assess the efficacy of international environmental agreements currently in place about finding equitable solutions to transboundary environmental issues.

### 1.2 Literature Review

This review of literature reviews seminal works that have led to the conceptualization of our understanding of international spillovers and global environmental justice. I have chosen four important pieces that provide multiple and varied perspectives on this contentious issue.

Nicholas Stern, "The Economics of Climate Change: The Stern Review" 2007

Stern's pioneering work throws up a very comprehensive analysis of the economic impacts of climate change, referring to it as "the greatest and widest-ranging market failure ever seen". It puts a number to the costs associated with climate change, an estimated loss that could be around 5-20% of

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the GDP every year if no action is taken. This work emphasizes utmost importance on climate change being a global externality, whereby the burden is separated between emission and cost among the emitters of greenhouse gases. He supported stronger, early action on climate change since its benefits are inevitably outweighing the costs. He spoke about mechanisms for international cooperation, such as carbon pricing and technology transfer. This piece of work is of the utmost importance to explain the economic dimensions of international environmental spillovers and has substantially affected the discussion on climate change mitigation and adaptation policy making.

• *Slow Violence and the Environmentalism of the Poor*. By Rob Nixon 2011

Nixon coins the term "**slow violence**" to define environmental damage that happens imperceptibly and out of sight<sup>7</sup>. His work is highly relevant to international spillovers and environmental justice, because he explores how environmental degradation hurts the poor disproportionately-most of the time-in ways not immediately apparent. Nixon deconstructs those temporal and spatial disjunctors of environmental harm, where the consequences of actions are felt far away in both time and space.

• *Lavanya Rajamani, "The Principle of Common but Differentiated Responsibilities: Origins and Scope" 2000*

Rajamani's article offers a comprehensive analysis of the principle of **Common but Differentiated Responsibilities (CBDR)**, a key concept in international environmental law<sup>8</sup>. She traces the historical development of CBDR through various international environmental agreements and examines its legal status and implications for state obligations in international environmental law. The author examines the tensions between CBDR and other principles of international law, such as sovereign equality. She further elaborates upon problems associated with operationalization of CBDR, especially in respect of climate change negotiations. It is an important book that describes

legal and ethical justification of differential treatment in international environmental governance relating to international spillovers.

• *John H. Knox, "The Human Right to a Clean Environment" (2018)*

Knox, a former UN Special Rapporteur on Human Rights and the Environment, discusses the development of recognition of a new human **right to a clean environment**<sup>9</sup>. He reviews the legal underpinnings of environmental human rights under international law and considers the material and procedural elements of a right to a clean environment. Knox then turns to the consequences of considering environmental rights as state obligation and individual protection and explores how environmental human rights may hold potential for leverage in global environmental challenges, including international spillovers.

### 1.3 Methodology

This is a mixed-methods study that incorporates a qualitative analysis of policy and legal documents, and it incorporates a case study methodology as well. The main methods used are:

1. Doctrinal legal research: International environmental agreements, declarations, and principles analysis of international spillovers and environmental justice.

2. Case Study Analysis: A critical close and comprehensive study of international environmental spillover experiences of India in its domestic policy and international engagements.

3. Comparative analysis: A comparative study of the approaches used by various countries and international organizations toward transboundary environmental issues.

This multi-dimensional approach helps to provide insight into the complex interplay that may exist between international spillovers and global environmental justice, especially as this interplay applies to developing nations.

## 2. Transboundary spillovers and Environmental Justice

International spillovers in the environmental

7 Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (2011).

8 Lavanya Rajamani, *The Principle of Common but Differentiated Responsibilities: Origins and Scope*, 9 Rev. Eur. Cmty. & Int'l Env't L. 120 (2000).

9 John H. Knox, *The Human Right to a Clean Environment*, 58 Va. J. Int'l L. 79 (2018).

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perspective are inherently related to the concept of global environmental justice. These spillovers pose an enormous challenge with respect to the equitable sharing of environmental benefits and burdens between nations and populations.<sup>10</sup> Accordingly, it is elaborate to understand all these forms with the different contexts of law that have emerged to address them. International spillovers can be of various forms, each raising global environmental justice concerns associated with them. Of these, probably the most visibly obvious has been transboundary pollution in which, for instance, airborne or liquid pollutants are carried across borders. The **LRTAP Convention**, adopted in 1979, is one of the earliest international efforts undertaken to address this issue.<sup>11</sup> The initial focus was on reducing sulfur emissions that cause acid precipitation in Europe; it now covers a wide range of air pollutants. It indicates the possibility of international cooperation to deal with spillovers in reducing certain emissions. Of course, its geographical boundary of effectiveness is limited up to Europe and North America and, hence, shows a weakness to truly global solution.<sup>12</sup>

The other critical international spillover is the degradation of global commons. The atmosphere, the oceans, and biodiversity are common property that cuts across national boundaries; hence their protection becomes everybody's burden. The United Nations Convention on the Law of the Sea, adopted in 1982, provides a comprehensive framework for the governance of the world's oceans.<sup>13</sup> It established the doctrine of EEZs yet makes it clear that states have duties to take care and preserve the marine environment. However, the effectiveness of **UNCLOS** in preventing overfishing and marine pollution has been limited, underscoring the difficulties in managing resources that lie beyond national jurisdictions.

Climate change probably epitomizes perhaps

the most thorough-going and complex form of international spillover. The United Nations Framework Convention on Climate Change, adopted in 1992, declares climate change as the "common concern of humankind". Two significant efforts toward the formulation of legally binding commitments on reduction targets for greenhouse gas emissions are the **Kyoto Protocol (1997)** and the **Paris Agreement (2015)**.

These enshrine the "*common but differentiated responsibilities and respective capabilities*" principle, or **CBDR-RC**, which recognizes the historical responsibility of developed countries and the varied capacities of countries to act in response to climate change.<sup>14</sup> The realization of the principle remains a subject of controversy and debate over equitable burden sharing in efforts for mitigation and adaptation. Thus, the transfer of hazardous wastes from developing to developed countries is in outright conflict with environmental justice.

The **Basel Convention** on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, adopted in 1989, aims to protect human health and the environment against the adverse effects of hazardous wastes. The Convention's Ban Amendment, which prohibits the export of hazardous wastes from developed to developing countries, entered into force in 2019. However, illegal waste trafficking remains a significant challenge, underlining the need for enhanced enforcement mechanisms and capacity building in developing countries. This makes the question of pursuing environmental justice complicated, often in the majority of cases, for it contains the aspects of asymmetry of impacts and disparities of adaptive capacities among nations.

It is the poor environment of developing states, particularly small island developing states and least developed countries, that suffers most while making very little contribution to the cause.<sup>15</sup> It is here that the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts,

10 Jacqueline Peel & Hari M. Osofsky, A Rights Turn in Climate Change Litigation?, 7 *Transnat'l Env't L.* 37, 37-67 (2018).

11 Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, T.I.A.S. No. 10,541, 1302 U.N.T.S. 217.

12 Lars Nordberg et al., The Convention on Long-range Transboundary Air Pollution: Successes and challenges, in *International Environmental Agreements: An Introduction* 39, 39-54 (Jørgen Wettestad & Lars H. Gulbrandsen eds., 2013).

13 United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397.

14 Lavanya Rajamani, The 2015 Paris Agreement: Interplay Between Hard, Soft and Non-Obligations, 28 *J. Env't L.* 337, 337-358 (2016).

15 W. Neil Adger et al., Fairness in Adaptation to Climate Change (2006).

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established under the UNFCCC in 2013, tries to right a historical wrong. But this effort remains highly contentious at international climate negotiations on how to operationalize it.

As the principle of prevention constitutes the very heart of international environmental law, states are bound to prevent harm to other states or areas falling beyond national jurisdictions. The principle was famously enunciated in the **Trail Smelter case (United States v. Canada, 1941)**, which has since then been reaffirmed in a plethora of international declarations and court judgments. The International Court of Justice, in its advisory opinion on the Legality of the Threat or Use of nuclear weapons (1996), held that "the existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment".

However, the application of this principle in the context of complex, diffuse environmental harms like climate change presents significant challenges. The difficulty in establishing clear causal links between specific actions and environmental harm, coupled with the long-term nature of many environmental impacts, complicates efforts to hold states accountable for transboundary environmental damage.

Climate change litigation has emerged as a new frontier to solve international spillovers and hold courts accountable on calls for environmental justice. For instance, the decision of the Dutch Supreme Court, making it binding for the state to cut emissions under its duty of care to citizens, as settled by **Urgenda Foundation v. State of the Netherlands (2019)**, shows, among other things, the role that domestic courts may take in handling international environmental issues. Likewise, **Juliana v. United States**, which is pending litigation, because youth plaintiffs are suing the U.S. government for not acting to combat climate change, suggests the emerging interest in intergenerational equity in the discourse of environmental justice.<sup>16</sup>

International spillovers for global environmental justice, therefore, call for more holistic approaches

that depart from traditional state-centric international law models. This calls for new legal and policy frameworks responsive to the complexity of global interconnectivity in environmental challenges. Such areas may be to enhance on the already existing international environmental agreements, new mechanisms of dealing with loss and damage, capacity building and technology transfer to developing countries, and new ideas, rights of nature, or ecocide as an international crime. The way forward balances respect for state sovereignty with the reality that challenges are global environmental, thus requiring a rethinking of governance at a global level, more integrated with principles of equity, responsibility, and capability. As the importance of international spillovers continues to challenge our usual understanding of responsibility and justice in this context, the growth of international environmental law and policy is called upon in the struggle to create a better, more just global future.

### 3. Case Study: India

India is an extraordinary case-study country through which the dilemmas international spillovers raise for the global cause of environmental justice can be explored. It happens to be the most populous democracy with a rapidly growing economy, hence a perfect example of the conflicting aspirations to develop and responsibility for the environment. This section explores the presence and vulnerability of India on the global environmental landscape, its homegrown issues and concerns, legal framework, and engagements with the international community.

#### 3.1 India's Exposure to International spillovers

Geographical and socio-economic characteristics make India especially sensitive to the impacts of international environmental spillovers. In fact, the sensitivity of India to its environment is multi-layered and deeply interwoven with its trajectory of development. The climate change is one of the most important threats India has toward environmental and economic stability. Despite the very low per capita emissions, India ranks among the countries most vulnerable to the impacts of climate change in recent

<sup>16</sup> Michael Burger, *The Law of Intergenerational Justice*, 50 *Env't L. Rep.* 10839, 10839-10853 (2020).

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rankings.<sup>17</sup> According to the Intergovernmental Panel on Climate Change, India already faces several major risks from increased floods, droughts, and heat-wave-related mortality. Climatic changes will have critical effects on agriculture, water security, and public health and thus can provide a potential reversal of four decades of hard-won development.

International spillovers are highly vulnerable to water security in India. Of course, it shares major river systems with the neighboring countries. Among them are the Indus River with Pakistan and the Ganges-Brahmaputra-Meghna basin with Nepal, China, and Bangladesh. The indirect impact of damming or water diversion upstream affects the water availability and quality downstream to a large extent.<sup>18</sup> While often cited as the most successful example of transboundary water cooperation, namely with India and Pakistan's Indus Waters Treaty of 1960, it also exemplifies sources of tension that remain ongoing, thus underlining the quite complex nature of managing shared water resources in a changing climate<sup>19</sup>.

Air pollution is another more critical challenge in India, possessing a domestic as well as transboundary dimension. While India itself suffers from severe air pollution that originates from within its borders, it also faces impacts from transboundary air pollution. Indeed, crop burning in Pakistan has been shown to contribute quite significantly to air quality problems in northern India, at least during winter months<sup>20</sup>.

In this end, the problem of air pollution calls for regional cooperation as attested to by initiatives such as the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia.

### **3.2 Domestic Environmental Challenges and Legal Framework**

International spillovers often overlap with India's more fundamental environmental concerns and highlight some effects. It is economic growth in India

that has been most important for poverty reduction but at a steep environmental price. This tension between development and environmental protection is thus highlighted in the developing Indian environmental legal framework. India's environmental law finds an origin in the Stockholm Declaration of 1972, which led to making environmental protection part of the Indian Constitution. Article 48A incorporated by the Constitution (Forty-second Amendment) Act, 1976, calls upon the state to protect and improve the environment<sup>21</sup>. Likewise, Article 51A(g) places a fundamental duty upon citizens to protect and improve the natural environment. The Environment (Protection) Act, 1986, basically is the law which forms a framework for coordination at the Central government level on various acts regarding the environment. Other landmark acts include the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, and the Forest Conservation Act, 1980. However, implementation and strong enforcement of these Acts have often proved challenging. India's high-speed industrialization and urbanization have, thus far, outpaced the ability of institutions of regulation to monitor environmental degradation effectively. The National Green Tribunal, established as recently as 2010, has played an important role in affording specialized adjudication of environmental cases but is at times constrained by jurisdictional limitation and implementation challenges<sup>22</sup>.

India's energy transition is an opportunity and a challenge in the global context of mitigating climate change. Although India has led the way in increasing the size of renewable energy development, with aggressive targets set under the National Solar Mission<sup>23</sup>, this country still relies on coal for its energy security and, by extension, presents a challenge for global climate mitigation efforts. The International Energy Agency projects that India will be the largest contributor to the rebound in coal demand in 2021, and indeed, it is marking a big worry between its development needs and environmental commitments.

17 David Eckstein, Vera Künzel & Laura Schäfer, *Global Climate Risk Index 2021*, Germanwatch (2021).

18 Robert Wirsing, Christopher Jasparro & Daniel C. Stoll, *International Conflict Over Water Resources in Himalayan Asia*, Palgrave Macmillan (2013).

19 Indus Waters Treaty, India-Pak., Sept. 19, 1960, 419 U.N.T.S. 125.

20 Id at 1.

21 India Const. art. 48A.

22 National Green Tribunal Act, 2010, No. 19, Acts of Parliament, 2010 (India).

23 Ministry of New and Renewable Energy, Gov't of India, Resolution, Jawaharlal Nehru National Solar Mission (Jan. 11, 2010).

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### **3.3 International Engagement of India and its Policy Approach**

Undeniably, India's approach towards addressing international spillovers and promoting environmental justice has, over time, drastically changed with shifts in its domestic priorities and the changing global dynamics.

India has strongly articulated its position on the development obligations of countries in international climate negotiations, recalling the "common but differentiated responsibilities and respective capabilities" principle stipulated under the United Nations Framework Convention on Climate Change (UNFCCC). In doing so, this represents the interests of India in arguing that it is primarily the responsibility of developed countries to advance mitigation efforts while assisting developing countries concerning both mitigation as well as adaptation. This is an important step in India's approach towards international climate politics. Because India did not want to relinquish the agenda for equity and historical responsibility, it has accepted much more demanding commitments, including ambitious renewable energy targets and an intention to reduce the emissions intensity of its GDP by 33-35% from 2005 levels by 2030<sup>24</sup>. Instead, India declined to pledge a net-zero target, insisting that it would be unfair to commit to that given its development needs<sup>25</sup>.

At the regional level, India has been identified with a series of joint endeavors in dealing with common environmental concerns. The South Asian Association for Regional Cooperation SAARC has served as a multilateral cooperation framework on matters of the environment, though it has been considerably hampered by political rivalry spilling over the whole region. India also shares active engagement with Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation BIMSTEC whose priority sectors encompass environmental cooperation.

This aspiration also informs India's strategy of international environmental governance. It has made big strides at this point to be a global leader in climate

action in shaping the efforts of the International Solar Alliance launched with France in 2015. The efforts of the International Solar Alliance are to promote solar energy in sun-rich countries, and it can be regarded as an attempt by India to shape the global narrative on climate action.

### **3.4 Challenges and Contradictions**

It runs controversially with the nuances of balancing developmental needs with environment protection and global responsibility, just like India's response to global environmental justice.

The two core dilemmas are that of developing aspirations and environmental commitments. While India has done much so far in addressing its environmental problems, on international forums, it plays the card of right to development with emphasis on how stern environmental regulations may impede relief from poverty and how more of the burden of global action on environmental commitments should be shared by the developed world since it has been the major emitter over the years<sup>26</sup>.

The third potential contentious issue is in issues of technology transfer. Developing countries, including India, have advocated greater access by developing and developed countries to the clean technologies hosted by developed countries. This, however, has been complicated by issues on intellectual property rights. The present waivers on intellectual property rights on clean technologies currently being discussed at the WTO bear in many respects similarities, especially with COVID-19 vaccines. Financial support for environmental action remains an important agenda. Developing country India insists that the developed world must increase financial support to mitigate environmental degradation. The developed countries committed to mobilizing \$100 billion in climate finance annually by 2020, which is now extended to 2025; this commitment has not been fulfilled to date, frustrating developing countries, including India.

### **3.5 Judicial Activism and Environmental Protection**

The Indian judiciary, with the Supreme Court as the prime institution, has done important work

24 India's Intended Nationally Determined Contribution: Working Towards Climate Justice (Oct. 2, 2015).

25 Varadhan, S. , India pushes back against carbon neutral target as pressure grows. (2021, March 17)

26 Navroz K. Dubash, Handbook of Climate Change and India: Development, Politics and Governance, Routledge (2012).

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in environmental protection through landmark judgments, some of which touched upon issues relating to international spillovers. In *M.C. Mehta v. Union of India (Taj Trapezium Case)*<sup>27</sup>, the Supreme Court directed the use of cleaner fuels for the industries located around Taj Mahal to safeguard the monument from air pollution. Though this was essentially an internal case, it settled the possibility of judicial intervention in dealing with a problem of such wide transboundary impact. The Supreme Court has further clearly recognized the principles of "sustainable development," "precautionary principle," and "polluter pays" as a part of Indian environmental jurisprudence in *Vellore Citizens Welfare Forum v. Union of India*<sup>28</sup>. All these principles, which are derived from international environmental law, have since been applied in many cases, proving that it is the judiciary that would transform and include international norms on the environment into the domestic law. Further, more recently, in *Hanuman Laxman Aroskar v. Union of India*<sup>29</sup>, the Supreme Court famously declared that cumulative impact assessment ought to be considered in all environmental decision-making, something which has particularly deep resonance to the issue of international spillovers wherein the cumulative impacts of actions across borders have to be considered.

### 4. International Spillovers and the Challenge of Global Environmental Justice: Critical Analysis

The international spillovers underlying environmental injustice in the global form are particularly complex in that they comprise a manifest nexus of interrelated challenges regarding the environment, economics, politics, and law. Thus, being comprehensive is only a necessary but not a sufficient condition for the solutions.

#### 4.1 The Development-Environment Nexus

One such fundamental key tension identified is that of economic development against environmental protection, especially in the interest of developing

nations. This basic tension is reflected in the principle of Common But Differentiated Responsibilities and Respective Capabilities that the United Nations Framework Convention on Climate Change (UNFCCC) enshrines. The UNFCCC recognizes that developed nations are responsible for many current environmental crises but at the same time recognizes the need to develop new economies. This story is well depicted by the case of India. The industrialization and urbanization processes are critical to the growth of its economy and reduction in poverty, which are targets under the agenda for the SDGs<sup>30</sup>. More importantly, these processes have resulted in deep-seated environmental degradation both at levels of localities and the globe at large. This is how India positions itself in international climate negotiations, as recently in INDCs under the Paris Agreement<sup>31</sup>. This is carried out while committing to reduce the emissions intensity of its GDP, emphasizing India's need for economic growth and access to energy.

Surely, CBDR-RC remains a disputable subject in the climate change negotiation. In fact, the Paris Agreement manifests a developed type of approach since it is action-oriented toward all parties but specifically admits the differentiated responsibility. It is too early to say if the agreement will bring development and the environment to level ground.

#### 4.2 Strengthening Global Environmental Governance

The analysis of legal frameworks and landmark cases highlights both the progress made in addressing international spillovers and the limitations of current approaches. While international environmental law has evolved significantly since the Trail Smelter case<sup>32</sup>, enforcement remains a key challenge. The lack of strong, binding mechanisms for ensuring compliance with international environmental agreements undermines their effectiveness.

This state-centric international law sometimes fails to explain the facts of a globalized world where non-state actors, such as multinational corporations,

27 *M.C. Mehta v. Union of India*, (1997) 2 S.C.C. 353 (India).

28 *Vellore Citizens Welfare Forum v. Union of India*, (1996) 5 S.C.C. 647 (India).

29 *Hanuman Laxman Aroskar v. Union of India*, (2019) 15 S.C.C. 401 (India).

30 G.A. Res. 70/1, Transforming our world: the 2030 Agenda for Sustainable Development (Oct. 21, 2015).

31 India's Intended Nationally Determined Contribution: Working Towards Climate Justice (Oct. 2, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf>.

32 *Id* at 4.

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play sizeable roles in environmental issues. This can be particularly true concerning cases in climate change litigation. While judgments in cases like *Urgenda Foundation v. State of the Netherlands*<sup>33</sup> have been secured so that binding judgments will be passed against governments to take necessary action over climate change, there is still a challenge when holding corporations accountable across jurisdictions.

International environmental law with multilateral environmental agreements dealing with very limited issues results in inefficiencies and possible contradiction. The situation might, therefore, call for a more integrated approach towards environmental governance even when the United Nations Environment Programme has attempted to address this fragmentation through initiatives such as the Environmental Management Group<sup>34</sup>.

### 4.3 Power Imbalances and Procedural Justice

This leads to a significant and dramatic power imbalance in global environmental governance. Though being more vulnerable to the effects of the environment, developed countries have lesser powers to influence decisions in the negotiation and the decision-making process of international organizations. Such imbalances create results not sufficiently beneficial to the needs and concerns of those involved.

The principle of public participation is defined by the Rio Declaration and further elaborated by the Aarhus Convention which, in turn, sets the framework through which such imbalances can be reviewed. The implementation of it, however, remains minimal around the world. The Escazú Agreement is the regional effort from Latin America and the Caribbean to enhance environmental democracy, but no such agreement exists in other regions.

Power imbalances need to be redressed for proper global environmental justice. This would be through reforms within the decision-making processes of international institutions to accord more voices to developing nations, such as under various

UN reform initiatives.

### 4.4 Role of Non-State Actors

Given this, international law focuses primarily on the behavior of states. This paper can, therefore, not focus on the issues about the contribution and solutions to international spillovers of non-state actors. The UN Guiding Principles on Business and Human Rights outline the corporate responsibility towards human rights, hence its adoption to an environmental view in some understandings.

Climate Change Litigation against Companies Another recent trend is a boom in climate change litigation against companies, including *Milieudefensie et al. v. Royal Dutch Shell plc*<sup>35</sup>, which remains within the rapidly evolving landscape of corporate accountability for environmental damage. There are, however, some important legal and practical obstacles in holding multinational companies liable for their share of international environmental spillovers. Towards a More Integral Approach Indeed, the first paradigm shift towards effective international spillovers and global environmental justice lies on the approaches towards environmental governance. More collaborative, equitable and holistic approaches recognizing the interdependence of the issues in global environmental challenges must be taken. The planetary boundaries concept is a basis for scientific thinking about the global nature of environmental challenges and defines safe operating space for humanity. The possibility of translation of this concept into international environmental law and policy may well result in a more holistic framework that could answer international spillovers of such nature. The ongoing attempt to agree on a Global Pact for the Environment represents an effort at international environmental law consolidation and strengthening. Precisely, the outcome of such processes is yet unclear, but they do reflect recognition of the need for a more robust and coherent approach to the governance of the global environment. Generally, international spillovers are a great barrier but also present an opportunity for recasting and restructuring global environmental governance. All these factors—power imbalance, appropriation of technological innovation, strong judicial systems, and collaborative

33 *Urgenda Foundation v. State of the Netherlands*, ECLI:N-L:HR:2019:2007, Judgment (Sup. Ct. Neth. Dec. 20, 2019).

34 U.N. Environment Programme [UNEP], Environmental Management Group, <https://unemg.org/> (last visited Sept. 28, 2024).

35 *Milieudefensie et al. v. Royal Dutch Shell plc.*, ECLI:N-L:RBDHA:2021:5337, Judgment (Dist. Ct. The Hague May 26, 2021).

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approaches-are the ways of making progress toward a fairer and more enduring global environment.

### 5. Conclusion & Suggestions

This research demonstrates how the developing nations with reference to India have suffered under a significant burden in explaining such transboundary environmental issues-that is, a basic tension between countries' aspirations for economic development and environmental sustainability. International spillovers became an important sphere of contemporary law during the last two or three decades and would be considered by the development of key international environmental agreements, such as the United Nations Framework Convention on Climate Change and its subsequent protocols, particularly the Paris Agreement, which have worked as milestones achievements in global environmental governance. This principle of common but differentiated responsibilities was established through these agreements, considering the historical input of developed nations in bringing about environmental degradation but also taking into account development needs in the emerging economies. This principle however remains contentious in practice, illustrative of the overall challenge of finding a balance for between development and environmental protection.

Even the case study of India vividly brings out such tensions. It is a fast-industrializing country, where most of its people are still below the poverty line and, therefore, it undergoes dual pressure: pushing economic growth while, simultaneously, reducing environmental degradation. A good example is that of its National Action Plan on Climate Change in satisfying environmental requirements within a development framework<sup>36</sup>. This is, however, matched with resource constraints and competing priorities in the implementation of such plans that seem to be a common challenge for developing countries. The landmark legal cases-analysis, like the Trail Smelter arbitration and the Pulp Mills case, is even nearer to showing a gradual development of international environmental law principles.

The two have spawned these foundational principles-one in the form of the obligation to prevent

transboundary harm and the other the environmental impact assessment obligation of projects that may have transboundary impacts. However, international law being inherently state-centric, its response has difficulty to grasp more and more nettlesome global environmental issues in a globalising world. Regional frameworks such as the ASEAN Agreement on Transboundary Haze Pollution may offer a more targeted intervention towards specified environmental issues. Regional initiatives also offer more context-specific solutions and can respond better to the needs of localities. Sometimes, resource constraints may also limit the success of regional initiatives, due to the fact that most member states have varying levels of political commitment.

One important implication of such a research outcome is that serious imbalance exists in international environmental governance, with vulnerable countries having much less influence in international negotiations and decision-making. Such imbalances can be observed in the product and outcomes of major environmental conferences as well as the structures of international environmental institutions. Corrective measures of such imbalance is necessary and, therefore, a condition for true global environmental justice.

The concept of global environmental justice itself is developing. Emerging in a national setting in the United States, the concept has grown to encompass international elements. This reflects growing recognition and appreciation of how environmental issues are interrelated in this globalizing world. Deconstructions of global environmental justice are debated and may involve varying articulations depending on who interprets it and what constitutes a "fair" allocation of environmental goods and evils.

In conclusion, addressing spillovers between international entities and promoting global environmental justice call for a paradigm shift in our approach towards environmental governance. It is more of a collaborative and fair and holistic approach that understands an interrelation between global challenges to the environment. Complexity is inevitable, but so too are the chances of justice and sustainability for all. Such efforts will of course hinge on the dynamic evolution of legal and policy frameworks, but only genuine global environmental justice can be achieved with additional commitment and innovation from all countries and other interested parties.

<sup>36</sup> Gov't of India, National Action Plan on Climate Change (2008).

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